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Bulk-Power System Executive Order: Implications for Current Projects, Future Projects, and NERC Compliance

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On May 1, 2020, President Donald Trump issued an Executive Order declaring a national emergency with respect to threats to the U.S. bulk-power system posed by the unrestricted supply of bulk power equipment by persons owned by, controlled by, or subject to the jurisdiction or direction of a foreign adversary, presumably including China, a source for many of the components impacted by the Executive Order.[1] The Executive Order prohibits certain transactions for the "acquisition, importation, transfer, or installation" (transaction) of bulk-power equipment in cases where the Department of Energy (DOE) determines that such equipment poses an undue risk of sabotage to or subversion of the bulk-power system, or catastrophic effects on critical infrastructure or the economy, or otherwise poses an unacceptable risk to national security or U.S. persons.

In the National Emergencies Act (NEA), enacted in 1976, and in the International Emergency Economic Powers Act (IEEPA), enacted in 1977, Congress delegated to the President the authority to regulate a variety of international economic transactions following a declaration of national emergency. Neither the NEA nor IEEPA defines what constitutes a "national emergency." Invocation of IEEPA is conditioned on a declaration regarding the necessity for dealing with an "unusual and extraordinary threat … to the national security, foreign policy, or economy of the United States." 50 U.S.C. § 1701. Notwithstanding IEEPA's sweeping delegation of authority, and the fact that one of the reasons for its enactment was the perception that presidents had previously allowed national emergencies to continue for far too long, Congress has not once attempted to terminate a national emergency declared by a president under IEEPA.

Although IEEPA was at first aimed at state actors, in recent years it has been used to target individuals, groups, and non-state actors such as terrorists and persons who engage in malicious cyber-enabled activities. Last year, for example, on May 15, 2019, in an action directed at China's Huawei Technologies Co., Ltd. and ZTE Corporation, President Trump invoked IEEPA to prevent certain foreign parties from exploiting perceived vulnerabilities in U.S. information and communications technology and services. That Executive Order, entitled, "Securing the Information and Communications Technology and Services Supply Chain" (the Telecommunications Executive Order), effectively banned Huawei products from the US telecommunications infrastructure.[2] "The Telecommunications Executive Order prohibits transactions that involve information and communications technology or services designed, developed, manufactured, or supplied by persons owned by, controlled by, or subject to the jurisdiction or direction of a foreign adversary whenever the secretary of commerce determines that a transaction would pose a threat to national security," the Department of Commerce (DOC) said in a statement accompanying the Telecommunications Executive Order.

The instant action regarding threats to the U.S. bulk-power system continues this trend of addressing potential cyber threats by prohibiting transactions involving equipment that was "designed, developed, manufactured, or

[1] E.O. 13,920 (May 1, 2020); https://www.whitehouse.gov/presidential-actions/executive-order-securing-united-states-bulk-power-system/.

[2] E.O. 13,873 (May 15, 2019); https://www.whitehouse.gov/presidential-actions/executive-order-securing-information-communications-technology-services-supply-chain/.

supplied" by a foreign adversary or by individuals or entities controlled by or subject to the jurisdiction of a foreign adversary. "It is imperative the bulk-power system be secured against exploitation and attacks by foreign threats. This Executive Order will greatly diminish the ability of foreign adversaries to target out critical electric infrastructure," the DOE said in a statement.[3]

The DOE has until September 28, 2020 to craft and publish rules and regulations implementing the Executive Order. The Executive Order specifically instructs the DOE to identify and list all prohibited bulk-power system electrical equipment in its proposed regulations. Furthermore, the DOE has the discretion to also identify and name the specific individuals, entities, and governments as foreign adversaries (no countries or entities were specifically identified in the Executive Order); establish procedures for the licensing of certain equipment and transactions; create a pre-qualified vendor and equipment list; and identify prohibited equipment already in use in the U.S. and develop regulations to "identify, isolate, monitor, or replace" this equipment as soon as practicable.

Uncertainties Arise After Issuance of Executive Order

Until the rules implementing the directives of the bulk-power system Executive Order are promulgated by the DOE, the language used in the Executive Order leaves considerable room for interpretation.

First, as discussed above, "foreign adversary" is not defined in the Executive Order, and the Executive Order makes no reference to specific countries or individuals that might be considered foreign adversaries. Impacted electric utilities, electric cooperatives, municipally owned utilities and generation owners and operators may have to wait months before the list of foreign adversaries is determined by the DOE.

Second, the full scope of the equipment to which the Executive Order applies is unclear. The equipment named in the Executive Order includes equipment used in by transmission providers with respect to transmission assets that are part of the high voltage transmission network, including for the interconnections of both generation and loads. Similarly, this equipment is used for traditional generation, energy storage projects, and renewable generation, including planned wind and solar projects. The definition of "bulk-power system electric equipment" includes items used in bulk-power system including "power generating stations . . . large generators, backup generators, . . . [and] generation turbines." Further, substations, which may be owned by a generator or a utility, are included in the definition of "bulk-power system electric equipment". Capacitors, substation transformers, voltage regulators, automatic circuit reclosers, protective relaying, metering equipment and industrial control systems are used by transmission service providers and generators alike to meet grid system reliability requirements. Questions remain regarding whether the Executive Order's prohibition on items used in power generating stations would extend to solar panels, solar arrays, invertors, or other related equipment made by or in a foreign adversary that may be less likely to have an ability to be used in a malicious manner as contemplated by the Executive Order. At the very least, renewable energy developers will be affected by the Executive Order's limitations with respect to the procurement of the equipment for the interconnection of wind projects that are dependent upon tax equity financing associated with production tax credits to be economic. Furthermore, solar projects utilizing the investment tax credit are at risk of delay that would reduce the project's ability to receive the anticipated federal tax credits.

