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Real-Time Data: Real-time measured values, state estimator values derived from the measured values, or other calculated values derived from the measured values — may include directly monitored data, Interutility data exchange (e.g., interconnection control area communication protocol or SCADAdata), and manually collected data.

Real-Time Monitoring: The act of scanning data and drawing conclusions about what the data indicates.

Self-Certification: A process by which an entity does a self-evaluation to determine if it is compliant with the specific requirements for a reliability standard.

- 1. Title: Monitoring the Wide Area
- **2. Number:** IRO-007-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the bulk electric system is continuously monitored.

4. Applicability

- **4.1.** Reliability Coordinator
- 5. **Proposed Effective Date:** Three months after Board of Trustee Adoption

B. Requirements

- **R1.** The reliability coordinator shall perform real-time monitoring of system operating parameters within its wide area to determine if operating parameters are within their associated interconnection reliability operating limits (IROLs).
- **R2.** If unanimity cannot be reached on the value for an IROL or its T_v , all reliability coordinators who monitor that Facility (or group of facilities) shall use the most conservative of the values under consideration.

C. Measures

- M1. The reliability coordinator shall have IROLs available for its system operators.
 - **M1.1** These limits shall include those that are associated with facilities (or groups of facilities) in the wide area monitored by the reliability coordinator.
- **M2.** The reliability coordinator shall have real-time data available in a form that its system operators can compare to the IROLs.
 - M2.1 The data shall be for the reliability coordinator's area and from the other reliability coordinator areas.
- **M3.** The reliability coordinator shall monitor system operating parameters in its wide area and shall compare these operating parameters against their associated IROLs.
 - **M3.1** For IROLs without agreed-upon limits, the reliability coordinator shall have evidence it operated to the most conservative of the values under consideration.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period shall be 12 months from the last violation.

1.3. Data Retention

The reliability coordinator shall keep data on limits for three calendar years. The Compliance monitor shall keep audited data for three calendar years.

1.4. Additional Compliance Information

The reliability coordinator shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

The reliability coordinator shall demonstrate the following to its compliance monitor to inspect during a scheduled, on-site review or as part of an investigation upon complaint:

1.4.1 Its system operators actively monitor and compare real-time system operating parameters associated with IROLs.

2. Levels of Non-Compliance

- **2.1. Level 1:** Not Applicable
- **2.2. Level 2:** Not Applicable
- **2.3. Level 3:** Not Applicable
- **2.4. Level 4:** A level four noncompliance occurs if either of the following conditions are present:
 - **2.4.1** System operating parameters not monitored in real-time and compared against IROLs.
 - **2.4.2** There was a disagreement on the IROL and the most conservative limit under consideration was not used.

E. Regional Differences

None identified

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Operational Planning Analysis: An analysis of the expected system conditions for the next day's operation and up to 12 months ahead. Expected system conditions include things such as load forecast(s), generation output levels, and known system constraints (transmission facility outages, generator outages, equipment limitations, etc.).

Real-Time Assessment: An examination of existing and expected system conditions, conducted by collecting and reviewing immediately available data.

- 1. Title: Reliability Coordinator Operational Analyses and Real-Time Assessments
- 2. Number: IRO-008-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the bulk electric system is assessed during the operations horizon.

4. Applicability

- 4.1. Reliability Coordinator
- 5. **Proposed Effective Date:** Three months after Board of Trustee Adoption.

B. Requirements

- **R1.** The reliability coordinator shall perform operational planning analyses to assess whether the planned operations within its wide area, including other reliability coordinator areas, will exceed any of its interconnection reliability operating limits (IROLs).
- **R2.** The reliability coordinator shall perform real-time assessments every 30 minutes to determine if its wide area is exceeding any IROLs or is expected to exceed any IROLs.
- **R3.** When the results of the reliability coordinator's operational planning analyses or real-time assessments indicate the need for specific operational actions to prevent or mitigate instances of exceeding IROLs, the reliability coordinator shall share its results with those entities that are expected to take those actions.

C. Measures

- **M1.** The reliability coordinator shall be able to identify operating situations or events that impact its reliability coordinator area's ability to operate without exceeding any IROLs as a result of the following.
 - **M1.1** The reliability coordinator shall have conducted an operational planning analysis at least once each day, evaluating the next day's projected system operating conditions.
 - M1.2 The reliability coordinator shall have conducted a real-time assessment periodically, but at least once every 30 minutes.
- **M2.** The reliability coordinator shall be able to show evidence that it shared the results of its operational planning analyses and real-time assessments with those entities expected to take actions based on that information. Evidence can be an operating log, voice recorder, fax, or other type of record.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period shall be 12 months from the last violation.

