NERC
NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

CIP Definitions

Project 2016-02 Modifications to CIP Standards

The Project 2016-02 Standard Drafting Team (SDT) is seeking comments on the following new, modified, or retired terms used in the proposed standard. Please note that Project 2016-02 is not proposing changes to Cyber Asset (CA), BES Cyber System (BCS), Electronic Security Perimeter (ESP), and External Routable Connectivity (ERC) definitions to maintain compatibility for non-virtualized systems.

Table 1: Retired, Modified, or Newly Proposed Definitions

NERC Glossary Term	Currently Approved Definition	CIP SDT Proposed New or Revised
BES Cyber Asset (BCA)	A Cyber Asset that if rendered unavailable, degraded, or misused would, within 15 minutes of its required operation, misoperation, or non-operation, adversely impact one or more Facilities, systems, or equipment, which, if destroyed, degraded, or otherwise rendered unavailable when needed, would affect the reliable operation of the Bulk Electric System. Redundancy of affected Facilities, systems, and equipment shall not be considered when determining adverse impact. Each BES Cyber Asset is included in one or more BES Cyber Systems.	A Cyber Asset or Virtual Cyber Asset; excluding Shared Cyber Infrastructure, that if rendered unavailable, degraded, or misused would, within 15 minutes of its required operation, misoperation, or non-operation, adversely impact one or more Facilities, systems, or equipment, which, if destroyed, degraded, or otherwise rendered unavailable when needed, would affect the reliable operation of the Bulk Electric System. Redundancy of affected Facilities, systems, and equipment shall not be considered when determining adverse impact. Each BES Cyber Asset is included in one or more BES Cyber Systems.

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Shared Cyber Infrastructure (SCI)		Programmable electronic devices whose compute, storage (including network transport), or network resources are shared with one or more Virtual Cyber Assets or that perform logical isolation for an ESZ or ESP. This includes its management systems.
Virtual Cyber Asset (VCA)		A logical instance of an operating system, firmware, or self-contained application hosted on Shared Cyber Infrastructure.

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Transient Cyber Asset (TCA)	A Cyber Asset that is: 1. capable of transmitting or transferring executable code, 2. not included in a BES Cyber System, 3. not a Protected Cyber Asset (PCA) associated with high or medium impact BES Cyber Systems, and 4. directly connected (e.g., using Ethernet, serial, Universal Serial Bus, or wireless including near field or Bluetooth communication) for 30 consecutive calendar days or less to a: • BES Cyber Asset, • network within an Electronic Security Perimeter (ESP) containing high or medium impact BES Cyber Systems, or • PCA associated with high or medium impact BES Cyber Systems. Examples of Transient Cyber Assets include, but are not limited to, Cyber Assets used for data transfer, vulnerability assessment, maintenance, or troubleshooting purposes.	A Cyber Asset or Virtual Cyber Asset that is: 1. capable of transmitting or transferring executable code, 2. not included in a BES Cyber System, 3. not a Protected Cyber Asset (PCA) associated with high or medium impact BES Cyber Systems, and 4. directly connected (e.g., using Ethernet, serial, Universal Serial Bus, or wireless including near field or Bluetooth communication) for 30 consecutive calendar days or less to a: • BES Cyber Asset, • Shared Cyber Infrastructure, • network within an Electronic Security Perimeter (ESP) or Electronic Security Zone containing high or medium impact BES Cyber Systems, or • PCA associated with high or medium impact BES Cyber Systems. Examples of Transient Cyber Assets include, but are not limited to, Cyber Assets used for data transfer, vulnerability assessment, maintenance, or troubleshooting purposes.

