

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

**BAL-001-1 — Real Power Balancing Control Performance**

 **Note:** This RSAW incorporates the WECC Regional Variance to BAL-001-1

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

|  |  |
| --- | --- |
| **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** |
| [**E.B.1**](#EB1Summary) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [**E.B.2**](#EB2Summary) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [**E.B.3**](#EB3Summary) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [**R2.**](#R2Summary) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [**R3.**](#R3Summary) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [**R4**](#R4Summary)**.** | 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 Table:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Req.** | **Finding** | **Summary & Documentation** | **Functions Monitored** |
| **[E.B.1](#EB1Summary)** |  |  | BA |
| **[E.B.2](#EB2Summary)** |  |  | BA |
| **[E.B.3](#EB3Summary)** |  |  | BA |
| [**R****2.**](#R2Summary) |  |  | BA |
| [**R****3.**](#R3Summary) |  |  | BA |
| [**R****4**](#R4Summary)**.** |  |  | BA |

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

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

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

# **Subject Matter Experts**

Identify Subject Matter Expert(s) responsible for this Reliability Standard. (Insert additional rows if necessary)

**Registered Entity Response (Required):**

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

**R1 Supporting Evidence and Documentation**

As of April 1, 2014, R1 does not apply in the WECC (see the Regional Variance in this standard).

# **E.B.1. Supporting Evidence and Documentation**

**E.B.1.** Each Balancing Authority shall operate such that, on a rolling 12-month basis, the average of the clock-minute averages of the Balancing Authority’s Area Control Error (ACE) divided by 10B (B is the clock-minute average of the Balancing Authority Area’s Frequency Bias) times the corresponding clock-minute averages of the Interconnection’s Frequency Error is less than a specific limit. This limit ε12 is a constant derived from a targeted frequency bound (separately calculated for each Interconnection) that is reviewed and set as necessary by the NERC Operating Committee. The equation for ACE in the Western Interconnection is:

*ACE =* (*NIA - NIS*)– 10*B*(*FA – FS*) *– IME + IATEC*

(Note: See Standard BAL-001-1 E.B.1. for a definition of equation terms)

**Registered Entity Response (Required):**

Describe, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 E.B.1**

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

Review the evidence to verify the Registered Entity has:

|  |  |
| --- | --- |
|  | Verify the ACE calculation used for AGC operation in ATEC mode is calculated using the equation:*ACE =* (*NIA - NIS*)– 10*B*(*FA – FS*) *– IME + IATEC* |
|  | Verify the entity achieved a minimum compliance of 100% (CPS1). |
| **Note to Auditor:** Refer to the Standard, Section E: Regional Variance, for definition of ACE equation terms.Refer to the Standard, Section E: Regional Variance, for definition of CPS1. |

**[Compliance Su](#EB1Finding)****[mmary:](#EB1Finding)**

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

# **E.B.2. Supporting Evidence and Documentation**

**E.B.2.** Each Balancing Authority shall limit the absolute value of IATEC, the Automatic Time Error Correction term as follows:

│IATEC│ ≤ Lmax

**Question:** Identify your BA’s **Lmax**: Maximum Automatic Time Error Correction term:

**Registered Entity Response (Required):**

Describe, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 E.B.2**

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

Review the evidence to verify the Registered Entity has:

|  |  |
| --- | --- |
|  | Review the entity’s calculation for limiting the absolute value of the LATEC term. |
|  | Verify the LATEC limiting value has been active in the ACE equation as required. |
| **Notes to Auditor:**Auditor should obtain a sample set of **IATEC** values from the data retention period to verify the absolute value of **IATEC** is less than or equal to **Lmax**.  |

[**Compli****ance Summary:**](#EB2Finding)

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

# **E.B.3. Supporting Evidence and Documentation**

**E.B.3.** Each Balancing Authority shall set Lmax within the limits as follows:

0.20 \* |B| ≤ Lmax ≤ L10

**Question:** Identify your Balancing Authority CPS2 limit in MW (**L10**) and your Balancing Authority Frequency Bias value (**B**).

