

**Reliability Standard Audit Worksheet[[1]](#footnote-1)**

CIP-005-5 – Cyber Security – Electronic Security Perimeter(s)

***This section to be completed by the Compliance Enforcement Authority.***

|  |  |
| --- | --- |
| **Audit ID:** | Audit ID if available; or REG-NCRnnnnn-YYYYMMDD |
| **Registered Entity:**  | Registered name of entity being audited |
| **NCR Number:**  | NCRnnnnn |
|  **Compliance Enforcement Authority:** | Region or NERC performing audit |
| **Compliance Assessment Date(s)[[2]](#footnote-2):** | Month DD, YYYY, to Month DD, YYYY |
| **Compliance Monitoring Method:**  | [On-site Audit | Off-site Audit | Spot Check] |
| **Names of Auditors:**  | Supplied by CEA |

# **Applicability of Requirements**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **BA** | **DP** | **GO** | **GOP** | **IA** | **LSE** | **PA** | **PSE** | **RC** | **RP** | **RSG** | **TO** | **TOP** | **TP** | **TSP** |
| **R1** | X | X | X | X | X |  |  |  | X |  |  | X | X |  |  |
| **R2** | X | X | X | X | X |  |  |  | X |  |  | X | X |  |  |

**Legend:**

|  |  |
| --- | --- |
| Text with blue background: | Fixed text – do not edit |
| Text entry area with Green background: | Entity-supplied information |
| Text entry area with white background: | Auditor-supplied information |

Findings

**(This section to be completed by the Compliance Enforcement Authority)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Req.** | **Finding** | **Summary and Documentation** | **Functions Monitored** |
| **R1** |  |  |  |
| P1.1 |  |  |  |
| P1.2 |  |  |  |
| P1.3 |  |  |  |
| P1.4 |  |  |  |
| P1.5 |  |  |  |
| **R2** |  |  |  |
| P2.1 |  |  |  |
| P2.2 |  |  |  |
| P2.3 |  |  |  |

|  |  |
| --- | --- |
| **Req.** | **Areas of Concern** |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Req.** | **Recommendations** |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Req.** | **Positive Observations** |
|  |  |
|  |  |
|  |  |

Subject Matter Experts

Identify the Subject Matter Expert(s) responsible for this Reliability Standard.

**Registered Entity Response (Required; Insert additional rows if needed):**

|  |  |  |  |
| --- | --- | --- | --- |
| **SME Name** | **Title** | **Organization** | **Requirement(s)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**R1 Supporting Evidence and Documentation**

**R1.** Each Responsible Entity shall implement one or more documented processes that collectively include each of the applicable requirement parts in *CIP-005-5 Table R1 – Electronic Security Perimeter. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning and Same Day Operations].*

**M1.** Evidence must include each of the applicable documented processes that collectively include each of the applicable requirement parts in *CIP-005-5 Table R1 – Electronic Security Perimeter* and additional evidence to demonstrate implementation as described in the Measures column of the table.

**R1 Part 1.1**

| **CIP-005-5 Table R1 – Electronic Security Perimeter** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 1.1 | High Impact BES Cyber Systems and their associated:* PCA

Medium Impact BES Cyber Systems and their associated:* PCA
 | All applicable Cyber Assets connected to a network via a routable protocol shall reside within a defined ESP. | An example of evidence may include, but is not limited to, a list of all ESPs with all uniquely identifiable applicable Cyber Assets connected via a routable protocol within each ESP. |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R1, Part 1.1

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more process(es) which require all applicable Cyber Assets connected to a network via a routable protocol to reside within a defined ESP. |
|  | Verify each Cyber Asset of an Applicable System that is connected to a network via a routable protocol resides within a defined ESP. |
|  | For each defined ESP, verify the identification of any associated PCA. |
| **Notes to Auditor:** 1. This Part is applicable to all high and medium impact BES Cyber Systems regardless of External Routable Connectivity.
2. Those Cyber Assets that are part of a high or medium impact BES Cyber System that are not connected to a network via a routable protocol need not reside within a defined ESP.
3. For Cyber Assets that are part of a high or medium impact BES Cyber System that do not reside within a defined ESP, the absence of a connection to a network via a routable protocol will be verified.
4. The reason to identify an ESP without External Routable Connectivity is to identify the PCA associated with the ESP.
5. In order to verify that each Cyber Asset residing within a defined ESP has been identified as either a BES Cyber Asset or as a PCA, it may be necessary to examine the ESP and conduct an inventory of network connections within the ESP.
6. The impact rating of Protected Cyber Assets is equal to the highest rated BES Cyber System in the same defined ESP.
 |

Auditor Notes:

**R1 Part 1.2**

| **CIP-005-5 Table R1 – Electronic Security Perimeter** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 1.2 | High Impact BES Cyber Systems with External Routable Connectivity and their associated:* PCA