1.3. Data Retention

The compliance monitor shall keep audited data for three calendar years.

1.4. Additional Compliance Information

The reliability coordinator shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews once every three years, and investigations upon complaint, to assess performance.

The reliability coordinator shall identify the following to its compliance monitor to inspect as part of a scheduled on-site review or as part of an investigation upon complaint.

- **1.4.1** The time the most recent operational planning analysis was conducted.
- **1.4.2** Whether the planned operations within the reliability coordinator's reliability coordinator area may exceed any of its IROLs.
- **1.4.3** The time the most recent real-time assessment was conducted.
- **1.4.4** Whether the real-time assessment identified if its reliability coordinator area is exceeding any IROLs or is expected to exceed any IROLs.

2. Levels of Non-Compliance

- **2.1. Level 1:** Not applicable
- **2.2. Level 2:** Not applicable
- **2.3.** Level 3: A level three noncompliance exists if operational planning analyses and real-time assessments were conducted but not as frequently as required.
- **2.4.** Level 4: A level four noncompliance exists if the reliability coordinator could not identify whether the planned operations within its reliability coordinator area were expected to exceed any of its IROLs.

E. Regional Differences

None identified

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Interconnection Reliability Operating Limit Event: Any instance of exceeding an interconnection reliability operating limit for a minimum of 30 continuous seconds.

Interconnection Reliability Operating Limit Event Duration: The length of time an interconnection reliability operating limit is exceeded. The duration is measured from the point in time where the limit is first exceeded for at least 30 continuous seconds and ends at the beginning of the continuous 30 seconds in which the value returns to within the interconnection reliability operating limit.

Occurrence Period: The time period in which performance is measured and evaluated.

- 1. Title: Reliability Coordinator Actions to Operate Within IROLs
- **2. Number:** IRO-009-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring prompt action to prevent or mitigate instances of exceeding IROLs.

4. Applicability

- **4.1.** Reliability Coordinator
- 5. **Proposed Effective Date:** Three months after Board of Trustee adoption.

B. Requirements

- **R1.** The reliability coordinator shall, without delay, act or direct others to act to:
 - **R1.1.** Prevent instances of exceeding interconnection reliability operating limit s (IROLs).
 - **R1.2.** Mitigate the magnitude and duration of instances of exceeding IROLs.
 - **R1.3.** The reliability coordinator shall include a statement in each IROL-related directive to inform the recipient that the directive is related to an IROL.
 - **R1.4.** The reliability coordinator shall document each instance of exceeding an IROL and shall document and complete an IROL violation report for each instance of exceeding an IROL for time greater than that limit's T_v . The reliability coordinator shall file each IROL violation report with its compliance monitor within five business days of the initiation of the event.
- **R2.** If the reliability coordinator directs a modification to an Implemented Interchange, the reliability coordinator shall direct the interchange authority to update the arranged interchange.

C. Measures

- **M1.** The reliability coordinator shall have documentation to support each instance where actions were taken or directives were issued to mitigate the magnitude and duration of exceeding an IROL.
- M2. The documentation shall include the date and time of the event, actions taken or directives issued, the magnitude of the event, and the duration of the event (This data may be from an operating log, may be from the entity's energy management system, or may be from some other source).
- **M3.** The duration of the event shall be measured from the point when the limit is exceeded for a minimum of thirty seconds to the point when the system has returned to a state that is within the IROL for a minimum of thirty seconds.
- M4. The reliability coordinator shall have a completed IROL violation report for each instance where it exceeded an IROL for time greater than that limit's T_v .
- **M5.** The IROL violation report shall include the date and time of the event, identification of which IROL was violated and the Tv for that limit, magnitude and duration of exceeding the IROL, actions taken or directives issued and the time these were initiated or issued, and an explanation of results of those actions or directives.

M5.1 The reliability coordinator shall have evidence it filed a completed IROL Violation Report with its Compliance Monitor within five business days of the initiation of the IROL event.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period shall be 12 months from the last violation.

1.3. Data Retention

The reliability coordinator shall keep IROL violation reports, operations logs, or other documentation for three calendar years. The compliance monitor shall keep audited data for three calendar years.