**Registered Entity Response (Required):**

Summarize, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 E.B.3**

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

Review the evidence to verify the entity has:

|  |  |
| --- | --- |
|  | Review the entity’s calculation of the Lmax value |
|  | Verify the value for Lmax is greater than or equal to 20% of the BA Frequency Bias. |
|  | Verify the value for Lmax is less than the BA **L10**(Balancing Authority CPS2 limit in MW). |

[**Complianc****e Summary:**](#EB3Finding)

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

# **R2 Supporting Evidence and Documentation**

**R2.** Each Balancing Authority shall operate such that its average ACE for at least 90% of clock ten-minute periods (6 non-overlapping periods per hour) during a calendar month is within a specific limit, referred to as L10.

**Registered Entity Response (Required):**

Summarize, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 R2**

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

Review the evidence to verify the entity has:

|  |  |
| --- | --- |
|  | Review monthly logs for past 12 months |
|  | Verify the average ACE was within the BAs L10 for the last 12 months for at least 90% of the time periods monitored. |

[**Complian****ce Summary:**](#R2Finding)

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

# **R3 Supporting Evidence and Documentation**

**R3.** Each Balancing Authority providing Overlap Regulation Service shall evaluate Requirement R1 (i.e., Control Performance Standard 1 or CPS1) and Requirement R2 (i.e., Control Performance Standard 2 or CPS2) using the characteristics of the combined ACE and combined Frequency Bias Settings.

**Question:**  Did the entity provide Overlap Regulation Service during the audit period? If no, state so and describe the process used for knowing such an event did not occur. If yes, provide description and evidence of compliance.

**Registered Entity Response (Required):**

Summarize, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 R3**

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

Review the evidence to verify the Registered Entity has:

|  |  |
| --- | --- |
|  | Responded to the RSAW Question above. |
|  | Verify the BA incorporated the combined ACE and combined Frequency Bias settings into its CPS1 and CPS2 calculations |

[**Compliance** **Summary:**](#R3Finding)

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

# **R4 Supporting Evidence and Documentation**

**R4.** Any Balancing Authority receiving Overlap Regulation Service shall not have its control performance evaluated (i.e. from a control performance perspective, the Balancing Authority has shifted all control requirements to the Balancing Authority providing Overlap Regulation Service).

**Question:**  Did the entity receive Overlap Regulation Service during the audit period? If no, state so and describe the process used for knowing such an event did not occur. If yes, provide description and evidence of compliance.

**Registered Entity Response (Required):**

Summarize, in narrative form, how you meet compliance with this requirement.

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 BAL-001-1 R4**

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

Review the evidence to verify the entity has:

|  |  |
| --- | --- |
|  | Responded to the RSAW Question above. |
|  | Verify the BA did not incorporated the combined ACE and combined Frequency Bias settings into its CPS1 and CPS2 calculations |

[**Complian****ce Summary:**](#R4Finding)

(Finding Summary):

Primary Documents Supporting Finding:

**Auditor Notes:**

**Supplemental Information**

**Other ‑** The list of questions above is not all inclusive of evidence required to show compliance with the Reliability Standard. Provide additional information here**, as necessary that** demonstrates compliance with this Reliability Standard.

|  |
| --- |
|  |

**Standard:** [**BAL-001-1 — Real Power Balancing Control Performance**](http://www.nerc.com/_layouts/PrintStandard.aspx?standardnumber=BAL-001-1&title=Real%20Power%20Balancing%20Control%20Performance&jurisdiction=United%20States)

**Revision History**

|  |  |  |
| --- | --- | --- |
| **Date** | **Reviewers** | **Revision Description** |
| March 2014 | WECC Compliance Staff | Initial version for revised BAL-001-1, Regional Variance |
| January 2014 | Nickole B. Radabaugh | Reviewed for consistency and content. |
| December 2014 | WECC Compliance | Updated formatting for 2015 |
| February 2015 | WECC Compliance | Removed Audit Id line from cover page |
|  |  |  |

1. WECC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate WECC and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The WECC RSAW language is written to specific versions of each WECC 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 WECC 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. WECC 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 WECC 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 WECC 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)