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## Purpose

Provides guidance for managing path de-rates and re-rates using the Existing Transmission Contract Calculator (ETCC), proper communication between the affected parties when a de-rate or re-rate occurs, and Operator instructions for managing ETC and TOR preexisting

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transmission contract reservations on the rated paths (Interconnections) and on internal Congestion paths.

## 1. Responsibilities


<b>ISO Operations Planning Engineer</b>	Update TTC, ETC or contract information as directed.  Updates the ETCC for changes to path rating Hourly TTCs Scheduled by 4 days out from the present day.
<b>ISO Day-Ahead Operations Engineer</b>	Enters Outage notes in the Outage Short Description that limit a path's Hourly TTC, as soon as practical.  Calculates ETC/TOR MW allocation values for 1 to 2 days out.  Verify and publish TTC/ETC/ATC information to OASIS for next operating day and D+2.  Update TTC, ETC, TOR or contract information as needed for D+3, D+2 and DA.
<b>ISO Transmission Desk</b>	Enter changes in ETC values into ETCC for current or next Operating Day.  Notify Market Participants through a Market Message for OASIS of Hourly TTC Path rating changes for current Operating Day that affect Market Participants and affected outage days.  Verify correct TTC/ETC/ATC data published to OASIS & Market Systems.

## 2. Scope/Applicability

### 2.1 Background

The ISO updates the ETCC to reflect Outages that de-rate Interchange path ratings over the next 30 days. Hourly TTC path ratings and Responsible Participating Transmission Owners (RPTO) curtailment instructions are used to calculate ETC/TOR MW allocation values. The resultant ETC, TOR and ATC (Market transmission) values are used to run the Day-Ahead and HASP Markets. These ETC/TOR/ATC values are published to OASIS for Market Participant's use.

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## 2.2 Scope/ Applicability

This procedure applies to updates to ETCC for any time frame. They can be fully coordinated with other affected Transmission Operators and Balancing Authority Areas, and they are entered into all systems affected by the change.

**Note:** Path rating changes (due to an Outage on the ISO Controlled Grid) submitted after 09:00 will not be included in the Day-Ahead market.


## 3. Procedure Detail

### 3.1 ISO Day-Ahead Operations Engineer or ISO Operations Planning Engineer

Take the following actions to update the ETCC:

**Note:** The ISO Day-Ahead Operations Engineer (DAOE) prepares work one (1) day out from present day (updating all requests from Trade Date plus 1 day (Day 1) and the following two (2) days through Day 4 after 15:00, with their primary focus on Day 1. The default Total Transmission Capacity (TTC) MW values are determined by Regional Transmission and any required MW changes to the ETCC default settings are made by the Day-Ahead Operations Engineer.

**Note:** Operations Planning Engineers process all requests made prior to 1500 four (4) days out from present day (updating all values from Trade Date plus four (4) days (Day 4) and the following six (6) days through Day 7, with their primary focus on requests made prior to 1500 on Day 4. The default Total Transmission Capacity (TTC) MW values are determined by Regional Transmission and any required MW changes to the ETCC default settings are made by Operations Planning Engineers, as needed, based on the outage studies or any potential changes in the system.


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ISO Day-Ahead Operations Engineer
<ol style="list-style-type: none"> <li>1. <b>Associate</b> paths to the correct Outages, as necessary, and enter the Study Limit values in ETCC:</li> <li>2. <b>Review</b> Path 15 derate due to outages and make changes per ISO Operating Procedure <a href="#">6310 Path 15 (Midway – Los Banos)</a> and ISO Desktop Procedure OES-OERT-006.</li> <li>3. <b>Manually enter</b> VEA ITC limits into ETCC for Day 1 and Day 2, using the “Upload Forecast” button in the ATC/ETC Summary. <ul style="list-style-type: none"> <li>• Verify the same.</li> </ul> </li> <li>4. <b>“Update” and “Publish”</b> to <b>send</b> all ETCC MW changes for days 1-7 to the market systems before 1600 each day.</li> </ol> <p><i><b>Note:</b> This should be done whether or not ETCC changes were published earlier in the day. This must be completed each day for all days that are transferred to Real-Time operations. By “Publishing” the ETC data, the ETCC application will automatically copy the 30-day Branch Group Outage Information to OASIS.</i></p>

### 3.1.1 One Day Before the Operating Day

Take the following actions using the ETCC, one (1) day before the Operating Day:

