
	Reliability Coordinator Procedure	Procedure No. RC0220
		Version No. 2.0
		Effective Date 11/18/2019
Time Error Correction		Distribution Restriction: None

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Purpose

Provide guidance to the CAISO Reliability Coordinator (RC) Operator for the initiation of Manual Time Error Correction (TEC) in a manner that does not adversely affect the reliability of the Interconnection.

1. Responsibilities

- Reliability Coordinator Operator
- Balancing Authority

2. Scope/Applicability

- This procedure addresses TEC coordination between **RC West**, Balancing Authorities (BA) s in the **RC West** Area, and other RCs and their BAs operating in the Western Interconnection.

3. Procedure Detail

3.1. Initiation of Manual Time Error Correction

RC West has been designated by NERC as the Interconnection Time Monitor for the Western Interconnection and will initiate TEC when necessary. With the retirement of NERC Standard BAL-004-0, TEC is no longer initiated when the time error crosses predefined thresholds. However, TEC may still be initiated if needed for reliability concerns or other unforeseen reasons.


TEC will be accomplished by **RC West** issuing a TEC notification and all Balancing Authorities (BA) in the Western Interconnection entering a frequency offset of ± 0.02 Hz or offset their Net Interchange Schedule (MW) by an amount equal to 20 percent of their Frequency Bias Setting.

When issuing a TEC the RC Operator should adhere to the following guidelines:

- **The TEC notice should be given at least one hour prior to its start or stop times.**
- **The TEC should last at least one hour unless terminated due to a reliability concern.**
- **The TEC should start and stop on the hour or half-hour unless there is a reliability concern.**

RC West is responsible for the notification of a TEC to all BAs in the RC West Area as well as all other RCs in the Western Interconnection. Other RCs shall be responsible for communicating the TEC information to the BAs in their RC Area.

Reliability Coordinator Actions
<ul style="list-style-type: none"> • Notify RC West Area BAs and other Western Interconnection RCs via the Grid Messaging System (GMS) upon initiation of a TEC. Entities that are identified as not having access to GMS should be contacted via alternative methods. Be sure to include the following information: <ul style="list-style-type: none"> ○ Fast or Slow Correction,

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Reliability Coordinator Actions
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- Effective time that the TEC will be initiated,
- Current accumulated time error, and
- The scheduled frequency (59.98 Hz for a Fast TEC or 60.02 Hz for a Slow TEC).
- **Ensure** that all BAs in the RC West area as well as all Western Interconnection RCs acknowledge the notification. Notify entities via phone if notification is not acknowledged within 15 minutes of being sent.

3.2. Termination of Manual Time Error Correction

RC West will terminate a TEC for the WECC Interconnection when it is no longer required and shall disseminate the TEC termination information to the Western Interconnection. At least one hour notice should normally be given prior to the termination of a TEC.

Reliability Coordinator Actions
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- **Notify** RC West Area BAs and other Western Interconnection RCs via GMS of upcoming termination of the TEC. Entities that are identified as not having access to GMS should be contacted via alternative methods. Be sure to include the following information:
 - Effective time of termination,
 - Current accumulated time error, and
 - The scheduled frequency upon termination (60.00 Hz).
- **Ensure** that all BAs in the CAISO area as well as all Western Interconnection RCs acknowledge the notification. Notify entities via phone if notification is not acknowledged within 15 minutes of being sent.

3.3. Request of Termination due to Reliability


An entity within the Western Interconnection may notify the RC Operator if the TEC is causing a reliability concern.

Reliability Coordinator Actions
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- **Discuss and evaluate** termination request and if necessary terminate the TEC in progress. Notifications should be made according to Section 3.2.

3.4. Reinitiating a Terminated Manual Time Error Correction

After a TEC has been terminated due to a reliability concern and those concerns no longer exist, the RC Operator may reinitiate a TEC. There should be a minimum of one hour between the

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termination and reinitiation notices. Normal TEC guidelines should be followed as described in Section 3.1.

4. Supporting Information

Operationally Affected Parties

Shared with Public.

References

NERC Requirements	
BA/TOP Operating Procedure	
Other References	


Definitions

The following terms capitalized in this Operating Procedure are in accordance with the NERC Glossary, and/or otherwise when used are as defined below:

Term	Description
Reliability Coordinator (RC) Area	The collection of generation, transmission, and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.

Version History

Version	Change	Date
1.0	Approved by Steering Committee	10/3/18
2.0	Major rewrite of procedure for RC West as Time Monitor. Replaced CAISO RC with RC West throughout.	11/18/19

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5. Periodic Review Procedure

Review Criteria & Incorporation of Changes

There are no specific review criteria identified for this document.

Frequency

Review at least once every three years.

Appendix

No references at this time.