

Frequently Asked Questions

March 2023

General

What is the difference between the Bulk Power System and the Bulk Electric System?

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. The term does not include facilities used in the local distribution of electric energy.

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.

BES facilities that impact BPS reliability are subject to compliance with NERC's mandatory Reliability Standards. The distribution system, which is defined the system that transports power from the transmission system to the end-use customer, is not overseen by NERC and is under the jurisdiction of state, provincial, or local utility regulatory agencies, except under-frequency load shedding and under-voltage load shedding relays located on the distribution system.

When was NERC created and why?

NERC was founded in 1968 by representatives of the electric utility industry for the purpose of developing and promoting voluntary compliance with rules and protocols for the reliable operation of the bulk power transmission systems of North America.

How does NERC define reliability?

NERC defines the reliability of the interconnected BPS in terms of two basic and functional aspects:

- **Adequacy:** Adequacy means having sufficient resources to provide customers with a continuous supply of electricity at the proper voltage and frequency, virtually all of the time. Resources refer to a combination of electricity generating and transmission facilities that produce and deliver electricity, and demand-response programs that reduce customer demand for electricity. Maintaining adequacy requires system operators and planners to take into account scheduled and reasonably expected unscheduled outages of equipment, while maintaining a constant balance between supply and demand.
- **Operating Reliability:** For decades, NERC and the electric industry defined system security as the ability of the BPS to withstand sudden, unexpected disturbances, such as short circuits or unanticipated loss of system elements due to natural causes. In today's world, the security focus of NERC and the industry has expanded to include BPS must be

planned, designed, built, and operated in a manner that takes into account these modern threats, as well as more traditional risks to reliability.

What is the ERO?

The Electric Reliability Organization (ERO) refers to NERC’s role as the independent entity that develops and enforces mandatory standards for the reliable operation and planning of the bulk power system throughout North America, as called for in the Energy Policy Act of 2005. NERC was designated as the ERO by the Federal Energy Regulatory Commission (FERC) on July 20, 2006.

Roles and Responsibilities

What is NERC’s role in the industry?

NERC’s mission is to improve the reliability and security of the bulk power system in the United States, Canada, and part of Mexico. The organization aims to do that not only by enforcing compliance with mandatory Reliability Standards, but also by acting as a catalyst for positive change—including highlighting system weaknesses, helping industry participants operate and plan to the highest possible level, and communicating lessons learned throughout the industry. NERC works with industry stakeholders and federal agencies to ensure all views are fully considered, the greatest possible level of consensus is achieved, and trust and confidence of regulators, industry, and the public is gained.

What does NERC do?

NERC develops and enforces Reliability Standards; monitors the bulk power system; assesses adequacy annually via a 10-year forecast and winter and summer forecasts; audits owners, operators, and users for preparedness; and educates and trains industry personnel.

When did NERC’s role change?

NERC’s transition from voluntary member organization to the independent authority charged with ensuring legal compliance with mandatory Reliability Standards was undertaken in phases. From its creation in 1968 until approximately July 2006, NERC operated as a voluntary industry organization. In July 2006, FERC certified NERC as the ERO for the United States, and preparations began for its new, expanded role. On June 18, 2007, compliance with NERC Reliability Standards became a legal requirement for bulk power system owners, operators, and users.

What is FERC’s role?

FERC is a federal agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC oversees NERC in the United States, as do provincial governments in Canada.

Corporate Structure and Governance

What type of legal structure does NERC have?

NERC is a 501(c)(6) not-for-profit corporation.

What is meant by self-regulatory?

“Self-regulatory” refers to a non-governmental entity to which the government has delegated power. In NERC’s case, FERC delegated to NERC the authority to create and enforce compliance with Reliability Standards. Although FERC and Canadian provincial governments retain the power of review and audit of

NERC, NERC has the authority to write rules and standards with expertise from the industry. This approach has the advantage of greater involvement by entities directly involved in the operation of the bulk power system who have detailed knowledge of the operational and technical needs of the industry.

Who runs NERC?

NERC is governed by a Board of Trustees comprised of 10–12 independent trustees and the president and chief executive officer of NERC. Trustees have expertise in electricity operations and reliability; legal, market, financial and regulatory matters; and familiarity with regional system operation issues. Their selection also reflects geographic diversity. Trustees are independent of the industry and must commit to serving the public interest and representing the reliability concerns of the entire North American electricity system. Trustees are elected by the Member Representatives Committee and serve for a term of three years. NERC is overseen by FERC and governmental authorities in Canada.

Is NERC a government agency?

NERC is a not for profit, non-governmental entity to which FERC has delegated authority to create and enforce compliance with Reliability Standards.