Medium Impact BES Cyber Systems with External Routable Connectivity and their associated:* PCA
 | All External Routable Connectivity must be through an identified Electronic Access Point (EAP). | An example of evidence may include, but is not limited to, network diagrams showing all external routable communication paths and the identified EAPs. |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R1, Part 1.2

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which ensure all External Routable Connectivity is through an identified Electronic Access Point (EAP). |
|  | Verify that all External Routable Connectivity is through an identified EAP. |
|  | For each defined ESP without an identified EAP, verify that no External Routable Connectivity exists.  |

Auditor Notes:

**R1 Part 1.3**

| **CIP-005-5 Table R1 – Electronic Security Perimeter** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 1.3 | Electronic Access Points for High Impact BES Cyber Systems Electronic Access Points for Medium Impact BES Cyber Systems | Require inbound and outbound access permissions, including the reason for granting access, and deny all other access by default. | An example of evidence may include, but is not limited to, a list of rules (firewall, access control lists, etc.) that demonstrate that only permitted access is allowed and that each access rule has a documented reason. |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R1, Part 1.3

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which require inbound and outbound access permissions, including the reason for granting access, and deny all other access by default. |
|  | For each Applicable System, verify inbound and outbound access permissions are implemented. |
|  | For each Applicable System, verify each inbound and each outbound access permission includes the reason for granting access. |
|  | For each Applicable System, verify inbound and outbound access is denied by default. |
| **Note to Auditor:** Some vendor firewalls contain an implicit “deny” statement in the Access Control List (ACL). Vendor documentation of that configuration is a form of evidence to demonstrate the deny by default requirement within this Part. |

Auditor Notes:

**R1 Part 1.4**

| **CIP-005-5 Table R1 – Electronic Security Perimeter** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 1.4 | High Impact BES Cyber Systems with Dial-up Connectivity and their associated:* PCA

Medium Impact BES Cyber Systems with Dial-up Connectivity and their associated:* PCA
 | Where technically feasible, perform authentication when establishing Dial-up Connectivity with applicable Cyber Assets. | An example of evidence may include, but is not limited to, a documented process that describes how the Responsible Entity is providing authenticated access through each dial-up connection. |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R1, Part 1.4

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes to perform authentication when establishing Dial-up Connectivity with applicable Cyber Assets, where technically feasible. |
|  | For each Cyber Asset of an Applicable System, verify authentication is performed when establishing a dial-up connection, or that an approved Technical Feasibility Exception (TFE) covers the Cyber Asset. |
|  | If a TFE is applicable to this Part, verify the compensating measures identified by the TFE are implemented. |
| **Note to Auditor:** If the Responsible Entity does not have or does not allow Dial-up Connectivity, the Responsible Entity is not required to document one or more processes to perform authentication when establishing Dial-up Connectivity with applicable Cyber Assets. It is sufficient to verify that they do not have Dial-up Connectivity. |

Auditor Notes:

**R1 Part 1.5**

| **CIP-005-5 Table R1 – Electronic Security Perimeter** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 1.5 | Electronic Access Points for High Impact BES Cyber SystemsElectronic Access Points for Medium Impact BES Cyber Systems at Control Centers | Have one or more methods for detecting known or suspected malicious communications for both inbound and outbound communications. | An example of evidence may include, but is not limited to, documentation that malicious communications detection methods (e.g. intrusion detection system, application layer firewall, etc.) are implemented. |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R1, Part 1.5

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which include one or more methods for detecting known or suspected malicious communications for both inbound and outbound communications. |
|  | For each Applicable System, verify the Responsible Entity has implemented one or more methods for detecting known or suspected malicious communications for both inbound and outbound communications. |

Auditor Notes:

**R2 Supporting Evidence and Documentation**

**R2.** Each Responsible Entity allowing Interactive Remote Access to BES Cyber Systems shall implement one or more documented processes that collectively include the applicable requirement parts, where technically feasible, in *CIP-005-5 Table R2 – Interactive Remote Access Management. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning and Same Day Operations].*

**M2.**  Evidence must include the documented processes that collectively address each of the applicable requirement parts in *CIP-005-5 Table R2 – Interactive Remote Access Management* and additional evidence to demonstrate implementation as described in the Measures column of the table.