Third, there are questions regarding whether agreements executed before May 1, 2020 are affected by the Executive Order. The Executive Order expressly states that it applies to "transactions" initiated after May 1, 2020.

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[3] *See* Department of Energy, *President Trump Signs Executive Order Securing the United States Bulk-Power System*, May 1, 2020, https://www.energy.gov/articles/president-trump-signs-executive-order-securing-united-states-bulk-power-system, last visited on May 7, 2020.

However, the language suggests that the receipt and installation of equipment pursuant to an existing agreement may be prohibited even if that agreement was entered into before May 1, 2020. The Executive Order contains a broad and expansive list of actions that constitute a "transaction," including the "acquisition, importation, transfer, or installation" of any bulk-power system equipment. Accordingly, given the Executive Order's broad definition of transaction, agreements entered into by parties prior to May 1, 2020 for the purchase and delivery of specific equipment may be affected by the Executive Order if the equipment has not yet been shipped or transferred to the receiving party or has not yet been installed by the receiving party. For example, a party that entered into an agreement with a foreign entity for the purchase of an autotransformer in February 2019, with delivery of the autotransformer in August 2020, may still be prohibited from accepting delivery of the autotransformer because of the Executive Order's broad definition of "transaction." The Executive Order also raises the question of whether the purchase of new equipment under existing master supply agreements or engineering, procurement and construction contracts would be prohibited. The order gives the DOE considerable discretion to nullify and invalidate previously bargained-for elements of an existing contract.

Additionally, the Executive Order instructs the DOE to identify prohibited equipment already in use in the U.S. and develop regulations to replace that equipment as soon as practicable. Accordingly, entities will be forced to comply with this retroactive mandate and replace equipment that was previously installed because it has now been deemed to pose a national security threat to the bulk-power system. The Executive Order provides no guidance regarding how long entities will have to comply with directives to replace equipment, whether they will be reimbursed for the costs of doing so, and whether they will be subject to penalties or fines for having installed now-prohibited equipment in the first place. In addition, the Executive Order is silent with respect to the cost recovery and accounting treatment of these assets. There are concerns associated with how state utility commissions will treat the replacement of now-prohibited equipment with respect to cost recovery associated with this equipment. State utility commissions may have previously deemed the now-prohibited equipment a prudent capital investment used and useful in the provision of service. Whether utility commissions will ultimately permit entities to recover the full amount of additional capital investments to comply with the DOE's directive is uncertain.

Finally, the Executive Order also establishes a Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security, which will be chaired by Energy Security Dan Brouillette, to coordinate with the Electricity Subsector Coordinating Council and the Oil and Natural Gas Subsector Coordinating Council. The Task Force will develop infrastructure procurement policies and procedures to protect the bulk-power system. The definition of the "bulk-power system" includes transmission lines of 69-kV or higher. However, it does not include distribution facilities. Despite carving out an exception for distribution facilities, the Executive Order instructs the Task Force to consult with distribution system industry groups to discuss potential attacks on distribution systems.

Each of these factors contributes to the uncertainty surrounding this Executive Order. While the rules promulgated by the DOE may provide some guidance, affected parties, including renewable project developers, traditional project developers, and transmission owners, and their vendors and contractors, will have to wait months for any rules to be finalized. Until then, affected parties will be subject to increased risks in purchasing bulk-power system equipment. In addition, as was the case with the Department of Commerce in the rulemaking to implement the Telecommunications Executive Order, the implementing rules promulgated by the DOE may be broad and provide little guidance and certainty to affected parties.

Going forward, stakeholders should consider the impact of contract language to address and allocate the potential risks associated with the Executive Order in amending existing agreements or negotiating new agreements with vendors, contractors, and suppliers.

It is noteworthy, however, that the ban imposed on dealings with Huawei in the Telecommunications Executive Order did not result in the immediate, complete cessation of either exports or imports to and from Huawei, in part

because U.S. businesses selling to Huawei and U.S. networks dependent on Huawei, made known their objections, and also because the Trump Administration was able to use the threat against Huawei and ZTE as leverage in more comprehensive trade negotiations with China. As a result, the history of the telecommunications infrastructure restrictions suggests that the Executive Order's restrictions on imports of equipment to be utilized in the bulk-power system may also be subject to countervailing pressures.

Interaction of Executive Order with Telecommunications Executive Order

Despite the uncertainty associated with the Executive Order, parties should keep a close eye on the DOC Notice of Proposed Rulemaking ("NOPR"), issued on November 27, 2019 in response to the Telecommunications Executive Order. The NOPR will likely guide the actions of the DOE in drafting its proposed rules and regulations to implement the directives of the instant Executive Order.