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Physical Access Control Systems (PACS)	Cyber Assets that control, alert, or log access to the Physical Security Perimeter(s), exclusive of locally mounted hardware or devices at the Physical Security Perimeter such as motion sensors, electronic lock control mechanisms, and badge readers.	Cyber Assets or Virtual Cyber Assets that control~~, alert, or log~~ access to the Physical Security Perimeter(s), exclusive of locally mounted hardware or devices at the Physical Security Perimeter such as motion sensors, electronic lock control mechanisms, and badge readers.
Physical Access Monitoring Systems (PAMS)		Cyber Assets or Virtual Cyber Assets that monitor, alert, or log access to the Physical Security Perimeter(s), exclusive of locally mounted hardware or devices at the Physical Security Perimeter such as motion sensors, electronic lock control mechanisms, and badge readers.
Protected Cyber Asset (PCA)	One or more Cyber Assets connected using a routable protocol within or on an Electronic Security Perimeter that is not part of the highest impact BES Cyber System within the same Electronic Security Perimeter. The impact rating of Protected Cyber Assets is equal to the highest rated BES Cyber System in the same ESP.	Cyber Assets or Virtual Cyber Assets that: • Are connected using a routable protocol within or on an Electronic Security Perimeter that are not part of the highest impact BES Cyber System within the same Electronic Security Perimeter; or • Are within the same Electronic Security Zone that are not part of the highest impact BES Cyber System within the same Electronic Security Zone; or • Share compute resources (CPU or memory) with a BES Cyber System.

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Electronic Access Point (EAP)	A Cyber Asset interface on an Electronic Security Perimeter that allows routable communication between Cyber Assets outside an Electronic Security Perimeter and Cyber Assets inside an Electronic Security Perimeter.	RETIRED
Electronic Access Control or Monitoring Systems (EACMS)	Cyber Assets that perform electronic access control or electronic access monitoring of the Electronic Security Perimeter(s) or BES Cyber Systems. This includes Intermediate Systems.	RETIRED
Electronic Access Control System (EACS)		Cyber Assets or Virtual Cyber Assets that provide electronic access control to an ESP, ESZ -or BES Cyber System.
Electronic Access Monitoring Systems (EAMS)		Cyber Assets or Virtual Cyber Assets that provide electronic access monitoring of an ESP, ESZ, or BES Cyber System.
Intermediate Systems (IS)	A Cyber Asset or collection of Cyber Assets performing access control to restrict Interactive Remote Access to only authorized users. The Intermediate System must not be located inside the Electronic Security Perimeter.	A type of EACS that is used to restrict Interactive Remote Access.
Electronic Security Zone (ESZ)		A segmented section of a network that contains systems and components to create logical isolation.

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External Routable Connectivity (ERC)	The ability to access a BES Cyber System from a Cyber Asset that is outside of its associated Electronic Security Perimeter via a bi-directional routable protocol connection.	The ability to access a BES Cyber System from a Cyber Asset or Virtual Cyber Asset that is outside of its associated Electronic Security Perimeter or Electronic Security Zone via a bi-directional routable protocol connection.
Interactive Remote Access (IRA)	User-initiated access by a person employing a remote access client or other remote access technology using a routable protocol. Remote access originates from a Cyber Asset that is not an Intermediate System and not located within any of the Responsible Entity's Electronic Security Perimeter(s) or at a defined Electronic Access Point (EAP). Remote access may be initiated from: 1) Cyber Assets used or owned by the Responsible Entity, 2) Cyber Assets used or owned by employees, and 3) Cyber Assets used or owned by vendors, contractors, or consultants. Interactive remote access does not include system-to-system process communications.	User-initiated access by a person employing a remote access client.
Physical Security Perimeter (PSP)	The physical border surrounding locations in which BES Cyber Assets, BES Cyber Systems, or Electronic Access Control or Monitoring Systems reside, and for which access is controlled.	The physical border ~~surrounding locations in which BES Cyber Assets, BES Cyber Systems, or Electronic Access Control or Monitoring Systems reside, and for~~ at which access is controlled.

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Removable Media	Storage media that (i) are not Cyber Assets, (ii) are capable of transferring executable code, (iii) can be used to store, copy, move, or access data, and (iv) are directly connected for 30 consecutive calendar days or less to a BES Cyber Asset, a network within an ESP, or a Protected Cyber Asset. Examples include, but are not limited to, floppy disks, compact disks, USB flash drives, external hard drives, and other flash memory cards/drives that contain nonvolatile memory.	Storage media that (i) are not Cyber Assets, (ii) are capable of transferring executable code, (iii) can be used to store, copy, move, or access data, and (iv) are directly connected for 30 consecutive calendar days or less to a BES Cyber Asset, a network within an ESP or ESZ, ~~or~~ a Protected Cyber Asset, or SCI. ~~Examples include, but are not limited to, floppy disks, compact disks, USB flash drives, external hard drives, and other flash memory cards/drives that contain nonvolatile memory.~~