**R2 Part 2.1**

| **CIP-005-5 Table R2 – Interactive Remote Access Management** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 2.1 | High Impact BES Cyber Systems and their associated:* PCA

Medium Impact BES Cyber Systems with External Routable Connectivity and their associated:* PCA
 | Utilize an Intermediate System such that the Cyber Asset initiating Interactive Remote Access does not directly access an applicable Cyber Asset. | Examples of evidence may include, but are not limited to, network diagrams or architecture documents.  |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R2, Part 2.1

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which require the utilization of an Intermediate System such that the Cyber Asset initiating Interactive Remote Access does not directly access an applicable Cyber Asset. |
|  | Verify all Interactive Remote Access utilizes an Intermediate System, or that an approved TFE covers this circumstance. |
|  | Verify that the Cyber Asset initiating Interactive Remote Access does not directly access an applicable Cyber Asset, or that an approved TFE covers this circumstance. |
|  | If a TFE is applicable to this Part, verify the compensating measures identified by the TFE are implemented. |

Auditor Notes:

**R2 Part 2.2**

| **CIP-005-5 Table R2 – Interactive Remote Access Management** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 2.2 | High Impact BES Cyber Systems and their associated:* PCA

Medium Impact BES Cyber Systems with External Routable Connectivity and their associated:* PCA
 | For all Interactive Remote Access sessions, utilize encryption that terminates at an Intermediate System. | An example of evidence may include, but is not limited to, architecture documents detailing where encryption initiates and terminates.  |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R2, Part 2.2

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which utilize encryption that terminates at an Intermediate System for all Interactive Remote Access sessions. |
|  | Verify all Interactive Remote Access utilizes encryption that terminates at an Intermediate System, or that an approved TFE covers this circumstance. |
|  | If a TFE is applicable to this Part, verify the compensating measures identified by the TFE are implemented. |

Auditor Notes:

**R2 Part 2.3**

| **CIP-005-5 Table R2 – Interactive Remote Access Management** |
| --- |
| **Part** | **Applicable Systems** | **Requirements** | **Measures** |
| 2.3 | High Impact BES Cyber Systems and their associated:* PCA

Medium Impact BES Cyber Systems with External Routable Connectivity and their associated:* PCA
 | Require multi-factor authentication for all Interactive Remote Access sessions. | An example of evidence may include, but is not limited to, architecture documents detailing the authentication factors used. Examples of authenticators may include, but are not limited to, * Something the individual knows such as passwords or PINs. This does not include User ID;
* Something the individual has such as tokens, digital certificates, or smart cards; or
* Something the individual is such as fingerprints, iris scans, or other biometric characteristics.
 |

**Registered Entity Response (Required):**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence (Required):

|  |
| --- |
| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

|  |
| --- |
|  |
|  |
|  |

Compliance Assessment Approach Specific to CIP-005-5, R2, Part 2.3

***This section to be completed by the Compliance Enforcement Authority***

|  |  |
| --- | --- |
|  | Verify the Responsible Entity has documented one or more processes which require multi-factor authentication for all Interactive Remote Access sessions. |
|  | Verify all Interactive Remote Access sessions require multi-factor authentication, or that an approved TFE covers this circumstance. |
|  | If a TFE is applicable to this Part, verify the compensating measures identified by the TFE are implemented. |

Auditor Notes:

Additional Information:

Reliability Standard

The full text of CIP-005-5 may be found on the NERC Web Site (www.nerc.com) under “Program Areas & Departments”, “Reliability Standards.”

In addition to the Reliability Standard, there is an applicable Implementation Plan available on the NERC Web Site.

In addition to the Reliability Standard, there is background information available on the NERC Web Site.

Capitalized terms in the Reliability Standard refer to terms in the NERC Glossary, which may be found on the NERC Web Site.

Sampling Methodology

Sampling is essential for auditing compliance with NERC Reliability Standards since it is not always possible or practical to test 100% of either the equipment, documentation, or both, associated with the full suite of enforceable standards. The Sampling Methodology Guidelines and Criteria (see NERC website), or sample guidelines, provided by the Electric Reliability Organization help to establish a minimum sample set for monitoring and enforcement uses in audits of NERC Reliability Standards.

Regulatory Language

FERC Order No. 706

FERC Order No. 791

Revision History for RSAW

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| DRAFT1v0 | 06/17/2014 | Posted for Public Comment | New Document |
| DRAFT2v0 | 09/17/2014 | CIP RSAW Development Team | Address comments received in response to DRAFT1v0. |
| DRAFT3v0 | 12/10/2014 | CIP RSAW Development Team | Address comments received in response to DRAFT2v0. |
| DRAFT4v0 | 02/06/2015 | CIP RSAW Development Team | Address comments from V5R SDT and address comments in response to DRAFT3v0. |
| DRAFT4v1 | 03/06/2015 | CIP RSAW Development Team | Address comments from V5R SDT meeting on March 3-4, 2015. |
| FINALv1 | 05/08/2015 | CIP RSAW Development Team | Address comments from final posting; review and address comments of V5R SDT. |

1. NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders, and the language included in this document, FERC Orders shall prevail. [↑](#footnote-ref-1)
2. Compliance Assessment Date(s): The date(s) the actual compliance assessment (on-site audit, off-site spot check, etc.) occurs. [↑](#footnote-ref-2)