As discussed above, the Telecommunications Executive Order served as a precursor to last week's bulk-power system Executive Order. Both orders regulate transactions that pose risks to the resilience of critical infrastructure and national security and both contain almost identical prohibitions on the acquisition, importation, and installation of the equipment covered by the respective orders.

The DOC's NOPR defines "foreign adversary" as any foreign government or foreign non-government person determined by the Secretary [of Commerce] to have engaged in a long-term pattern or serious instances of conduct significantly adverse to the national security of the United States or security and safety of United States persons" for purposes of the Telecommunications Executive Order. The Trump administration has signaled its preference to maintain autonomy over the definition of "foreign adversary." The DOC requested comments on all aspects of the NOPR except the definition of foreign adversary, stating that it is a "matter of executive branch discretion." In addition, the NOPR proposes that DOC evaluations of applicable transactions be conducted on a case-by-case basis. Such evaluations could be initiated by a subset of federal agencies or by information submitted to the DOC by private parties. The NOPR further proposes that rule violations be subject to administrative penalties.

Stakeholders should expect to see similar definitions and transaction evaluation provisions in the DOE proposal.

Interaction of Executive Order with New NERC Supply Chain Standards

Supply chain vulnerability is not a new issue for the electric power sector. In 2017, the North American Electric Reliability Corporation ("NERC") approved a set of new and revised standards (the "Supply Chain Standards") to address supply chain risks, including CIP-013-1, which specifically tackles threats associated with third party vendor products and services. CIP-013-1 requires entities to develop supply chain management programs to identify and assess vendor products and services. Further, entities must establish processes by which vendors notify the entity when risk incidents occur and coordinate with the entity to resolve such incidents. The Supply Chain Standards were scheduled to become effective on July 1, 2020, but in April NERC deferred the deadline by three months to October 1, 2020 in response to COVID-19. NERC's deferral of the implementation deadline contrasts with the urgency of the issuance of the Emergency Order and raises questions about overlap between the two regulatory initiatives.

Prospective vs. Retroactive Application

The Executive Order and CIP 013-1 operate along different timeframes for how and when transmission systems assets are impacted by the regulations. CIP 013-1 is prospective only. The Executive Order, in comparison, may be applied retroactively. The Executive Order directs the Secretary of Energy to develop recommendations on ways to identify, isolate, monitor, or replace problematic equipment that poses a risk to the electric grid. This

creates uncertainty for entities that have met the NERC supply chain security requirements but remain subject to DOE findings that existing transmission equipment must be replaced or otherwise acted upon to mitigate cyber-security risks.

Furthermore, as discussed above, the Executive Order does not address how long entities will have to meet and comply with directives to replace equipment, whether entities will be reimbursed for compliance costs incurred, or whether affected entities will be subject to penalties or fines for having installed the now-prohibited equipment in the first place. It also remains to be seen whether compliance with CIP 013-1 and other Supply Chain Standards will protect an entity against a DOE determination that the entity's transmission equipment "poses and undue risk of catastrophic effects on the security or resiliency" of the electric grid.

Scope of Impacted Equipment

The scope of transmission system components that are impacted by the Executive Order and CIP-013-1 are similar but not identical. The Executive Order applies to the "bulk-power system," a term not defined by NERC, that refers to (i) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (ii) electric energy from generation facilities needed to maintain transmission reliability. It includes transmission lines rated at 69 kV or higher, in contrast to NERC's regulatory authority that extends over the bulk electric system ("BES") that includes transmission elements operated at 100 kV or higher. Electric distribution facilities are excluded from both the Executive Order and NERC definitions.

CIP-013-1 currently applies only to BES transmission elements of high or medium impact. However, in December 2019 NERC issued the results of a *Supply Chain Risk Assessment* that recommends modifying the Supply Chain Standards to include low impact BES cyber-security systems with remote electronic access connections. Many entities have already begun preparation for this expanded scope and are including low impact systems in their CIP-013-1 compliance efforts. Entities that have taken this approach may have an advantage in being able to readily identify supply chain components of equipment to determine if such equipment falls within the scope of the DOE regulations to be promulgated by the DOE. Few entities are likely to have installed transmission elements that fall below 100 kV, and if so, it is unlikely in NERC compliance efforts. Because the Executive Order governs equipment that operates at 69 kV or higher, entities may begin to consider whether to include such equipment in some CIP-013-1 compliance efforts. Simply adding this equipment to existing risk management processes may present the most efficient way to track and record supply chain vendor data to prevent a circumstance where an entity must retrace past actions if equipment is subject to DOE review.

In summary, much work remains to be done to make transparent the direct application of the Executive Order to specific equipment, new and future transactions, and counterparties. The Executive Order presents novel and challenging issues for the continued development and operation of transmission system equipment, however the implications for industry stakeholders, including with respect to NERC compliance and interpretation based off of the similar Telecommunications Executive Order as discussed herein, provide insights to further developments in the implementation of the Executive Order.