
	<b>Reliability Coordinator Procedure</b>	<b>Procedure No.</b>	RC0670
		<b>Version No.</b>	1.1
		<b>Effective Date</b>	9/27/2019
<b>NERC PRC-002-2 Disturbance Monitoring and Reporting Requirements Process</b>		<b>Distribution Restriction:</b> <b>None</b>	

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## 1. Purpose

Document the internal process for CAISO RC:

- Identifies Bulk Electric System (BES) Elements for which Dynamic Disturbance Recording (DDR) data is required
- Identifies a minimum DDR coverage, inclusive of those BES elements identified for which DDR data is required
- Notifies all owners of identified BES elements that their respective BES Elements require DDR data
- Re-evaluates all BES elements at least once every five calendar years and notifies all owners of identified BES elements that had BES elements requiring DDR data
- Facilitates compliance with NERC Reliability Standard PRC-002-2


## 2. Introduction

NERC Reliability Standard PRC-002-2 (Disturbance Monitoring and Reporting Requirements) was created to ensure adequate data is available to facilitate analysis of BES Disturbances. PRC-002-2 requires the CAISO RC, as the Reliability Coordinator in the Western Interconnection, to build and maintain a list of Dynamic Disturbance Recorders (DDR) that meet the requirements spelled out in R5.

## 3. Role and Responsibility

The Operation Engineering Service team is responsible for maintenance of this process document including the PRC-002 DDR list in the PRC-002-2 CAISO DDR List. The process document will be reviewed at least annually but updates will occur whenever required. The DDR list needs to be reevaluated every five years.

When a Transmission Owner or Generator Owner notifies the CAISO RC of a BES element or DDR status change, evaluation and revision of the PRC-002-2 DDR list will also occur. The Operation Engineering team notifies all owners of identified BES Elements within 90 days of changes to the DDR list and when implementation of a reevaluated list of BES Elements is required. The DDR list is considered confidential and will only be shared with owners of an identified BES Element(s) or those having access to the ISO RC portal. Mechanisms for notification include email and posting of the DDR list to the CAISO RC Portal. The CAISO RC will not provide the DDR list or attestations to non-owners of identified BES Elements.


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## 4. BES Element Identification

Per NERC Reliability Standard PRC-002-2 R5.1 and R5.2, the ISO RC identifies BES Elements for which DDR data is required and documents them in the PRC-002-2 CAISO DDR List.

The PRC-002 DDR list contains identified BES Elements for which dynamic Disturbance recording (DDR) data is required, including the following:

- 1) Generating resource(s) with:
  - a) Gross individual nameplate ratings greater than or equal to 500 MVA  
The Operation Engineering Service team identifies individual units meeting the minimum 500 MVA or greater nameplate requirement by reviewing and confirming the modeled MVA rating with the GOP for individual units that are identified as potentially  $\geq 500$  MVA (triggered by a review of all individual units in the West-wide System Model with maximum MW  $\geq 450$  MW).
  - b) Gross individual nameplate ratings greater than or equal to 300 MVA where the gross plant/facility aggregate nameplate rating is greater than or equal to 1000 MVA  
The Operation Engineering Service team identifies individual units meeting the minimum 300 MVA or greater nameplate, where gross plant/facility aggregate meeting 1000 MVA or greater nameplate requirement by reviewing and confirming the modeled MVA rating with the GOP for individual units that are identified as potentially  $\geq 300$  MVA
- 2) BES Elements that are part of a stability (angular or voltage) related System Operating Limit (SOL).  
  
The Operations Engineering Team identifies BES Elements that are part of or in the vicinity of a stability (angular or voltage) related SOL by reviewing entity provided limits and Peak-established stability limitations.
- 3) Terminals of high voltage direct current (HVDC) circuits with a nameplate rating greater than or equal to 300 MVA, on the alternating current (AC) portion of the converter.  
  
The Operation Engineering Team identifies HVDC terminals meeting the minimum 300 MVA or greater nameplate requirement by calculating maximum MVA using the Full Network Model AC rated current and nominal voltage parameters.
- 4) BES Elements that are part of an Interconnection Reliability Operating Limit (IROL).  
  
The Operation Engineering Team identifies BES Elements that are critical to the derivation of a defined IROL
- 5) BES Elements with a major voltage sensitive area as defined by an area with an in-service undervoltage load shedding (UVLS) program.  
  
The Operation Engineering Team identifies major voltage sensitive areas by reviewing active Undervoltage Load Shedding programs and applicable Remedial Action Schemes.

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The PRC-002 DDR list contains identified minimum DDR coverage, inclusive of those BES Elements identified above, of at least one BES Element; and one BES Element per 3000 MW of the CAISO RC's historical simultaneous peak System Demand.

## 5. Communication

For all PRC-002-2 questions or discussion, please submit a ticket through the ISO's CIDI system.

## 6. Supporting Information

### Operationally Affected Parties

Shared with the Public.


### References

NERC Requirements	PRC-002-2
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
None	

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### Version History

Version	Change	Date
1.0	Approved by Steering Committee.	3/12/19
1.1	Updated RC West logo. Updated Distribution Restriction to “None” for public sharing.	9/27/19

## 7. 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.