ISO Day-Ahead Operations Engineer
<p><i><b>Note:</b> The ETCC automatically recalculates ETC and TOR rights allocations, by tie, based primarily upon TTC.</i></p> <ol style="list-style-type: none"> <li>1. <b>Review</b> ETCCs MW changes one (1) day before the Operating Day.</li> <li>2. <b>Adjust</b> associated ETCCs, as required, based upon RPTO and NPTO instructions for administration of their contracts on each specific tie.</li> <li>3. <b>Modify</b> WAPA and/or CDWR ETC MW “CRN” values, per their direction and notification as Responsible SC, <u>by 08:30 PPT.</u></li> <li>4. For Path 15 TTC changes, <ul style="list-style-type: none"> <li>• <b>Follow</b> ISO Operating Procedure <a href="#">6310 Path 15 (Midway – Los Banos)</a> and ISO Desktop Procedure OES-OERT-006.</li> </ul> </li> <li>5. If Path 15 changes are for the current day, <ul style="list-style-type: none"> <li>• <b>Inform</b> the ISO Real-Time Transmission Dispatcher to update the ETCC accordingly</li> </ul> </li> <li>6. Each day: <b>“Update” and “publish”</b> to <b>send</b> all ETCC MW changes for days 1-7 to the market systems.</li> </ol> <p><i><b>Note:</b> This should be done whether or not ETCC changes were published earlier in the day. This must be completed each day for all days that are transferred to Real-Time</i></p>

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<b>ISO Day-Ahead Operations Engineer</b>
<i>operations. By "Publishing" the ETC data, the ETCC application will automatically copy the 30-day Branch Group Outage Information to OASIS.</i>

<b>ISO Day-Ahead Market Desk</b>
1. <b>Verify</b> ETC data was pushed and published correctly.

### 3.1.2 Two Days Before the Operating Day

Take the following actions, after the 15:30 meeting to set up ETCs, 2 days out:

<b>ISO Day-Ahead Operations Engineer</b>
<ol style="list-style-type: none"> <li>1. <b>Complete</b> the ETC calculations for two (2) days out.</li> <li>2. <b>Run</b> Market Setup manually each day, for seven (7) days from <b>D+2</b> on a rolling basis <u>and</u></li> <li>3. <b>Publish</b> ETCC.</li> <li>4. <b>Run</b> Path 15 calculators for any TTC de-rates or re-rates on Path 15 or DCPP Production changes <u>and</u></li> <li>5. <b>Enter</b> the corresponding Path 15 ETC CRN values into the ETCC, per ISO Operating Procedure <a href="#">6310 Path 15 (Midway – Los Banos)</a> and ISO Desktop Procedure OES-OERT-006.</li> <li>6. <b>Check</b> the ETC calculations <u>and</u></li> <li>7. <b>Ensure</b> no negative ATCs are calculated for two (2) days out.</li> </ol>

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### 3.2 ISO Transmission Desk


#### 3.2.1 Real-Time Events

Take the following actions for all events that occur in the Real-Time:

ISO Transmission Desk
<ol style="list-style-type: none"> <li>1. If a de-rate occurs mid-hour, <ul style="list-style-type: none"> <li>• <b>Enter</b> the de-rate into the ETCC starting with <u>that</u> hour.</li> </ul> </li> <li>2. If a re-rate occurs mid-hour, <ul style="list-style-type: none"> <li>• <b>Enter</b> the re-rate into the ETCC starting with the <u>next hour</u>.</li> </ul> </li> <li>3. If a de-rate or a re-rate occurred in the past (i.e. no notification was made to the ISO in the same hour), <ul style="list-style-type: none"> <li>• <b>Enter</b> the de-rate or re-rate into the ETCC starting with the <u>next hour</u>.</li> </ul> </li> </ol> <p><b>Caution:</b> <i>Transmission Dispatchers must act when tags are accepted on a tie above the current ETC. There are settlements implications when a tag is accepted, but the ETC was not properly modified.</i></p>

#### 3.2.2 Resolving Negative ATC

ISO System Operator
<ol style="list-style-type: none"> <li>1. If an error message is received indicating Negative ATC for a trade date: <p><b>Note:</b> <i>For the TRACY230_BG line, refer to ISO Operating Procedure <a href="#">8530 New Melones Pseudo Tie</a>.</i></p> <ul style="list-style-type: none"> <li>• <b>Identify</b> the branch group with the negative values and <b>take</b> the following steps: <ul style="list-style-type: none"> <li>○ <b>Click</b> on ATC/ETC &amp; use the CRN Originals and Adjustments tab to identify the hourly ATC values associated with the error message.</li> </ul> </li> </ul> <p><b>Note:</b> <i>On the COI, BART is the last 80 MW of priority on the tie.</i></p> </li> <li>2. <b>Make</b> all other routine notifications unrelated to ETCC or market actions taken.</li> </ol>

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### 3.2.3 ETCC Changes and Updates

Take the following actions to enter new Outage information into the ETCC:

