
 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction: None</b>	

## Table of Contents

<b>Purpose</b> .....	<b>1</b>
1. Responsibilities.....	2
2. Scope/Applicability.....	2
2.1. Background.....	2
2.2. Scope/ Applicability .....	3
3. Procedure Detail .....	3
3.1. Intertie (Transfer Path) TTC or Scheduling Limit Curtailment.....	3
3.1.1. Before the Operating Hour .....	3
3.1.2. Current Operating Hour.....	4
3.2. Schedule Changes not Associated with Intertie (Transfer Path) Limitations.....	5
3.2.1. Initiated by Suppliers or Receivers.....	5
3.3. BANC Intertie Schedules .....	6
3.3.1. Net Schedule Curtailments.....	6
3.4. Low Priority Export E-Tag Curtailments.....	6
3.4.1. Pro-Rata LPT Curtailments by priority.....	7
4. Supporting Information.....	7
Operationally Affected Parties .....	7
References.....	7
Definitions .....	7
Version History .....	8
5. Periodic Review Procedure .....	9
Review Criteria & Incorporation of Changes.....	9
Frequency.....	9
Appendix.....	9

## Purpose

Provides guidelines for making Interchange curtailments.

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

## 1. Responsibilities

<b>CAISO Transmission Dispatcher</b>	<p>Takes immediate actions to implement Interchange Schedule curtailments, as required by operating conditions, with adjacent Balancing Authorities (BAs) to assure System Reliability and compliance with applicable NERC and WECC Interchange Standards. Interconnected BAs must agree on Net Scheduled Interchange (NSI) values. Accurate and timely communication is essential to managing flow on the ties and to minimize inadvertent Interchange throughout the WECC area.</p> <p>When the actual power flow exceeds a System Operating Limit (SOL) for a Transmission element, take immediate action to reduce the actual power across that element. Following a Contingency or other event that results in an IROL violation, the Transmission Operator shall return its transmission system to within IROL as soon as possible, but no longer than 30 minutes. A Transmission Operator shall inform its Reliability Coordinator when an IROL or SOL has been exceeded and the actions being taken to return the system to within limits. Exceedance times may vary based upon element owner requirements.</p>
<b>Scheduling Coordinator (SC)</b>	<p>Respond to schedule adjustments in a timely manner as described in this procedure.</p> <p>Scheduling Coordinators should also be familiar with the WECC Unscheduled Flow Mitigation Plan Document posted on <a href="http://www.wecc.org">www.wecc.org</a>.</p>


## 2. Scope/Applicability

### 2.1. Background

Due to Outages, path limitations, interruption of Energy Schedules from adjoining Balancing Authorities or during a CAISO BA EEA 3 event, it is frequently necessary to eliminate or adjust imports and exports to the CAISO after the close of the active CAISO markets.

Interchange Schedule curtailments are implemented in accordance with the CAISO Tariff on a pro rata basis. Interchange Schedule curtailments for Existing Transmission Contracts (ETC) and Transmission Ownership Rights (TOR) are performed based on the instructions given to the CAISO by the responsible Participating Transmission Owners (PTOs) and Non-Participating Transmission Owners, respectively. However, in order to maintain interconnected System Reliability, or prevent or mitigate an emergency, the CAISO Transmission Dispatcher may be required to take actions that conflict with the instructions provided by the PTO and Non-Participating Transmission Owners.

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b> 2540
		<b>Version No.</b> 7.1
		<b>Effective Date</b> 12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction: None</b>

## 2.2. Scope/ Applicability

This procedure applies to Interchange Schedule curtailments.

