

Frequently Asked Questions

August 2013

General

What is the Bulk-Power System or Bulk Electric System?

NERC defines the Bulk-Power System as the electricity power generation facilities combined with the high-voltage transmission system, which together create and transport electricity around North America. Put another way, the Bulk-Power System is the continent's electricity system except for the local electricity facilities you see in your town or city. NERC does not deliver power directly to homes and businesses. That service generally is provided by a local utility of some kind. Local delivery is under the jurisdiction of state, provincial or local utility regulatory agencies.

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 electric transmission systems of North America.

How does NERC define reliability?

NERC defines a reliable Bulk-Power System as one that is able to meet the electricity needs of end-use customers even when unexpected equipment failures or other factors reduce the amount of available electricity. NERC divides reliability into two categories:

- **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.
- **Security:** For decades, NERC and the bulk power industry defined system security as the ability of the Bulk-Power System 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 withstanding disturbances caused by manmade physical or cyber attacks. The Bulk-Power System must be planned, designed, built and operated in a manner that takes into account these modern threats, as well as more traditional risks to security.

What is the ERO?

Electric reliability organization 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 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 shedding light on system weaknesses, helping industry participants operate and plan to the highest possible level, and communicating lessons learned throughout the industry.

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.

How has NERC's role changed over the years?

Historically, NERC connected the various industry participants through a voluntary council. That changed with the passage of the Energy Policy Act of 2005, which called for the creation of an international electricity reliability organization. EAct marked a fundamental shift in electricity regulation in the United States.

What did NERC do to assume its new role?

Many aspects of NERC's traditional operations provided a solid foundation upon which to build the ERO, including governance by an independent Board of Trustees; an open and balanced standards development process; an effective program of monitoring and enforcing compliance with standards; technical excellence; an established ability to oversee regional reliability programs; and a philosophy of including stakeholders in regular operations and decision-making.

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.

In its application to FERC to be named the electric reliability organization, NERC defined its proposed structure, governance and operational procedures. NERC also defined the respective authorities and responsibilities of NERC, the Regional Entities and the Bulk-Power System owners, operators and users

within the jurisdiction of NERC for reliability purposes. The application also included NERC's Bylaws, Rules of Procedure, regional delegation agreements, and a transition plan.

In 2005, NERC revised its Reliability Standards.

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 phased. From its creation in 1968 until approximately July 2006, NERC operated as a voluntary industry organization. In July 2006, FERC certified NERC as the electric reliability organization 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?

The Federal Energy Regulatory Commission 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 has 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; and their selection 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 the Federal Energy Regulatory Commission and governmental authorities in Canada.

Is NERC a government agency?

NERC is a not-for-profit corporation.

How is NERC funded?

Previously, the Regional Entities funded NERC operations. Today, 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 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.

Membership**Who can be a member of NERC?**

Before, eight Regional Entities were the sole members and owners of NERC. Today, membership is open to all entities with an interest in the reliability of the Bulk-Power System. Members fall into these sectors:

- Investor-owned utility
- State or municipal utility
- Cooperative utility
- Federal or provincial utility/power marketing administrator
- Transmission-dependent utility
- Merchant electricity generator
- Electricity marketer
- Large end-use electricity customer
- Small end-use electricity customer
- Independent system operator/regional transmission organization
- Regional Entity
- Government representative

What role do members play?

NERC members contribute their expertise with Bulk-Power System planning and operations in many ways, including participation in various NERC committees. (Non-members can also sit on NERC committees.) Through the Member Representatives Committee (MRC), NERC members elect the NERC Board and can amend NERC Bylaws. The MRC also provides policy input to the Board.

How many members does NERC have?

NERC has more than 1,900 members.

What is the difference between a NERC member and a NERC stakeholder?

NERC members are individuals and entities that joined NERC so they can participate in NERC planning and operations through committees, voting privileges and the Member Representatives Committee. “Stakeholders” refers to any party that has a “stake” in what NERC does. Stakeholders include members, governments, all Bulk-Power System participants, employees and end-use electricity customers.

What is the membership fee?

Membership in NERC is free. However, 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 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.

Regional Entities**What are the Regional Entities?**

NERC works closely with eight regional reliability organizations 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.

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 Regions 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, and plan for emergencies, in their respective regions of North America.

Staff**How many staff members does NERC have and what are their functions?**

By involving bulk power industry experts in its operations and planning, NERC is able to operate with a streamlined staff of around 180. Staff members are responsible for the coordination and planning of all

NERC functions and for support functions including Legal, Human Resources, Communications and Administration.

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 Ontario, New Brunswick, Alberta, British Columbia, Manitoba and Nova Scotia and are in the process of adoption in Quebec. While Saskatchewan does not have an independent regulator, the province has determined that its utilities will be subject to NERC Reliability Standards.

When will NERC be named the electric reliability organization for Canada?

Authority over electricity generation and transmission in Canada rests primarily with provincial governments. Not all jurisdictions have legal structures to "name" an ERO. However, all have recognized NERC as an electric reliability standards-setting organization and have committed to supporting NERC in its standards-setting and oversight role as the North American ERO. NERC has memorandums of understanding with Ontario, Quebec, Nova Scotia, New Brunswick, Alberta, Saskatchewan and the National Energy Board of Canada, all of whom commit to working with NERC to enhance North American Bulk-Power System reliability. While there are currently no MOUs in effect with British Columbia and Manitoba, both provinces have adopted NERC Reliability Standards as mandatory and enforceable and work closely with the ERO.

NERC in Mexico

What is NERC's role in Mexico?

NERC expects to seek recognition as the electric reliability organization for Mexico as the Mexican electric grid is strengthened and interconnected to a greater degree with the U.S. grid. Currently, Baja Mexico is connected to the Western Interconnection. The Western Electricity Coordinating Council continues to be responsible for coordinating and promoting electric system reliability in both Canada and Mexico.

When will NERC be named as the reliability organization for Mexico?

The legislation is with the Mexican Congress, but due to various elections, it is on hold.

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.

Who has to register with NERC?

Although anyone can choose to join NERC as a member, for the most part, individuals and businesses are not considered “users” unless they are able to exert a material impact on the reliability of the Bulk-Power System. For detailed information on the Compliance Registration process and who must register, please see the Statement of Compliance Registry Criteria.

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.

The NERC Reliability Standard does not apply to lower-voltage lines such as those of the local distribution systems. Most distribution or local power lines that run through neighborhoods and backyards likely fall under the purview of local utilities and state regulatory agencies.