

What is a bulk power system (BPS)?

NERC defines the bulk power system (BPS) as the facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and electric energy from generation facilities needed to maintain transmission system reliability.

What is a fine bulk power system?

fine Bulk-Power System? What equipment is included/excluded? The Bulk-Power System is the facilities and control systems necessary for operating an interconnected electric transmission network, to include those lines rated at 69 kV or more, and

What is a bulk electric system (BES)?

The Bulk Electric System (BES) is defined in NERC's Glossary\_of\_Terms as all transmission elements operated at 100 kV or higher and real power and reactive power resources connected at 100 kV or higher. Facilities used in the local distribution of electric energy are not included in this term.

Are BPs facilities NERC compliant?

BES facilities that impact BPS reliability are subject to compliance with NERC's mandatory Reliability Standards.

Are protection system misoperations a good indicator of BPS reliability?

Protection system misoperations remain an important indicator of the reliability of the BPS. Human error is one of the potential causes for misoperations to occur. Figure 5.11 shows the number of misoperations due to human error by RE for the past five years.

How are variable energy resources changing the BPS?

The addition of variable energy resources (VER), primarily wind and solar PV as well as the retirement of conventional generation, are fundamentally changing how the BPS is planned and operated. Planning and operating the grid must increasingly account for energy limitations and variability across the resource fleet.



The guideline, Bulk Power System Reliability Perspectives on the Adoption of Institute of Electrical and Electronics Engineers Standard 1547-2018 (IEEE Std 1547-2018), aims to provide high-level guidance and bulk power system reliability perspectives that should be considered during the adoption and implementation of IEEE Std 1547-2018.



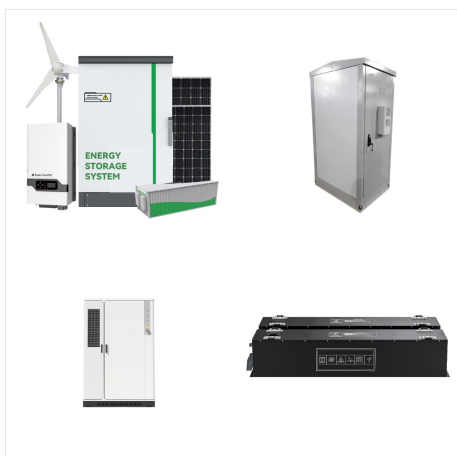
The bulk-power system is the backbone of our Nation's energy infrastructure. It is fundamental to not only national security, but to the American economy and our way of life. The 2019 Worldwide Threat Assessment<sup>1</sup> and the 2020-2022 National Counterintelligence Strategy<sup>2</sup>



WASHINGTON, D.C. ??? Today, the U.S. Department of Energy (DOE) Office of Electricity (OE) announced a Request for Information (RFI) to solicit views on safeguarding the bulk-power system (BPS) supply chain from threats and vulnerabilities.



NPCC enforces compliance with NERC standards, ensuring Bulk Electric System reliability with integrity across the NPCC Region and Canadian provinces. Resources Events Careers Contact. About. About Us. Leadership Team. Northeast Power Coordinating Council, Inc. Regional Standards Committee Work Plan for Calendar Years 2024-2025.



Pursuant to Executive Order 13920 issued May 1, 2020, titled "Securing the United States Bulk-Power System," the Department of Energy (DOE or the Department) is seeking information to understand the energy industry's current practices to identify and mitigate vulnerabilities in the supply chain for components of the bulk-power system (BPS).



NERC Bulk Power System Awareness is responsible for collecting data and analyzing information on any system disturbances that may have an impact on the North American BPS. Bulk Power System Awareness must relay any discoveries critical to system reliability to internal departments, registered entities, regional organizations, government



bulk power system (BPS). Our mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. The North American BPS is divided into seven RE boundaries as shown in the map and corresponding table below.



In the Order No. 693 NOPR,6 FERC proposed to "interpret the term ???bulk electric system??? to apply to all of the ??? 100 kV transmission systems and any underlying transmission system (< 100 kV) that could limit or supplement the operation of the higher voltage transmission systems.



