

Compliance Application Notice — 0031

CIP-006 R1 Acceptable Opening Dimensions

Posted [DATE]

Primary Interest Groups

Compliance Enforcement Authority (CEA)¹
NERC
Regional Entity
Registered Entities subject to ~~CIP-005 and~~ CIP-006
Responsible Entities²

Issue: What is the acceptable unprotected opening dimension in the Physical Security Perimeter (PSP)?

For the purpose of aiding a CEA, this CAN provides instruction to assess whether an opening in the PSP must have additional protective measures in place.

Background

CIP-006 R1.1 is intended to ensure protection of assets within an [electronic security perimeter \(ESP\)](#) via a “six-wall” border or documented alternative measures. To date there are a variety of ways in which entities have endeavored to create a completely enclosed (six-wall) border.

Compliance Application

CIP-006 states, in pertinent part:

***R1. Physical Security Plan** – The Responsible Entity shall document, implement, and maintain a physical security plan, approved by the senior manager or delegate(s) that shall address, at a minimum, the following:*

R1.1. All Cyber Assets within an Electronic Security Perimeter shall reside within an identified Physical Security Perimeter. Where a completely enclosed (“six-wall”) border

¹ Compliance Enforcement Authorities include ERO auditors, investigators, enforcement personnel or any person authorized to assess issues of concern, potential non-compliance, and possible, alleged or confirmed violations of NERC Reliability Standard requirements.

² Within the text of Standard CIP-006, “Responsible Entity” shall mean: Reliability Coordinator; Balancing Authority; Interchange Authority; Transmission Service Provider; Transmission Owner; Transmission Operator; Generator Owner; Generator Operator; Load Serving Entity; NERC; and Regional Entity

cannot be established, the Responsible Entity shall deploy and document alternative measures to control physical access to such Cyber Assets.

R.1.2. *Identification of all physical access points through each Physical Security Perimeter and measures to control entry at those access points.*

R.1.3. *Processes, tools, and procedures to monitor physical access to the perimeter(s).*

CEAs are to consider 96 square inches as the measurement for each maximum acceptable opening without physical protective measures in place. This is consistent with other agencies that use similar measurement practices in other industries.

- Director of Central Intelligence Directive (DCID) 6/9 is the Manual of Physical Security Standards for Sensitive Compartmented Information Facilities (SCIF) adopted by the Department of Defense (DOD). Section 3.3.4 of this document references the 96-square-inch metric in regard to physical protection of vents, ducts and pipes.
<http://www.fas.org/irp/offdocs/dcid6-9.pdf>
- Department of Homeland Security Management Directives System MD# 11030.1 is the Manual of Physical Protection of Facilities and Real Property adopted by the Department of Homeland Security (DHS). Section VI.A.2 of this document references a 100-square-inch metric in regard to areas of single openings for perimeter walls.
http://www.dhs.gov/xlibrary/assets/foia/mgmt_directive_110301_physical_protection_of_facilities_and_real_property.pdf
- DOD Directive 5210.63 is the directive for Security of Nuclear Reactors and Special Nuclear Materials. In Enclosure 2 of this directive, definition E2.1.16.2 references 96 square inches as the maximum allowable opening without protective measures for Special Nuclear Material Vaults.
<http://biotech.law.lsu.edu/blaw/dodd/corres/pdf2/D521063p.pdf>

Additionally, for any opening greater than 96 square inches, regardless of shape, with ~~one~~ its shortest side greater than 6 inches in length, CEAs are to look for evidence that the opening is protected against entry by the use of bars, wire mesh or other permanently installed ~~metal~~ barrier that leaves no opening greater than 6 inches on its shortest side.

Several application examples include:

- An opening of 8 inches by 8 inches would not require any additional protection since the opening is less than 96 square inches.
- An opening of 2 inches by 100 inches would not require any additional protection, because even though the opening is greater than 96 square inches, the smaller dimension is less than 6 inches.
- An opening of 8 inches by 15 inches would require metal bars, ~~or~~ mesh, or other permanently installed barrier since the opening is greater than 96 square inches, and the smaller dimension is greater than 6 inches.

- An opening of 8 inches by 100 inches that cannot be closed in by bars or mesh due to safety/regulatory requirements but upon which entities utilized “alternative measures” (e.g., electronic sensors) would require a TFE to be filed with the appropriate Regional Entity.

Effective Period for CAN

This CAN is effective upon posting as final on the NERC Web site, and is to be used by CEAs to assess compliance from the posting date forward, regardless of the start date of any non-compliance or Possible Violation. It supersedes all prior communications and will remain in effect until such time that a future version of a FERC-approved or other applicable government authority-approved standard or interpretation becomes effective and addresses the specific issue contained in this CAN.

For any enforcement action in process and for audits that have been initiated,³ a CEA will apply the appropriate discretion, including consideration of the specific facts and circumstances of the non-compliance, in determining whether to assess compliance pursuant to this CAN.

Evidence of Compliance

A CEA is to assess the following to obtain reasonable assurance of the entity’s compliance:

- That any opening that does not have physical ~~protective~~^{preventative} measures in place is less than 96 square inches.
- That any opening greater than 96 square inches, with its shortest side greater than 6 inches in length, is protected against entry by the use of bars, wire mesh or other permanently installed ~~metal~~ barrier that leaves no opening greater than 6 inches on its shortest side.

In addition, a CEA is to verify that a responsible entity submitted a TFE for CIP-006 R1.1 that outlines the basis and alternate and/or compensating measures for any opening over 96 square inches without physical protective measures. For example, a motion detector is a non-physical protective measure.

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³ “Initiated” means that a registered entity has received notification of the upcoming audit.

⁴ In this usage, “preventative” means a CEA is to verify there is a true physical prevention control and not merely a physical detection control (e.g. motion sensors are detection controls – barriers are prevention controls).

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This document is designed to convey compliance monitoring instruction to achieve a measure of consistency among auditors and Compliance Enforcement Authorities. It is not intended to establish new requirements under NERC's Reliability Standards or to modify the requirements in any existing NERC Reliability Standard. Compliance will continue to be assessed based on language in the currently enforceable NERC Reliability Standards. This document is not intended to define the exclusive method an entity must use to comply with a particular standard or requirement, or foreclose a registered entity's demonstration by alternative means that it has complied with the language and intent of the standard or requirement, taking into account the facts and circumstances of a particular registered entity. Implementation of information in this document is not a substitute for compliance with requirements in NERC's Reliability Standards.