ISO Transmission Desk
<ol style="list-style-type: none"> <li>1. <b>Associate</b> path(s) to the appropriate outages using ETCC.</li> <li>2. <b>Verify</b> that changes reflect on OASIS.</li> <li>3. If the ETCC changes have a market impact, <ul style="list-style-type: none"> <li>• <b>Send</b> a market message.</li> </ul> </li> <li>4. <b>E-mail</b> Outage entry to “ETC Changes Notification” and “OEs-RT” distribution list (which notifies all necessary departments).</li> </ol>

## 4. Supporting Information

### Operationally Affected Parties

Shared with the RC and 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:

CAISO Tariff	
ISO Operating Procedure	<a href="#">6310 Path 15 (Midway – Los Banos)</a> <a href="#">8530 New Melones Pseudo Tie</a>
NERC Requirements	
WECC Criterion	
Other References	

### 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.


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

<b>ATC (Available Transfer Capability)</b>	A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses (ETC & TOR reservations). ATC is defined as the Total Transfer Capability (TTC), less the Transmission Reliability Margin (TRM), less the sum of preexisting transmission commitments (which includes ETC & TOR) and the Capacity Benefit Margin (CBM).
<b>CRN</b>	Contract Reference Number
<b>ETC</b>	Existing Transmission Contract
<b>NPTO</b>	Non-Participating Transmission Owner
<b>Publish</b>	Publishes the active entitlements/volumes associated with the selected Operating Date.  <i><b>Note:</b> There is a seven (7) day publish that publishes for the Operating Date + 6.</i>
<b>Publish 30-Day OASIS</b>	Publishes the Outage Equipment description, Outage text, Transmission Interface (limit), Direction, Start hour, End hour, and line ratings.  <i><b>Note:</b> This publish does not contain the entitlements or volumes.</i>
<b>RPTO</b>	Responsible Participating Transmission Owner
<b>TOR</b>	Transmission Ownership Right
<b>TTC (Total Transfer Capability)</b>	Total Transfer Capability defined as the amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission system by way of all transmission lines (or paths) between those areas under specified system conditions.
<b>Update</b>	This commits changes for Outage notes that have been entered and updates the Outage Sheet.  <i><b>Note:</b> Where multiple notes exist for a given Interchange Name (Path), the most restrictive will apply.</i>




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## Version History

Version	Change	Date
6.5	Page 1: Replaced "Pre-Scheduler" with "Day-Ahead Market Operator." Page 2: Replaced "Pre-Scheduling" with "Day Ahead Market Operator." Page 4: Replaced "in Pre-Scheduling" with "by the Day Ahead Market Operator." Page 5: Replaced "Pre-Scheduler" with "Day Ahead Market Operator." Page 5 & 6: Replaced "CAISO Pre-Scheduler Actions" with "CAISO Day Ahead Market Operator Actions." Page 8: Replaced "Contact Pre-Scheduler during Day shift or Senior Scheduler after hours" with "Contact Day Ahead Market Operator during Day shift or Lead Day Ahead Market Operator after hours." Page 9: Replaced "Pre-Schedulers are finished" with "the Day Ahead Market Operator is finished."	12/16/2013
6.6	Replace "Day Ahead Market Operator" with "Day ahead Operations Engineer" on page 1, 2, 5, 6, 8 and 9. Added OEs-RT distribution list to section 3.3.3, 3.3.4 and 3.3.5.	10/15/2014
6.7	Changed "SLIC entry" to "Outage entry" in Sections 3.3.3, 3.3.4 and 3.3.5. Changes throughout reflecting roles changed in Operations Planning. Updated calculator references.	2/27/2015
7.0	Periodic review: Section 3.1 & 3.2: Revised due to role/responsibility changes. Changed the role names used in this procedure to their new role names. Changed all references from CAISO to ISO. Updated formatting and grammar.	2/03/2017
7.1	Updated procedure to add language/steps from 3640A into this procedure, resulting in the retirement of 3640A (as it relates to Path 15).	6/22/2017
7.2	Updated procedure to remove all references of 3640A, as this procedure was retired on 6/22/2017. Updated formatting and grammatical improvements.	9/28/2017
7.3	Responsibilities Section & Sections 3.1 & 3.2: Various updates due to the implementation of the new ETCC tool. Replaced Peak RC with the RC. Minor format and grammar updates throughout. Removed version history prior to 5-years.	1/16/2019
7.4	Section 2.2: Added note regarding path rating changes after 9:00, for clarity.	1/25/2019

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Version	Change	Date
7.5	Section 3.2.1: Updated Caution note, removing reference to Interchange Scheduler. Minor format and grammar updates.	4/29/2019

## 5. Periodic Review Procedure

### Review Criteria & Incorporation of Changes

There are no specific criteria for reviewing or changing this document, follow instructions in Procedures 5510 and 5520.

### Frequency

Every 3 Years

## Appendix

3640B MEADELDORD\_BG, MEAD\_ITC and MEADVEA\_BG ETCC Administration