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Purpose

Provides guidance for:

- Requesting Emergency Assistance from the CAISO
- The CAISO to provide Emergency Assistance to other Balancing Authorities
- Scheduling of Emergency Assistance
- Settlements of Emergency Assistance

Note: This procedure addresses guidance for the CAISO to provide emergency assistance to other Balancing Authorities. Guidance for emergency assistance pricing from another Balancing Authority to the CAISO is found in E-505B, Prices – Emergency Assistance to the CAISO.

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1. Capacity Emergency Assistance (Spinning or Non-Spinning Reserve)

Note: Emergency Assistance may be available from the CAISO for Balancing Authorities of the WECC Interconnection that are signatories to written contractual agreements with the CAISO (Interconnected Balancing Authority Operating Agreements, Service Schedule 13), or who have entered into a verbal contract with the CAISO by requesting such assistance.


If ALL of the following are true:

- The requesting Balancing Authority experiences an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria for Operating Reserve.
- All other commercial solutions have been exhausted.
- The next relief measure is reduction of firm Load.

Then the requesting Balancing Authority may request Emergency Assistance for capacity by taking the actions outlined below:


Step	Requesting Balancing Authority Actions
1	Advise the CAISO Shift Supervisor of the nature of the problem, the amounts, the time, and the duration that the Capacity Assistance is required. (This should only be until the Balancing Authority can get their schedules into the CAISO through the HA market—up to 135 minutes)
Step	CAISO Actions
2	Evaluate CAISO Operating Reserve and the Supplemental Energy stack to determine availability of transferable Operating Reserves.
3	Verify that supplying emergency capacity to another Balancing Authority will not decrease CAISO Operating Reserves below minimum WECC requirements.

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Step	CAISO and Requesting Balancing Authority Actions
4	Verify that available transmission service exists to assure delivery capability if the Energy associated with the capacity sale is subsequently called upon.
5	Agree on the following: <ul style="list-style-type: none"> o Capacity will be sold at the prices indicated in Attachment A for the applicable Balancing Authority, plus applicable charges specified in the CAISO Tariff, o Transmission capacity is the responsibility of the deficient system, o Settlement for the Capacity will be according to the CAISO Tariff, and the CAISO settlement process, billing cycle, and payment timeline, o The maximum MW value, o The duration of the schedule, o The delivery point for any associated Energy, o The appropriate contact information to facilitate settlement.
Step	CAISO Actions
6	Record the above information in the SLIC log. This must be done to allow for correct settlements.
7	Log the “Title” as “Intertie Emergency Assistance.”
Step	CAISO and Requesting Balancing Authority Actions
8	Establish an emergency Balancing Authority-to-Balancing Authority Schedule.
Step	CAISO Scheduler Actions
9	Create a Schedule in CAS to facilitate the Balancing Authority-to-Balancing Authority assistance as follows: <ul style="list-style-type: none"> o <u>Scheduling Coordinator</u> - use valid SC ID if available, otherwise use ZISO. Energy type is CSPN. o <u>Interchange ID</u> - should include an acronym that is descriptive of the receiver (If not a registered SC it would be preferable to use the NERC Entity Code found at TSIN.com, on the electronic tag, or provided by the Entity contact). For example a Non-Scheduling Coordinator purchase from Niagara Mohawk Power would have the Interchange ID of “ZISO_NMNM_EMERG.” o <u>Comments</u> - A remark in the miscellaneous field that describes the transaction as Non-Market Participant (NMP) is helpful.

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2. Energy Emergency Assistance


If ALL of the following are true:

- The requesting Balancing Authority is experiencing an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria Operating Reserve,
- All other commercial solutions have been exhausted,
- All non-firm demand on the deficient system has been eliminated,
- All non-firm exports on the deficient system have been eliminated,
- The next relief measure is reduction of firm Load.

Then the requesting Balancing Authority may request Emergency Assistance for energy by taking the actions outlined below:

Step	Requesting Balancing Authority Action
1	Advise the CAISO Shift Supervisor of the nature of the problem, the amounts, the time, and the duration that the Energy Assistance is required. (This should only be until the Balancing Authority can get their schedules into the CAISO through the HA market—up to 135 minutes)
Step	CAISO Actions
2	Evaluate the Supplemental Energy stack and other Energy sources for the availability of Energy and determine how much of that Energy must be kept available for potential CAISO needs.
3	Maintain the minimum Spinning Reserve requirement.
4	Verify that CAISO load management programs are <u>not</u> needed to provide the Emergency Assistance (i.e. no shedding of interruptible or firm Load).
Step	CAISO and Requesting Balancing Authority Actions
5	Evaluate the availability of transmission service and make every effort to facilitate the Schedule between the CAISO and the deficient system.
6	Agree on the following: <ul style="list-style-type: none"> ○ Energy will be sold at the prices indicated in Attachment A for the applicable Balancing Authority, plus all applicable charges specified in the CAISO Tariff, ○ The total price may only be estimated before delivery and will be finalized in the settlement process, ○ Transmission capacity is the responsibility of the requesting deficient system, ○ Settlement for the Energy will be according to the CAISO Tariff, and the CAISO settlement process, billing cycle, and payment timeline. ○ MW value, ○ Ramp start time and duration, ○ Delivery point, ○ Duration of Schedule, ○ Integrated MWH, ○ The appropriate contact information to facilitate settlement.


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Step	CAISO Actions				
7	Record the above information in the CAISO SLIC log. This must be done to allow for correct settlements.				
8	Log the “Title” as “Intertie Emergency Assistance.”				
Step	CAISO and Requesting Balancing Authority Actions				
<p><i>Note: All Energy Schedules are to be considered firm, and are recallable only in the event the CAISO becomes deficient to the point of otherwise having to shed interruptible or firm Load to maintain the minimum Spinning Reserve requirement.</i></p> <p><i>Emergency Assistance Energy is Out of Market and is scheduled according to S-318, Out of Market Energy Transactions on the Inter-ties.</i></p> <p><i>Integrated values for the Emergency Assistance Schedule may be agreed upon at the initiation of the Schedule, at its termination, or at a later time.</i></p> <p><i>The CAISO will facilitate the Emergency Assistance Energy Schedule for no longer than the remainder of the initial hour plus the following two hours. Beyond that time, Emergency Assistance should be scheduled in the Hour-Ahead Market if possible.</i></p>					
9	Establish an emergency Balancing Authority-to-Balancing Authority Schedule.				
Step	CAISO Scheduler Actions				
10	<p>Create a Schedule in CAS to facilitate the Balancing Authority-to-Balancing Authority assistance as follows:</p> <ul style="list-style-type: none"> o <u>Scheduling Coordinator</u> - use valid SC ID if available, otherwise use ZISO. o Energy type, per S-318, is Out of Market and is scheduled according to S-318, Out of Market Energy Transactions on the Inter-ties. o <u>Interchange ID</u> - should include an acronym that is descriptive of the receiver (If not a registered SC it would be preferable to use the NERC Entity Code found at TSIN.com, on the electronic tag, or provided by the Entity contact). For example a Non-Scheduling Coordinator purchase from Niagara Mohawk Power would have the Interchange ID of “ZISO_NMNM_EMERG.” o <u>Comments</u> - A remark in the miscellaneous field that describes the transaction as Non-Market Participant (NMP) would be helpful. 				
11	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e0ffff;">If...</th> <th style="background-color: #e0ffff;">Then...</th> </tr> </thead> <tbody> <tr> <td>The Balancing Authority requesting Energy Assistance is currently receiving Capacity Assistance,</td> <td>Reduce the appropriate spinning or non-spinning reserve Schedule in an amount equal to the requested Energy Assistance Schedule.</td> </tr> </tbody> </table>	If...	Then...	The Balancing Authority requesting Energy Assistance is currently receiving Capacity Assistance,	Reduce the appropriate spinning or non-spinning reserve Schedule in an amount equal to the requested Energy Assistance Schedule.
If...	Then...				
The Balancing Authority requesting Energy Assistance is currently receiving Capacity Assistance,	Reduce the appropriate spinning or non-spinning reserve Schedule in an amount equal to the requested Energy Assistance Schedule.				

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Step	CAISO Scheduler Actions
12	Enter a manual net interchange number reflecting the previous total interchange Schedule value adjusted by the value of the new Balancing Authority-to-Balancing Authority Emergency Assistance Schedule, And enter the new Schedule as soon thereafter as practicable (after-the-fact if necessary), And adjust the manual net interchange as appropriate.

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3. Wheeling Emergency Assistance


If ALL of the following are true:

- The requesting Balancing Authority is experiencing an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria Operating Reserve,
- All other commercial solutions have been exhausted,
- The next relief measure is Emergency Energy or Capacity Assistance.