How is NERC funded?

The U.S. government and Canadian provincial governments have directed NERC to allocate costs to those who benefit from a reliable bulk power system: the end-users. NERC allocates its operating costs and those of the six Regional Entities to “load-serving entities”—those owners, operators, and users of the bulk power system responsible for delivering electricity to retail customers—based on how much net energy they need to meet their users’ energy requirements. Funds are then collected from these load-serving entities.

NERC Registered Entities

Who has to register with NERC?

Registered Entities are bulk power system users, owners, and operators who are responsible for performing specified reliability functions to which requirements of mandatory NERC Reliability Standards are applicable. For detailed information on the Compliance Registration process and who must register, please check NERC’s [Organization Registration and Organization Certification](#) page.

Membership

Who may become a NERC member?

Any person or entity with an interest in the reliable operation of the North American bulk power system can apply for membership. A member must maintain their membership in accordance with Article II of the Corporation Bylaws. You do not need to be a member to attend public meetings of NERC or NERC committees. You also do not need to be a NERC member to vote on Reliability Standards as part of the Registered Ballot Body.

How does a person or entity become a NERC member?

Any person or entity interested in becoming a NERC member should complete the online application form on the NERC [ERO Portal](#). Interested parties should check the existing [NERC Membership list](#) to see if their company or affiliate company is already a member before submitting an application. Additional information is available at [member information](#).

What is the difference between a NERC member and a NERC Registered Entity?

NERC Members are individuals and entities that joined NERC so they could participate in NERC planning and operations through committees, voting privileges, and the Member Representatives Committee. **NERC Registered Entities** are bulk power system users, owners, and operators who are responsible for performing specified reliability functions which are subject to the requirements of mandatory NERC Reliability Standards. Registered Entities may choose to be, but are not required to be, members of NERC.

What is the difference between NERC members and NERC stakeholders?

NERC members participate in NERC planning and operations through committees, voting privileges, and the Member Representatives Committee. **NERC stakeholders** include members, governments, all bulk power system participants, employees, and end-use electricity customers.

What is the membership fee?

There is no charge for NERC membership.

Regional Entities

What are the Regional Entities?

NERC works closely with six Regional Entities whose members come from all segments of the electric industry: investor-owned utilities; federal power agencies; rural electric cooperatives; state, municipal and provincial utilities; independent power producers; power marketers; and end-use customers. These entities account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California, Mexico. These Regional Entities are Northeast Power Coordinating Council (NPCC), Midwest Reliability Organization (MRO), ReliabilityFirst (RF), SERC Reliability Corporation (SERC), Texas Reliability Entity Inc. (Texas RE), and WECC.

What is the role of the Regional Entities?

First, the Regional Entities have delegated authorities and responsibilities, as approved by FERC, to enforce NERC and regional Reliability Standards and perform other standards-related functions assigned by NERC. NERC oversees the Regional Entities in this role to ensure consistency of delegated functions across North America, while allowing for an appropriate degree of flexibility to accommodate regional differences.

Second, the Regional Entities have non-statutory roles, which include working with their own members to forecast electricity demand, coordinate operations, share information, provide training, and plan for emergencies, in their respective Regions of North America.

NERC in Canada

What is NERC's role in Canada?

NERC's roles in Canada and the United States are very similar. While the approval process varies in the different Canadian jurisdictions, NERC Reliability Standards—in some cases modified to reflect the jurisdictions' reliability regimes—are mandatory and enforceable in the provinces of Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Quebec, Saskatchewan.

NERC in Mexico

What is NERC's role in Mexico?

Baja California, Mexico is part of the Western Interconnection. WECC, the Regional Entity for the Western Interconnection, is responsible for coordinating and promoting electric system reliability in that area.

NERC in My Neighborhood

Does NERC's work affect my local neighborhood and electricity supply?

NERC's focus is the bulk power system, which includes power generation and the high-voltage transmission of electricity. NERC is not directly involved in the local distribution or delivery of electricity to homes and businesses, but its work to maintain and improve the reliability of the bulk power system impacts the entire electricity industry, because the bulk system forms the backbone of the entire international network of power delivery lines and equipment.

What is NERC's rule on tree-trimming in local neighborhoods?

NERC's tree-trimming standard applies only to high-voltage transmission lines of 200 kV or higher, or transmission lines of lower voltages if the Regional Entity deems the line critical to bulk power system reliability. If such a line runs through your neighborhood, then the owner of that line must keep the vegetation in that area trimmed to meet the NERC Reliability Standard. Most distribution or local power lines that run through neighborhoods and backyards likely fall under the purview of local utilities and state regulatory agencies.