The Department of Energy (DOE) has issued a "prohibition order" in line with President Trump's May 2020 broad bulk power system (BPS) security executive order (EO 13920) that will ban some





The report, which presents NERC's Reliability Issues Steering Committee's (RISC's) strategic efforts to identify and prioritize risks to bulk power system (BPS) reliability, was approved by



The rapid interconnection of bulk power system (BPS) connected inverter-co -based resources (1IBR is the ) most significant driver of grid transformation and poses a high risk to BPS reliability.<sup>2</sup> The speed of this change continues to challenge grid planners, operators, protection engineers, and many other facets of the



States Bulk-Power System,<sup>2</sup> 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



bulk-power system" including public power entities. FPA ? 215(b)(1), 16 U.S.C. ? 824o(b)(1). The term "bulk-power system" is statutorily defined as "facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof)"



acquisitions, import, transfer, or installation of bulk-power system components where there is a credible threat that could compromise the BPS. DOE, working closely with its federal and industry partners, will develop a mechanism to pre-qualify equipment and vendors for the BPS supply chain. Securing the United States -Power System from



Ensuring Reliability of the Bulk Power System with . Growing Levels of Distributed Energy Resources . November 2022 . Purpose and Background Distributed energy resource. 1 (DER) levels are rapid ly growing across many areas of North America (see . Figure 1) and are altering how the bulk power system (BPS) is planned, designed, and operated.



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Reliability Corporation (NERC) and the six Regional  
Entities (REs), is a highly reliable and secure North  
American bulk power system (BPS). Our mission is  
to assure the effective and efficient reduction of  
risks to the reliability and security of the grid.  
Reliability | Resilience | Security



Executive Order 13920 (EO 13920), Securing the  
United States Bulk-Power System (May 2020),  
directs the Secretary of Energy is to work with  
various Federal agencies to ensure that the  
acquisition of bulk-power systems is in line with  
national security demands.CESER will work with  
interdepartmental partners and the task force  
created in this EO to ensure that energy security  
???



In the development and enforcement of Regional Reliability Standards, NPCC, to the extent possible, facilitates attainment of fair, effective, efficient, and competitive electric markets while providing an open, transparent, fair and inclusive process that has no financial barriers to participation.



Bulk Power System Elements Revised ???  
December 01, 2009 1 1.0 NPCC defines specific requirements applicable to design, operation, and protection of the bulk power system. The object of this Classification of Bulk Power System Elements (Document A-10) is to provide the methodology to identify the bulk power system elements



The rapid interconnection of bulk power system (BPS)-connected inverter-based resources (IBR) 1. is the most significant driver of grid transformation and a high risk to BPS reliability. poses . 2. The speed of this change continues to challenge grid planners, operators, protection engineers, and many other facets of the





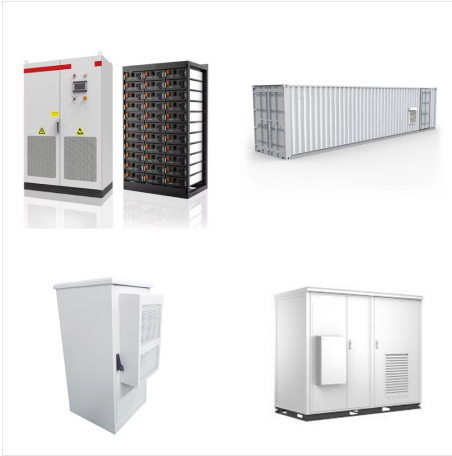
Although the North American bulk power system (BPS) remains reliable and resilient, extreme weather events continue to pose the greatest risk to its reliability and stability, and both cyber and physical attacks on critical infrastructure are increasing, according to the North American Electric Reliability Corporation (NERC).



NARUC Bulk Power System Learning Modules Spring 2024 Module 3; Cybersecurity Training for State Regulators; Current Issues 2024; The next series of three BPS learning modules will be held on April 2, 11, and 16, 2024 from 1:00-3:30 p.m. ET. Registration will open in early March. The series will explore the following topics, featuring



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).



The Bulk Power System Awareness group collects and analyzes information on system disturbances and other incidents that could have an impact to the North American bulk power system (BPS). BPSA, with the assistance of Reliability Coordinators and use of various tools, monitors present conditions on the BPS; providing leadership coordination, technical ???



Bulk Electric System: Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy.