

# Reliability Principles

NERC Reliability Standards are based on certain reliability principles that define the foundation of reliability for North American bulk power systems.<sup>1</sup> Each reliability standard shall enable or support one or more of the reliability principles, thereby ensuring that each standard serves a purpose in support of reliability of the North American bulk power systems. Each reliability standard shall also be consistent with all of the reliability principles, thereby ensuring that no standard undermines reliability through an unintended consequence.

1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.
5. Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of interconnected bulk power systems.
6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
7. The reliability of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.
8. Bulk power systems shall be protected from malicious physical or cyber attacks.

## Version History

Version	Date	Owner	Change Tracking
1	March 18, 2010		
1	May 16, 2014	Standards Information Staff	Updated template

<sup>1</sup> The intent of the set of NERC reliability standards is to deliver an Adequate Level of Reliability. The latest set of characteristics associated with an Adequate Level of Reliability are posted on the Reliability Standards Resources Web Page.