1.4. Additional Compliance Information

The reliability coordinator shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

The reliability coordinator shall have the following available for its compliance monitor to inspect during a scheduled, on-site review or within 5 days of a request as part of an investigation upon complaint:

- **1.4.1** Operations logs or other documentation indicating the magnitude and duration of each instance of exceeding an IROL and the actions or directives issued for each of these instances
- **1.4.2** IROL violation reports

2. Levels of Non-Compliance

- **2.1.** Level 1: IROL exceeded for a time less than or equal to T_v and no documentation to indicate actions taken or directives issued to mitigate the instance.
- 2.2. Level 2: Not Applicable
- **2.3.** Level 3: Not Applicable
- **2.4.** Level 4: IROL exceeded for time greater than T_v .

E. Regional Differences

None identified

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Future Development Plan:

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None introduced in this standard.

- 1. Title: Reliability Coordinator Data Specification and Collection
- 2. Number: IRO-010-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring the reliability coordinator has the data it needs to monitor and assess the operation of its reliability coordinator area.

4. Applicability

- **4.1.** Reliability Coordinator
- 5. **Proposed Effective Date:** Three months after Board of Trustee adoption.

B. Requirements

- **R1.** The reliability coordinator shall specify and collect the data and information it needs to support real-time monitoring, operational planning analyses, and real-time assessments conducted relative to operating within its reliability coordinator area's interconnection reliability operating limits(IROLs). The reliability coordinator shall collect this data from the entities performing functions that have facilities monitored by the reliability coordinator, and from entities that provide real-time facility status to the reliability coordinator. This includes specifying and collecting data from the following:
 - **R1.1.** Balancing authorities
 - **R1.2.** Generator owners
 - **R1.3.** Generator operators
 - **R1.4.** Interchange authority
 - **R1.5.** Load-serving entities
 - **R1.6.** Reliability coordinators
 - **R1.7.** Transmission operators
 - **R1.8.** Transmission owners
- **R2.** The reliability coordinator shall specify when to supply data and information (based on its hardware and software requirements, and the time needed to do its operational planning analyses).
- **R3.** The reliability coordinator shall notify its compliance monitor (within 5 business days of being unable to resolve the issue) when both of the following conditions are present:
 - **R3.1.** An entity that has data needed to support real-time monitoring, perational planning, or real-time assessments relative to operating within the reliability coordinator's reliability coordinator area has not provided data as specified, and
 - **R3.2.** The reliability coordinator was unable to resolve the issue with the entity responsible for providing the data.

C. Measures

M1. The reliability coordinator shall have a documented specification for data needed to build and maintain models needed to support real-time monitoring, operational planning analyses, and real-time assessments relative to interconnection reliability operating limits.

- **M1.1** Specification shall include a list of required data, a mutually agreeable format, and timeframe and periodicity for providing data.
- **M1.2** Specification shall address the data provision process to use when automated real-time system operating data is unavailable.
- **M2.** The reliability coordinator shall have evidence that it has distributed its data specification to entities that have Facilities monitored by the reliability coordinator and to entities that provide facility status to the reliability coordinator.
- **M3.** The reliability coordinator shall have evidence it notified its compliance monitor when an entity that has facilities monitored by the reliability coordinator, or an entity that provides facility status to the reliability coordinator, does not provide data as specified and the reliability coordinator was unable to resolve the issue with the entity responsible for providing the data.
 - **M3.1** If the reliability coordinator does not receive data as specified, and is unable to resolve the situation, then the reliability coordinator shall notify its compliance monitor within five business days of discovering that the issue of the missing data could not be resolved.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period shall be 12 months from the last violation.

1.3. Data Retention

The reliability coordinator shall keep its data specification(s) for three calendar years. The compliance monitor shall keep audited data for three calendar years.

1.4. Additional Compliance Information

The reliability coordinator shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance. The reliability coordinator shall have the following available for its compliance monitor to inspect during a scheduled, on-site review or within 5 days of a request as part of an investigation upon complaint:

1.4.1 Data specification(s)

1.4.2 Proof of distribution of the data specification(s)

2. Levels of Non-Compliance

- **2.1.** Level 1: Data specification incomplete (missing either the list of required data, a mutually agreeable format, a timeframe for providing data, or a data provision process to use when automated real-time system operating data is unavailable).
- **2.2.** Level 2: No data specification or the specification not distributed to the entities that have Facilities monitored by the reliability coordinator and the entities that provide the reliability coordinator with facility status.
- **2.3. Level 3:** Not Applicable

2.4. Level 4: Not Applicable

E. Regional Differences

None identified

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- 1. Title: Providing Reliability–Related Data to the Reliability Coordinator
- **2. Number:** IRO-011-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring the reliability coordinator has the data it needs to monitor and assess the operation of its reliability coordinator area.

4. Applicability

- **4.1.** Balancing Authority
- **4.2.** Generator Owner
- **4.3.** Generator Operator
- **4.4.** Interchange Authority
- **4.5.** Load-Serving Entity
- **4.6.** reliability coordinator
- **4.7.** Transmission Operator
- **4.8.** Transmission Owner
- 5. **Proposed Effective Date:** Three months after Board of Trustee adoption.

B. Requirements

- **R1.** Each entity performing one of the following functions shall provide data, and information, as specified, to the reliability coordinator(s) with which it has a reliability relationship. The data and information is limited to data needed by the reliability coordinator to support real-time monitoring, operational planning analyses, and real-time assessments conducted relative to operating within its reliability coordinator area's interconnection reliability operating limits (IROLs).
 - **R1.1.** Balancing Authority
 - **R1.2.** Generator Owner
 - **R1.3.** Generator Operator
 - **R1.4.** Interchange Authority
 - **R1.5.** Load-serving Entity
 - **R1.6.** Reliability Coordinator
 - **R1.7.** Transmission Operator
 - **R1.8.** Transmission Owner

C. Measures

- **M1.** The balancing authority, generator owner, generator operator, load-serving entity, reliability coordinator, transmission operator and transmission owner shall each have the following:
 - **M1.1** Evidence that it provided data and information, as specified, to the requesting reliability coordinator, within the timeframe specified, in the mutually agreed upon format, or
 - M1.2 Evidence that it committed to providing the data identified in the specification.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period is 12 months from the last violation.

1.3. Data Retention

The responsible entity shall keep data transmittal documentation for three calendar years. The compliance monitor shall keep audited data for three calendar years.

1.4. Additional Compliance Information

The balancing authority, generator owner, generator operator, interchange authority, load-serving entity, reliability coordinator, transmission operator and transmission owner (responsible entity) shall each demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

The responsible entity shall have the following available for its compliance monitor to inspect during a scheduled, on-site review or within 5 days of a request as part of an investigation upon complaint:

1.4.1 Evidence indicating data was sent to the reliability coordinator or evidence that the responsible entity committed to providing the data identified in the specification.

2. Levels of Non-Compliance

- **2.1. Level 1:** Not Applicable
- **2.2. Level 2:** Not Applicable
- **2.3. Level 3:** Not Applicable
- **2.4.** Level 4: Data was not provided to the reliability coordinator as specified and the situation was not resolved with the reliability coordinator.

E. Regional Differences

None identified

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None introduced in this standard.

- 1. Title: Reliability Coordinator Processes, Procedures, or Plans for Preventing and Mitigating Interconnection Reliability Operating Limits
- **2. Number:** IRO-012-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that there are processes, procedures or plans for foreseeable instances of exceeding interconnection reliability operating limits (IROLs).
- 4. Applicability
 - **4.1.** Reliability Coordinator
- 5. **Proposed Effective Date:** Three months after Board of Trustee Adoption.

B. Requirements

R1. The reliability coordinator shall have one or more operating processes, procedures, or plans that identify actions it shall take or actions it shall direct others to take, for both prevention and mitigation of instances of exceeding its IROLs.

C. Measures

M1. The reliability coordinator shall have one or more documented operating processes, procedures, or plans that address both preventing and mitigating instances of exceeding IROLs. There shall be evidence that the reliability coordinator coordinated the development of these operating procedures, processes, or plans with those entities responsible for taking actions and with those entities impacted by such actions.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period is 12 months from the last violation.

1.3. Data Retention

The reliability coordinator shall keep its action plan for three calendar years. The compliance monitor shall keep audit records for three calendar years.

1.4. Additional Compliance Information

The reliability coordinator shall demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint, to assess performance.

The reliability coordinator shall have the following available for its compliance monitor to inspect during a scheduled, on-site review or within 5 days of a request as part of an investigation upon complaint.

1.4.1 Processes, procedures, or plans that address preventing and mitigating instances of exceeding IROLs.

2. Levels of Non-Compliance

- **2.1.** Level 1: Operating processes, procedures, or plans for both preventing and mitigating instances of exceeding IROLs exist, but these documents weren't coordinated with all involved and impacted entities.
- **2.2.** Level 2: Operating processes, procedures, or plans for both preventing and mitigating instances of exceeding IROLs exist but these documents weren't coordinated with any involved or any impacted entities.
- **2.3.** Level 3: Operating processes, procedures, or plans exist but do not address both preventing and mitigating instances of exceeding IROLs.
- **2.4.** Level 4: No operating processes, procedures, or plans exist addressing preventing and mitigating instances of exceeding IROLs.

E. Regional Differences

None identified

Version Date	Action	Change Tracking
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This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed:

- 1. SAC approves SAR for posting (March 10, 2002)
- 2. Drafting Team posts Draft SAR for comment (April 2 May 3, 2002) (August 20 September 29, 2002)
- 3. SAC approves development of standard (November 20, 2003)
- 4. JIC assigns development of standard to NERC (January 10, 2003)
- Drafting Team posts Drafts for comment (February 18 April 2, 2003) (July 1 August 29, 2003)
- 6. Balloted (December 18, 2003 January 6, 2004)
- 7. Drafting Team posts Drafts for comment (March 1 April 14, 2004)

Description of Current Draft:

This informational draft reflects the Standard Authorization Committee's directive to change the 'reliability authority' to the 'reliability coordinator'. The drafting team is not soliciting comments during this posting.

Future Development Plan:

Anticipated Actions Anticipated Date 1. Post revised Implementation Plan and recommendations for Version 0 To be determined revisions/retirements for 45 day comment period. 2. Post for 30-day pre-ballot period. To be determined 3. First ballot of Version 0 standards. To be determined 4. Recirculation ballot of Version 0 standards. To be determined 5. 30-day posting before board adoption. To be determined 6. Board adopts Version 0 standards. To be determined 7. Effective date. To be determined

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

None introduced in this standard.

- 1. Title: Reliability Coordinator Directives Relative to Interconnection Reliability Operating Limits
- **2. Number:** IRO-013-1
- **3. Purpose:** To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring that the reliability coordinator's directives are followed.

4. Applicability

- **4.1.** Balancing Authority
- **4.2.** Interchange Authority
- **4.3.** Transmission Operator
- 5. **Proposed Effective Date:** Three months after Board of Trustee adoption.

B. Requirements

- **R1.** The balancing authority, interchange authority, and transmission operator shall each follow its reliability coordinator's directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances the balancing authority, interchange authority or transmission operator shall immediately inform the reliability coordinator of its inability to perform the directive so that the reliability coordinator can implement alternate remedial actions. The directives covered by this requirement shall be those that:
 - **R1.1.** Prevent instances of exceeding interconnection reliability operating limits (IROLs).
 - **R1.2.** Mitigate the magnitude and duration of instances of exceeding IROLs.
- **R2.** The balancing authority, interchange authority, and transmission operator shall notify its reliability coordinator when the actions associated with a directive have been completed.
 - **R2.1.** The balancing authority, interchange authority, and transmission operator shall each document the reliability coordinator's directives and its actions taken.

C. Measures

- **M1.** The Responsible Entity shall have the following documentation in an operations log or other data source(s), to show that it followed each directive it received relative to an IROL:
 - M1.1 Date and time of each reliability coordinator directive received
 - M1.2 Directive issued by the reliability coordinator
 - M1.3 Actions taken in response to the reliability coordinator's directive

D. Compliance

- 1. Compliance Monitoring Process
 - **1.1. Compliance Monitoring Responsibility**

Regional Reliability Organization

1.2. Compliance Monitoring Period and Reset Timeframe

The performance-reset period is 12 months from the last violation.

1.3. Data Retention

The balancing authority, interchange authority, and transmission operator shall keep its documentation for three calendar years. The compliance monitor shall keep audit records for three calendar years.

1.4. Additional Compliance Information

The balancing authority, interchange authority, and transmission operator shall each demonstrate compliance through self-certification submitted to its compliance monitor annually. The compliance monitor may also use scheduled on-site reviews every three years, and investigations upon complaint to assess performance.

The balancing authority, interchange authority and transmission operator shall each make the following available for its compliance monitor to inspect during a scheduled, on-site review or within 5 days of a request as part of an investigation upon complaint:

1.4.1 Operations log or other data source(s) to show the following for each instance of being issued a reliability coordinator directive relative to an IROL:

1.4.1.1 Date and time of each reliability coordinator directive received.

1.4.1.2 Directive issued by the reliability coordinator.

1.4.1.3 Actions taken in response to reliability coordinator's directive.

2. Levels of Non-Compliance

- **2.1.** Level 1: The reliability coordinator's directives relative to preventing or mitigating instances of exceeding IROLs were followed but the documentation did not include the date and time of each directive received, the directive received, the actions taken, in response to the directive.
- **2.2. Level 2:** Not Applicable
- **2.3. Level 3:** Not Applicable
- **2.4.** Level 4: Did not follow the reliability coordinator's directives.

E. Regional Differences

None identified

Version Date	Action	Change Tracking
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