

# Reliability Standard Audit Worksheet<sup>1</sup>

## IRO-017-1 – Outage Coordination

*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)<sup>2</sup>:** 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 *[RSAW developer to insert correct applicability]*

	BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
R1									X						
R2	X												X		
R3							X							X	
R4							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

<sup>1</sup> 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.

<sup>2</sup> Compliance Assessment Date(s): The date(s) the actual compliance assessment (on-site audit, off-site spot check, etc.) occurs.

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**Findings**

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

Req.	Finding	Summary and Documentation	Functions Monitored
R1			
R2			
R3			
R4			

Req.	Areas of Concern

Req.	Recommendations

Req.	Positive Observations

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**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)

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**R1 Supporting Evidence and Documentation**

- R1.** Each Reliability Coordinator shall develop, implement, and maintain an outage coordination process for generation and Transmission outages within its Reliability Coordinator Area. The outage coordination process shall:
  - R1.1** Identify applicable roles and reporting responsibilities including:
    - R1.1.1** Development and communication of outage schedules.
    - R1.1.2** Assignment of coordination responsibilities for outage schedules between Transmission Operator(s) and Balancing Authority(s) prior to submitting to Reliability Coordinators.
  - R1.2** Specify outage submission timing requirements.
  - R1.3** Define the process to evaluate the impact of Transmission and generator outages within its Reliability Coordinator Wide Area.
  - R1.4** Define the process to coordinate the resolution of identified outage conflicts with its Transmission Operators and Balancing Authorities, and other Reliability Coordinators.
  - R1.5** Document and maintain the specifications for outage analysis during the operations planning horizon.
  
- M1.** Each Reliability Coordinator shall make available its dated, current, in force outage coordination process for generation and Transmission outages within its Reliability Coordinator Area.

**Compliance Narrative (Required):**

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.

**Evidence Requested:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Outage coordination process for generation and Transmission outages within its RC Area.

**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

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


**Compliance Assessment Approach Specific to IRO-017-1, R1**

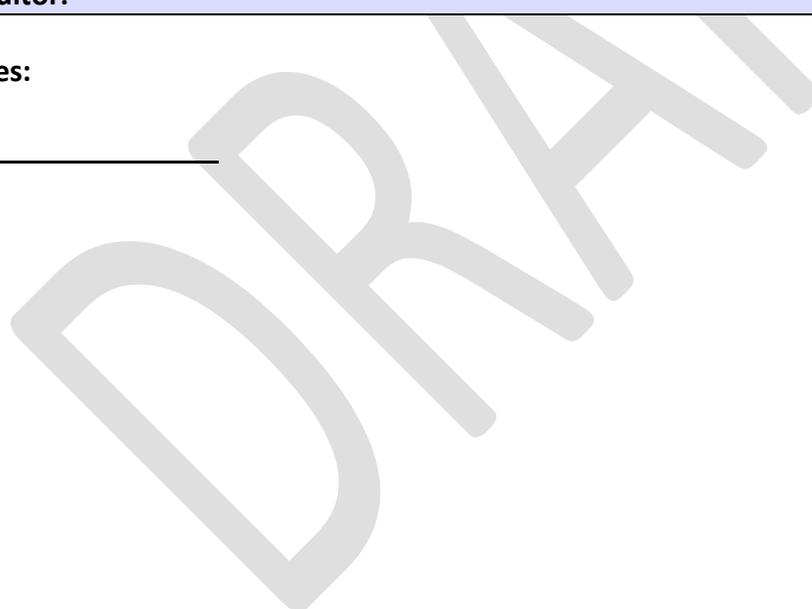
***This section to be completed by the Compliance Enforcement Authority***

	Determine if the entity develop, implement, and maintain an outage coordination process for generation and Transmission outages within its RC Area by identifying applicable roles and reporting responsibilities including development and communication of outage schedules and assignment of coordination responsibilities for outage schedules between TOP(s) and BA(s) prior to submitting to RCs.
	Determine if the entity's outage coordination process specify outage submission timing requirements.
	Determine if the entity's outage coordination process define the process to evaluate the impact of Transmission and generator outages within its RC Wide Area.
	Determine if the entity's outage coordination process define the process to coordinate the resolution of identified outage conflicts with its TOPs and BAs, and other RCs.
	Determine if the entity's outage coordination process document and maintain the specifications for outage analysis during the operations planning horizon.