## 3. Procedure Detail


### 3.1. Intertie (Transfer Path) TTC or Scheduling Limit Curtailment

#### 3.1.1. Before the Operating Hour

Take the following actions for a curtailment or adjustment resulting from a transfer path limitation for BA-to-BA transfer on an Interconnection, which occurs before the start of an Operating Hour, but after the close of the Hour-Ahead Scheduling Process (HASP) Market:

CAISO Transmission Dispatcher
<p><b>Note:</b> Schedules using ETCs or TORs will be adjusted in accordance with the instructions provided by the PTO or Non-Participating Transmission Owners, respectively.</p> <ol style="list-style-type: none"> <li>1. <b>Apply</b> the necessary Interconnection curtailments to market schedules <u>and</u> <ul style="list-style-type: none"> <li>• <b>Use</b> Interchange Schedules on a pro rata basis, per the CAISO Tariff.</li> </ul> </li> <li>2. <b>Coordinate</b> with the affected BAs <u>and</u> <ul style="list-style-type: none"> <li>• <b>Curtail</b> the tie specific Interchange Schedules, using the Interchange Transaction Scheduler curtailment mode.</li> </ul> </li> <li>3. The curtailment of the tag initiates an approval process involving all the entities listed on the tag and shall serve to <b>inform</b> the affected entities of tags (Interchange Schedules) curtailed.</li> </ol> <p><b>Note:</b> In the event that notification prohibits reallocation of transmission on a CAISO Tariff basis, the Transmission Dispatcher takes whatever action necessary to maintain interconnected System Reliability based on prudent operating practices.</p> <ol style="list-style-type: none"> <li>4. If the specific ETC/TOR curtailment instructions <u>are</u> pro rata, <ul style="list-style-type: none"> <li>• <b>Manage</b> ETCs and TOR curtailments in the same manner as market transmission awarded usage Schedules.</li> </ul> </li> <li>5. If the specific ETC/TOR curtailment instructions <u>are not</u> pro rata, <ul style="list-style-type: none"> <li>• <b>Follow-up</b> <u>as soon as possible</u> to manually curtail the respective ETC or TOR tags, per the ETC/TOR specific PTO/Non-Participating Transmission Owners instruction.</li> </ul> </li> <li>6. <b>Do not change</b> the associated market award schedules in the Interchange Transaction Scheduler application to agree with the tagging adjustments.</li> </ol>

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

<b>CAISO Transmission Dispatcher</b>
<p><b>Note:</b> CAISO Settlements staff needs the pertinent information on any curtailed transactions, both the original market award data and the final-tagged Interchange value as delivered, to assure that Imbalance Energy and other associated charges are settled properly, per the CAISO Tariff.</p>


<b>Scheduling Coordinator (SC)</b>
<ol style="list-style-type: none"> <li><b>Notify</b> the source BA, responsible for the source generation, <u>and/or</u> <ul style="list-style-type: none"> <li><b>Report</b> the curtailed limit in the CAISO Outage management system for dynamic and pseudo schedules.</li> <li><b>Note:</b> The Market Participant SC/PSEs are responsible for all notifications associated with all commercial aspects of their adjusted transactions.</li> </ul> </li> </ol>

### 3.1.2. Current Operating Hour

Take the following actions for curtailments within the current Operating Hour:

<b>CAISO Transmission Dispatcher</b>
<ol style="list-style-type: none"> <li><b>Monitor</b> RTCA and determine if schedule curtailments are necessary in order to mitigate any overloads or other reliability concerns post-derate.</li> <li><b>Determine</b> the amount of schedules that will need to be curtailed in order to mitigate; and which Interchange Schedules, if any, are required to be curtailed on the affected path to meet the reduced Total Transfer Capacity as determined by the CAISO and the adjacent Balancing Authority. <p><b>Note:</b> If no reliability concerns are identified, post-derate and no overloads are identified within RTCA, then schedules are not required to be curtailed to meet the reduced TTC for the current hour.</p> <p><b>Note:</b> Open ties always warrant schedule curtailments. If an ITC constraint goes to zero, schedules should be curtailed to zero, regardless of the time frame.</p> </li> <li><b>Apply</b> the curtailments to market schedules, <ul style="list-style-type: none"> <li><b>Use</b> Interchange Schedules on a pro rata basis, and</li> <li><b>Confirm</b> the individual Interchange Schedule changes with adjacent Balancing Authority operators via the WIT and/or phone <u>and</u></li> <li><b>Agree</b> upon new Net Scheduled Interchange values.</li> </ul> <p><b>Note:</b> The SC/PSEs are responsible for notifications associated with all commercial aspects of the adjusted Interchange transactions.</p> </li> <li><b>Evaluate</b> Existing Transmission Contracts and TORs based on the instructions provided by the PTO, or Non-Participating Transmission Owners.</li> </ol>