Then the requesting Balancing Authority may request Emergency Wheeling Assistance by taking the actions outlined below:


Step	Requesting Balancing Authority Action
1	Advise the CAISO Shift Supervisor of the nature of the problem, the lines affected, the amounts, the time, and the duration that the Emergency Wheeling Assistance is required. (This should only be until the Balancing Authority can get their schedules into the CAISO through the HA market—up to 135 minutes)
Step	CAISO Actions
2	Evaluate the availability of transmission service, And determine how much transmission must be kept available for potential CAISO needs and how much can be provided as Emergency Wheeling Assistance.
3	Verify that CAISO load management programs are <u>not</u> needed to provide the Emergency Wheeling Assistance (no shedding of interruptible or firm Load).
Step	CAISO and Requesting Balancing Authority Actions
4	Agree on the following: <ul style="list-style-type: none"> ○ Transmission will be provided including all applicable charges specified in the CAISO Tariff, ○ The total price may only be estimated before delivery and will be finalized in the settlement process, ○ Energy and capacity are the responsibility of the requesting deficient system, ○ Settlement for the Wheeling charges is in accordance with the CAISO Tariff, settlement process, billing cycle, and payment timeline, ○ The total Wheeling Access Charge is calculated based upon the voltage level of the line used and the MWs transmitted, ○ MW value, ○ Ramp start time (if any) and duration, ○ Delivery point and Receipt point, ○ Duration of Schedule, ○ Integrated MWH (for first hour only), ○ The appropriate contact information to facilitate settlement.

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Step	CAISO Actions
5	Record the above information in the CAISO SLIC log. This must be done to allow for correct settlements.
6	Log the “Title” as “Intertie Emergency Wheeling Assistance” And the “Price” as “Wheeling Charges.”
Step	CAISO and Requesting Balancing Authority Actions
<i>Note: The CAISO will facilitate the Emergency Wheeling Assistance Schedule for no longer than the remainder of the initial hour plus the following two hours. Beyond that time, Emergency Wheeling Assistance should be scheduled in the Hour-Ahead Market if possible.</i>	
7	Establish an emergency Balancing Authority-to-Balancing Authority Wheel Schedule.
Step	CAISO Scheduler Actions
8	Create a Wheeling Schedule (receipt point and a delivery point and must have same Interchange ID) in CAS to facilitate the Balancing Authority-to-Balancing Authority assistance as follows: <ul style="list-style-type: none"> o <u>Scheduling Coordinator</u> - use valid SC ID. o <u>Interchange ID</u> - should include an acronym that is descriptive of the receiver o <u>Comments</u> - A remark in the miscellaneous field that describes the transaction as Non-Market Participant (NMP) would be helpful.
9	Verify that the combined total transmission does not exceed the path rating.
10	Enter a manual net interchange number reflecting the previous total interchange Schedule value adjusted by the value of the new Balancing Authority-to-Balancing Authority Emergency Wheeling Assistance Schedule, And enter the new Schedule as soon thereafter as practicable (after-the-fact if necessary), And adjust the manual net interchange as appropriate.

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4. Load Transfer Emergency Assistance


If ALL of the following are true:

- The requesting Balancing Authority is experiencing an emergency and is unable to serve a portion of their Load that has separated from their Balancing Authority,
- Utility procedures exist that provide for transfer of this load to the CAISO Balancing Authority,
- All other commercial solutions have been exhausted,
- The next relief measure is reduction of firm Load,

Then the requesting Balancing Authority may request an Emergency Load Transfer, transferring Load responsibility from the requesting Balancing Authority to the CAISO by taking the actions outlined below:


Step	Requesting Balancing Authority Action
1	<p>Advise the CAISO Shift Supervisor of the nature of the problem, the lines affected, the amounts, the time, and the duration that the Emergency Load Transfer Assistance is required.</p> <p>This should only be until the Balancing Authority can:</p> <p>1) re-establish service to their load in the separated area, <u>or</u></p> <p>2) get their schedules into the CAISO through the HA market—up to 135 minutes, whichever comes first.</p>
Step	CAISO Actions
2	<p>Evaluate the availability of transmission service and Generation, And determine how much transmission and Energy must be kept available for potential CAISO needs and how much can be provided as Emergency Load Transfer Assistance.</p>
3	<p>Verify that CAISO load reduction programs are <u>not</u> needed to provide the Emergency Load Transfer Assistance (i.e. no shedding of interruptible or firm Load).</p>

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Step	CAISO and Requesting Balancing Authority Actions
<p><i>Note: The CAISO will facilitate the Emergency Load Transfer Assistance for no longer than the remainder of the initial hour plus the following two hours. Beyond that time, Wheeling and Energy should be scheduled in the Hour-Ahead Market if possible.</i></p>	
4	<p>Agree on the following:</p> <ul style="list-style-type: none"> ○ All applicable charges specified in the CAISO Tariff will be charged, ○ The total price may only be estimated before delivery and will be finalized in the settlement process, ○ Non-ISO transmission and capacity are the responsibility of the requesting deficient system, ○ Settlement for the Load Transfer will be in accordance with the CAISO Tariff, and the CAISO settlement process, billing cycle, and payment timeline. ○ MW value, ○ Duration of Emergency Load Transfer (if known), ○ The appropriate contact information to facilitate settlement.
Step	CAISO Actions
5	Record the above information in the CAISO SLIC log. This must be done to allow for correct settlements.
6	Log the “Title” as “Emergency Load Transfer Assistance.”
Step	CAISO Scheduler Actions
8	None – the Load Transfer should not be crossing any inter-ties, otherwise it would be Emergency Energy (Section 1) or Emergency Wheeling (Section 2) Assistance.

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5. Billing and Payment

Once the emergency request for assistance is concluded, take the following steps to reconcile the transaction:

Step	CAISO Settlements Department Action	
1	Settle the transaction based on the information supplied by the Operations Department and the applicable Interconnected Balancing Authority Operating Agreement, Service Schedule 13, OR	
	If...	Then...
	There is no existing agreement,	Use the terms that were agreed to in Real Time.

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Supporting Information

Affected Parties • Market Participants

Responsibility & Authority


CAISO NERC Certified RT Operating Personnel	Hold authority, as delegated by the Executive Officers of the CAISO, to take or direct timely and appropriate real-time actions necessary to ensure reliable operation of the CAISO Controlled Grid, up to and including shedding of Firm Load to prevent or alleviate System Operating Limit or Interconnection Reliability Operating Limit violations. These actions may be performed without obtaining approval from higher-level personnel within the CAISO.
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References

• CAISO Settlements and Billing Protocol
• CAISO Interconnected Control Area Operating Agreement
• WECC Minimum Operating Reliability Criteria (MORC)

Policy


The CAISO may assist Balancing Areas within the WECC Interconnection during System Emergencies. The CAISO will not shed firm or non-firm load to provide Emergency Assistance to other Balancing Areas.

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Definitions


Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the CAISO Tariff shall have that meaning when capitalized in this Operating Procedure.

Term	Definition
Emergency Capacity Assistance	Capacity assistance provided to a requesting Balancing Area that is experiencing an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria for Operating Reserve. The requesting Balancing Area has exhausted all other commercial solutions and the next relief measure is reduction of firm Load.
Emergency Energy Assistance	Energy assistance provided to a requesting Balancing Area that is experiencing an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria for Operating Reserve. The requesting Balancing Area has exhausted all other commercial solutions and the next relief measure is reduction of firm Load.
Emergency Wheeling Assistance	Transmission wheeling assistance provided to a requesting Balancing Area that is experiencing an emergency, and is unable to maintain WECC Minimum Operating Reliability Criteria for Operating Reserve. The requesting Balancing Area has exhausted all other commercial solutions and the next relief measure is reduction of firm Load. This assistance does not require CAISO Energy or Capacity, only transmission wheeling.
Emergency Load Transfer	Energy assistance provided to a requesting Balancing Area that is experiencing an emergency, and is unable to serve Load in their Balancing Area due to a contingency. The requesting Balancing Area has exhausted all other commercial solutions and the next relief measure is reduction of firm Load. This option is only viable if there is an alternate path that is normally open and that connects the Balancing Area to the CAISO.

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Version History

Version	Change	By	Date
1.0	Drafted		12/11/98
2.0	Defined operating reserve levels for supplying Emergency Assistance, removed step by step references to Billing and Settlements procedures		7/17/00
2.1	Annual review, re-formatted		4/19/02
2.2	Annual review, no changes		8/1/03
2.3	Added logging info		8/28/03
2.4	Removed references to WECC Emergency Assistance Procedure, which has been withdrawn		01-06-03
2.5	Added specific direction for Schedulers to create correct interchange schedule in BITs.		7/15/04
2.6	Annual review, information mapped.		3/16/05
3.0	Added Emergency Wheeling Assistance to section 3		9/19/05
3.1	Removed requirement to e-mail Information Engineering & Analysis support staff of the Emergency Assistance		12/1/05
3.2	Corrected error that should have been done in last revision		12/9/05
4.0	Added Emergency Load Transfer Assistance to section 4		3/13/06
4.1	Removed lines within that instructed “ Force BITs Schedule information to EMS.”		4/20/06
5.0	Added Attachment B		5/2/06
5.1	Added CAISO NERC Certified RT Operating Personnel to Responsibility section.		11/15/06
5.2	Added clarification for Settlements & logging in Section 3		2/12/08

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Technical Review

Reviewed By Content Expert	Signature	Date
Ops Support		2/12/08
Regional Transmission		5/15/06
Grid Ops		11/15/06
Market Ops		5/9/06
Scheduling		5/9/06

Approval

Approved By	Signature	Date
Director of Operations Support		5/16/06
Director of Grid Operations		5/15/06

*Signed previous versions; 5.2 contains minor changes and does not require full approval.

Appendix

[Attachment A: Prices - Emergency Assistance to Other Balancing Authorities](#)

[Attachment B: Prices – Emergency Assistance to the CAISO](#)