**Note to Auditor:**

**Auditor Notes:**

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**R2 Supporting Evidence and Documentation**

- R2.** Each Transmission Operator and Balancing Authority shall follow its Reliability Coordinator outage coordination process.
- M2.** Each Transmission Operator and Balancing Authority shall provide evidence upon request that it followed its Reliability Coordinator outage coordination process. Such evidence could include, but is not limited to, web postings with an electronic notice of the posting, dated operator logs, voice recordings, postal receipts showing the recipient, date and contents, or e-mail records.

**Compliance Narrative (Required):**

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.

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**Evidence Requested:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Documentary evidence such as web postings, dated operator logs, voice recordings, postal receipts, and emails that it followed its RC outage coordination process.

**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 IRO-017-1, R2**

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

	Obtain a sample of outages for the audit period
	Review documentary evidence to determine if the entity complied with its RC's outage coordination

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process.

**Note to Auditor: It is expected that each entity would have a large population of outages. Auditor should use approved sampling methodologies to review a sample set of outages for comparison to the coordination process**

**Auditor Notes:**

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**R3 Supporting Evidence and Documentation**

**R3.** Each Planning Coordinator and Transmission Planner shall provide its Planning Assessment to impacted Reliability Coordinators.

**M3.** Each Planning Coordinator and Transmission Planner shall provide evidence upon request showing that it provided its Planning Assessment to impacted Reliability Coordinators. Such evidence could include, but is not limited to, web postings with an electronic notice of the posting, dated operator logs, voice recordings, postal receipts showing the recipient, date and contents, or e-mail records.

**Compliance Narrative (Required):**

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.

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**Evidence Requested:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Documentary evidence such as web postings, dated operator logs, voice recordings, postal receipts, and emails that entity provided its Planning Assessment to impacted Reliability Coordinators.

**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 IRO-017-1, R3**

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

	Review documentary evidence to determine if PC and TP provided its Planning Assessment to all impacted Reliability Coordinators.
<b>Note to Auditor: For any deficiencies noted, review for compliance with required data provisions per IRO-</b>	

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**Auditor Notes:**

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**R4 Supporting Evidence and Documentation**

**R4.** Each Reliability Coordinator, Planning Coordinator, and Transmission Planner shall coordinate solutions within the Reliability Coordinator Area for identified issues or conflicts with planned outages in the Planning Assessment.

**M4.** Each Reliability Coordinator, Planning Coordinator, and Transmission Planner shall provide evidence upon request showing that it coordinated solutions within the Reliability Coordinator Area for identified issues or conflicts with planned outages in the Planning Assessment. Such evidence could include, but is not limited to, web postings with an electronic notice of the posting, dated operator logs, voice recordings, postal receipts showing the recipient, date and contents, or e-mail records.

**Compliance Narrative (Required):**

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.

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**Evidence Requested:**

<b>Provide the following evidence, or other evidence to demonstrate compliance.</b>
Evidence that RC, PC, and TP coordinated solutions within the RC Area for identified issues or conflicts with planned outages in the Planning Assessment.

**Registered Entity Evidence (Required):**

<b>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.</b>					
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 IRO-017-1, R4**

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

	Interview entity’s management to determine if there were any issues or conflicts with planned outages in the Planning Assessment.
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If applicable, determine that each RC, PC, and TP coordinated solutions within the RC Area for identified issues or conflicts with planned outages in the Planning Assessment.
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<b>Note to Auditor: In cases where no conflicts are identified, Auditor should consider obtaining corroborating evidence from the alternate party.</b>
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**Auditor Notes:**

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**Additional Information:**

**Reliability Standard**

*The RSAW developer should provide the following information without hyperlinks. Update the information below as appropriate.*

The full text of IRO-017-1 may be found on the NERC Web Site ([www.nerc.com](http://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.

**Selected Glossary Terms**

Please refer to the NERC web site for the current enforceable terms.

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**Revision History for RSAW**

Version	Date	Reviewers	Revision Description
1	06/20/2014	Posted for Industry Review	New Document

<sup>i</sup> Items in the Evidence Requested section are suggested evidence that may, but will not necessarily, demonstrate compliance. These items are not mandatory and other forms and types of evidence may be submitted at the entity's discretion.

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