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

CAISO Transmission Dispatcher
<p><i><b>Note:</b> In the event that notification prohibits reallocation of transmission on CAISO Tariff basis, the Transmission Dispatcher takes whatever action necessary to maintain interconnected System Reliability based on prudent operating practices.</i></p> <ol style="list-style-type: none"> <li>5. <b>Curtail</b> tags, using the Interchange transaction scheduler curtailment mode.</li> <li>6. <b>When</b> mid-hour transfer capability changes or other Contingencies requiring mid-hour Schedule changes are made: <ul style="list-style-type: none"> <li>• <b>Determine</b> the hourly-integrated value based on the time of the actual event.</li> <li>• <b>Communicate</b> the integrated values to the affected SCs after confirming them with the adjacent Balancing Authority operators. (Normally done via the E-Tag).</li> </ul> </li> <li>7. <b>Do not change</b> the associated market award Schedules in the Interchange transaction scheduler application to agree with the tagging adjustments.</li> </ol> <p><i><b>Note:</b> CAISO Settlements staff needs the pertinent information on any curtailed transactions, both the original market award data and the final-tagged Interchange value as delivered, to assure that Imbalance Energy and other associated charges are settled properly, per the CAISO Tariff.</i></p>


### 3.2. Schedule Changes not Associated with Intertie (Transfer Path) Limitations

#### 3.2.1. Initiated by Suppliers or Receivers

Take the following actions for changes to Interchange Schedules initiated by suppliers or receivers, which are not precipitated by a transfer path limitation (e.g. a supplier cutting a Schedule due to the loss of a Generating Unit):

CAISO Transmission Dispatcher, Scheduling Coordinator (SC)
<ol style="list-style-type: none"> <li>1. If notified of an interruption of an import or export to the CAISO BA, <ul style="list-style-type: none"> <li>• <b>Contact</b> the other adjacent BA to help assure coordination.</li> </ul> </li> </ol>

Scheduling Coordinator (SC)
<ol style="list-style-type: none"> <li>1. <b>Notify</b> all commercial entities for the adjusted transaction.</li> <li>2. <b>Report</b> the curtailed limit in the CAISO outage management system for dynamic and pseudo schedules. If the issue occurs in real-time, adjust E-Tags accordingly.</li> </ol>

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

CAISO Transmission Dispatcher
<ol style="list-style-type: none"> <li>1. <b>Confirm</b> the individual Interchange Schedule changes with adjacent Balancing Authority operators, <u>and</u> <ul style="list-style-type: none"> <li>• <b>Agree</b> on a new Net Scheduled Interchange value.</li> </ul> </li> </ol>

### 3.3. BANC Intertie Schedules

BANC does not allow net schedules on their interties and instead separately evaluates intertie import schedules against the tie import limit, and export schedules against the tie export limit.

#### 3.3.1. Net Schedule Curtailments


Before the next Operating Hour, but after the close of the HASP Market, if notified by BANC of CAISO's schedules exceeding an intertie import and/or export scheduling limit, the Transmission Dispatcher should curtail the intertie schedules to the appropriate limit (if not already corrected through the HASP Market) through the following actions:

CAISO Transmission Dispatcher
<p>When notified of over-scheduled condition on BANC intertie,</p> <ol style="list-style-type: none"> <li>1. <b>Verify</b> schedules on the affected intertie exceed the specified import and/or export limit. <ul style="list-style-type: none"> <li>• <b>Account</b> for any intertie schedule adjustments issued through the HASP Market. <ul style="list-style-type: none"> <li>○ If over <u>import</u> limit, <b>curtail import</b> schedules on the affected tie pro-rata to the import-scheduling limit.</li> <li>○ If over <u>export</u> limit, <b>curtail export</b> schedules on the affected tie pro-rata to the export-scheduling limit.</li> </ul> </li> </ul> </li> <li>2. <b>Verify</b> with BANC RT Scheduler that the post-curtailment hourly schedules on the identified intertie are within applicable schedule limits verbally or via WIT.</li> </ol>

### 3.4. Low Priority Export E-Tag Curtailments

CAISO may need to curtail any remaining LPT exports that cleared HASP when the CAISO BA is in an EEA 3 during a firm load shedding event or to prevent shedding firm load. Interchange Transaction Scheduler or the Transmission Dispatcher shall curtail the operator-identified/filtered exports without overloading the scheduling limits in the import direction.

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

### 3.4.1. Pro-Rata LPT Curtailments by priority

After the close of the HASP Market, if notified by the Manager of Real-Time Operations of the need to pro-rata curtail Low Priority Transaction (LPT) exports during a CAISO BA EEA 3:

<b>CAISO Transmission Dispatcher</b>
<p>1. <b>Verify</b> remaining LPT exports from the Interchange Transaction Scheduler</p> <ul style="list-style-type: none"> <li>• Curtail pro-rata by priority, starting with the lowest priority first.</li> <li>• LPT Curtailments in order of priority shall be: <ul style="list-style-type: none"> <li>○ RTECON</li> <li>○ RTLPT</li> <li>○ DALPT</li> </ul> </li> </ul> <p><b>Note:</b> During emergency conditions, the order above may be subject to operator judgement and consistent with good utility practice.</p>

## 4. Supporting Information

### Operationally Affected Parties

Shared with the Public.

### References


Resources studied in the development of this procedure and that may have an effect upon some steps taken herein include but are not limited to:

<b>None</b>	
-------------	--

### 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.

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*

 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction: None</b>	

The following additional terms are capitalized in this Operating Procedure when used as defined below:


**None.**

### Version History

Version	Change	Date
6.4	Section 3.1.2: Added ISO Transmission Desk Action and added note after ISO Interchange Scheduling Desk Action #1. Minor format and grammar updates.	2/22/18
6.5	Section 1: Changed Interchange Scheduler Desk to Transmission Desk. Section 2.1: Changed Interchange Scheduler to Transmission Dispatcher. Section 3.1.1: Combined Interchange Scheduler Desk table with Transmission Desk table and left under Transmission Desk heading. Former Transmission Desk task is now step 6 in new table. Also changed all instances of Interchange Scheduler to Transmission Dispatcher. Section 3.1.2: Combined Interchange Scheduler Desk table with Transmission Desk table and left under Transmission Desk heading. With change Checking RTCA is now step one, and the previous Scheduling Desk tasks are now steps 2-6. Also changed all instances of Interchange Scheduler to Transmission Dispatcher. Section 3.3.1: Changed Interchange Scheduling Desk to Transmission Desk and Interchange Scheduler to Transmission Dispatcher. Minor format and grammar updates.	4/15/19
7.0	Periodic Review: Minor format and grammar updates. Removed references of 3510A WECC Unscheduled Flow Reduction Guideline (Retired 12/20/19). Removed history prior to 5-years.	10/22/20
7.1	Periodic Review: Minor edit in Section 2.1 to include "or during a CAISO BA EEA 3 event". Added new Section 3.4 for LPT exports. Replaced Transmission "Desk" with "Dispatcher" and removed history prior to five years.	12/11/23

*This document is controlled when viewed electronically.  
When downloaded or printed, this document becomes UNCONTROLLED.*



 <b>California ISO</b>	<b>Operating Procedure</b>	<b>Procedure No.</b>	2540
		<b>Version No.</b>	7.1
		<b>Effective Date</b>	12/11/2023
<b>Interchange Schedule Curtailments</b>		<b>Distribution Restriction:</b> <b>None</b>	

## 5. Periodic Review Procedure

### Review Criteria & Incorporation of Changes

There are no specific criteria for reviewing or changing this document, follow instructions in Procedure 5510.

### Frequency

Every three (3) Years.

### Appendix

No references at this time.