Unofficial Comment Form

# Project 2016-02 Modifications to CIP Standards

Modifications to address the FERC directive regarding the  
Definition of Low Impact External Routable Connectivity

**Do not** use this form for submitting comments. Use the [electronic form](https://sbs.nerc.net/) to submit comments  
on the **Modifications to address the Federal Energy Regulatory Commission directive regarding the Definition of Low Impact External Routable Connectivity**. The electronic form must be submitted by **8 p.m. Eastern, Tuesday, September 6, 2016.  
m. Eastern, Thursday, August 20, 2015**

Additional information is available on the [project page](http://www.nerc.com/pa/Stand/Pages/Project%202016-02%20Modifications%20to%20CIP%20Standards.aspx). If you have questions, contact either Senior Standards Developer, [Stephen Crutchfield](mailto:stephen.crutchfield@nerc.net) at (609) 651-9455 or [Al McMeekin](mailto:al.mcmeekin@nerc.net) at (404) 446-9675.

## Background Information

On January 21, 2016, the Federal Energy Regulatory Commission (FERC or Commission) issued [Order No. 822](https://www.ferc.gov/whats-new/comm-meet/2016/012116/E-2.pdf), Revised Critical Infrastructure Protection Reliability Standards, approving seven CIP Reliability Standards and new or modified definitions. In Order No. 822, the Commission also directed NERC to make certain modifications to those standards and definitions. On March 9, 2016, the NERC Standards Committee authorized the Standards Authorization Request (SAR) to be posted for a 30-day informal comment period from March 23 – April 21, 2016. Based on the comments received, the 2016-02 Modifications to CIP Standards Drafting Team (SDT) made minor revisions to the SAR which was posted for an additional 30-day informal comment period June 1-30, 2016.

In Order 822, the Commission stated:

“73. Based on the comments received in response to the NOPR, the Commission concludes that a modification to the Low Impact External Routable Connectivity definition to reflect the commentary in the Guidelines and Technical Basis section of CIP-003-6 is necessary to provide needed clarity to the definition and eliminate ambiguity surrounding the term “direct” as it is used in the proposed definition. Therefore, pursuant to section 215(d)(5) of the FPA, we direct NERC to develop a modification to provide the needed clarity, within one year of the effective date of this Final Rule. We agree with NERC and other commenters that a suitable means to address our concern is to modify the Low Impact External Routable Connectivity definition consistent with the commentary in the Guidelines and Technical Basis section of CIP-003-6.”

**SDT Approach**

The SDT changed the term Low Impact External Routable Connectivity to Low Impact External Routable Communication (LERC) and revised the definition of LERC. The revisions clarify that LERC is an attribute of a BES asset (e.g., a substation or generation facility), not a BES Cyber Asset, and focuses on whether there is routable protocol communications across the asset boundary without regard to 'direct vs. indirect' access that may occur. It removes the dependency between the electronic access controls that may be in place and having those controls determine whether LERC exists or not. For those BES assets that have LERC, the SDT changed the requirement from requiring a LEAP to requiring electronic access controls to “permit only necessary electronic access to low impact BES Cyber Systems” (revised Attachment 1, Section 3.1) within the BES asset and expanded the Guidelines and Technical Basis with numerous examples of electronic access controls. The proposed definition of LERC is the following:

# Low Impact External Routable Communication (LERC) – A routable protocol communication that crosses the boundary of an asset containing one or more low impact BES Cyber Systems, excluding communications between intelligent electronic devices used for time-sensitive protection or control functions between non-Control Center BES assets containing low impact BES Cyber Systems including, but not limited to, IEC 61850 GOOSE or vendor proprietary protocols.

With the proposed definition of LERC, the SDT determined that the implemented security controls, which previously created an absence of LERC by making the connection “indirect,” would become acceptable methods of electronic access control. As such, the specific implementation of a Low Impact BES Cyber System Electronic Access Point (LEAP) is not required; therefore, the SDT is proposing the retirement of LEAP. This change is reflected in the revised language of CIP-003-7, Attachment 1, Sections 2 and 3.1.

In summary, the SDT made the following changes to address the directive:

1. Revised the definition of LERC
2. Retired Low Impact BES Cyber System Electronic Access Point (LEAP)
3. Revised the requirement language (Requirement R2) of Sections 2 and 3 in Attachment 1 of CIP-003-7
4. Revised the associated High VSL for Requirement R2 of CIP-003-7
5. Revised the evidential language (Measure M2) of Sections 2 and 3 in Attachment 2 of CIP-003-7
6. Non-substantive errata changes within CIP-003-7 such as changing “ES-ISAC” to “E-ISAC”.

The SDT requests feedback on the proposed approach to addressing the FERC directive.

**Questions**

1. Definition: The SDT replaced the term *Low Impact External Routable Connectivity* with *Low Impact External Routable Communication (LERC)* and revised the definition such that it is relevant to the type ofcommunication that occurs crossing the boundary of the BES asset that contains the low impact BES Cyber Systems. This more clearly aligns with the output of CIP-002-5.1 Requirement R1, Part 1.3. Do you agree with these changes? If not, please provide the basis for your disagreement and an alternate proposal.

Yes:

No:

Comments:

1. Requirement R2: The SDT revised CIP-003-6, Attachment 1, Section 2 Physical Security Controls to reflect the retirement of LEAP. Do you agree with these revisions? If not, please provide the basis for your disagreement and an alternate proposal.

Yes:

No:

Comments:

1. Requirement R2: The SDT revised CIP-003-6, Attachment 1, Section 3 Electronic Access Controls to require entities to implement electronic access control(s) for LERC, if any, to permit only necessary electronic access to low impact BES Cyber System(s). Do you agree with this revision? If not, please provide the basis for your disagreement and an alternate proposal.

Yes:

No:

Comments:

1. Measure M2: The SDT revised the complementary language of CIP-003-6, Attachment 2, Sections 2 and 3 to make the evidential language of the Measure consistent with the revised requirement language. Do you agree with these revisions? If not, please provide the basis for your disagreement and an alternate proposal.

Yes:

No:

Comments:

1. Guidelines and Technical Basis: The SDT revised the Guidelines and Technical Basis (GTB) section of the standard to reflect the changes made to Requirement R2. The GTB provides support for the technical merits of the requirement and provides **example** diagrams that illustrate various electronic access controls at a conceptual level. Do you agree with the content of the GTB? If not, please provide the basis for your disagreement and alternate or additional proposal(s) for SDT consideration.

Yes:

No:

Comments:

1. Implementation Plan: The SDT revised the Implementation Plan such that it establishes a single effective (compliance) for the revisions made to Sections 2 and 3 of Attachment 2 in CIP-003, which will be the later of September 1, 2018 or the first day of the first calendar quarter that is nine (9) calendar months after the effective date of the applicable governmental authority’s order approving the standard and NERC Glossary term, or as otherwise provided for by the applicable governmental authority. Do you agree with this proposal? If not, please provide the basis for your disagreement and an alternate proposal.

Yes:

No:

Comments:

1. If you have additional comments on the proposed revisions to address the FERC directive regarding the LERC definition that you have **not** provided in response to the questions above, please provide them here.

Comments: