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Purpose

To provide guidelines for Scheduling the use of Existing Transmission Contract (ETC) rights and, where applicable, Transmission Ownership Rights (TOR) in the ISO Balancing Authority (BA). It also describes ISO’s Market and Interchange Scheduling system software functionality that supports these purposes.

1. Responsibilities

<table>
<thead>
<tr>
<th>CAISO (The ISO)</th>
<th>The ISO is the single OASIS site administrator for all transmission facilities under its operational control and is responsible for independently calculating OTC and ATC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO Day-Ahead Operations Engineer</td>
<td>On a daily basis, notifies PTOs via email of the PTO-specific ETC/TOR DAM entitlements and the OTCs used to determine each ETC allocation. ETC/TOR reservations are then used by the ISO to calculate ATC for each Rated Path (Intertie). ATCs for each Intertie are posted to OASIS.</td>
</tr>
</tbody>
</table>
2. Scope/Applicability

2.1. Background

Describes ETC and TOR.

2.2. Scope/ Applicability

This procedure applies to ETC and TOR.

3. Procedure Detail

3.1. Scheduling ETC and TOR Rights

The following provides a description of the Scheduling process for ETC and TOR rights:

The use of ETC or TOR transmission rights must be Scheduled in both ISO Market and Interchange Scheduling systems by a responsible SC. The responsible SC is determined by the PTO or Non-Participating TO, which notifies the ISO using TRTC instructions. The
Modeling - Scheduling ETC and TOR Rights

responsible SC Schedules ETC/TORs using market resources registered as source or sink for the ETC/TOR rights, in the ISO Master File following existing SIBR rules for these self-schedules.

Any transfer or sale of ETC rights must first be coordinated by the ETC rights holder through the PTO. The PTO modifies the TRTC instructions and submits them to the ISO.

PTOs and Non-Participating TOs may choose to sell all or a portion of their TORs hourly, on their own OASIS sites. An entity that purchases TOR rights must coordinate the use of this PTO or Non-Participating TOs transmission with the responsible SC for the TOR rights owner. The TOR rights owner’s SC then Schedules the use of the TOR rights, on behalf of the party that purchased this transmission from the PTO or Non-Participating TOs.

**Note:** If the PTO or Non-Participating TOs sell TORs to another party, on a long-term basis, the new PTO may reassign all/part of its rights to the purchaser’s SC to Schedule use directly with the ISO. The new PTO makes such assignment by revising its TRTC instructions and submitting them to the ISO, accordingly.

ETC/TORs need to be Scheduled in Day-Ahead Market (DAM) and Real-Time Market (RTM) for priority and settlements treatment. In many cases, ETC/TOR rights can be Scheduled after the close of the ISO’s RTM. To Schedule the use of these “Real-Time” rights (after the close of the HASP/RTM), the responsible SC must contact the Interchange Scheduler by telephone, or use a separately agreed upon process. The exact cutoff times for Scheduling ETC/TOR rights in Real-Time vary according to the individual ETC/TOR contract. MSS entities with load-following capabilities may also Schedule up until 20 minutes before the hour.

### 3.2. Treatment of ETC and TOR Transmission Market Schedules

The following provides a description of the treatment of ETC and TOR transmission Market Schedules:

Scheduled use of ETC/TOR rights within their effective MW allocations are not assessed ISO Congestion and/or access charges, as applicable. Scheduled use of ETC/TOR rights within their effective MW allocations have priority rights in the ISO transmission Markets and typically are not curtailed by the Market optimization software until all other Schedules using ISO Market transmission service have been curtailed.
3.3. Existing Transmission Contracts Calculator (ETCC)

The following provides a description of the Existing Transmission Contracts Calculator (ETCC):

In accordance with TRTC instructions and existing market rules, the ETCC calculates the amount of firm transmission Capacity in MW to be "reserved back" for each individual ETC/TOR right, for each hour, each trade Day and each market.

Contract Reference Numbers (CRNs) are used as flags in both the ISO Market and Interchange Scheduling systems to identify these ETC and TOR Schedules for special Scheduling priority and Settlements treatment.

The amount of Operational Transfer Capability (OTC) for each branch group and/or ITC, inclusive of the Interties, is determined by ISO Outage Coordination, based upon operating conditions. Outage Coordination loads the OTCs into the ETCC.

ISO Day-Ahead Operations Engineer uses the ETCC to calculate the amount of transmission Capacity entitlement (allocation) for each ETC/TOR CRN (right) in accordance with the curtailment calculations provided by the PTO or the Non-Participating TO.

The total ETC/TOR entitlements per branch group are published to the OASIS System by the ISO Day-Ahead Operations Engineer Individual ETC/TOR rights (MW) CRN allocations are published for each responsible SC, via SIBR.

3.4. ETC/TOR MW Rights Modifications

Based on CAISO Tariff section 16 and 17, TRTC modifications need to be submitted by the PTO and Non-Participating TO.

<table>
<thead>
<tr>
<th>Non-Participating Transmission Owner(s), Participating Transmission Owner (PTO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete the TRTC instructions Template.</td>
</tr>
<tr>
<td>2. Send the modified TRTC instructions to <a href="mailto:TRTC@caiso.com">TRTC@caiso.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISO Transmission Rights and Transmission Curtailment (TRTC) Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review the TRTC instruction and verify they are complete and accurate.</td>
</tr>
<tr>
<td>- Once changes have been reviewed and approved,</td>
</tr>
<tr>
<td>- Notify PTO or Non-Participating TO of the acceptance of the revised TRTC instructions.</td>
</tr>
<tr>
<td>- Initiate change management request for Master File if needed.</td>
</tr>
</tbody>
</table>
### ISO Transmission Rights and Transmission Curtailment (TRTC) Administrator

2. **Notify** the following ISO teams about the TRTC instruction updates and intended effective date:
   - Market Operators
   - Interchange Scheduling & Transmission Operators
   - Operations Planning Engineers
   - Congestion Revenue Rights (CRR).

3. **Update** Master File (MF) for requested TRTC changes, if needed; following regular MF update timeline and procedure.

4. **Notify** PTO/ Non-Participating TO that TRTC change process is complete per request.

### ISO Day-Ahead Operations Engineer

Update ETCC tool calculation:

1. **Request** ETCC admin to update ETC and/or TOR MW per PTO/ Non-Participating TO requested adjustments if a contract change that requires modification on calculation of the contract, request ETCC admin to update calculation of contract.

2. **Confirm** with PTO/Non Participating TO that the changes are reflected correctly in OASIS for ETCC limits and/or SIBR reports for CRN limits.

3. **Review and Make** requested changes in ETCC spreadsheet for Path 15 and VEA.

4. **Submit** E2T to update spreadsheets in PI process book.

Operations will update spreadsheet for ETCC on EOR and WOR.

**Note:** ETCC tool has most calculations included, only Path 15, Path 26, VEA and EOR/WOR require a separate spreadsheet to calculate share on contract during outages.

### ISO Day-Ahead Market Desk

1. **Run** process to post Hourly TR Capacity to the Transmission Interface Usage report in OASIS.

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### 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:

<table>
<thead>
<tr>
<th>CAISO Tariff</th>
<th>Sections 16 and 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO Operating Procedure</td>
<td></td>
</tr>
<tr>
<td>NERC Requirements</td>
<td></td>
</tr>
<tr>
<td>WECC Criterion</td>
<td></td>
</tr>
<tr>
<td>Other References</td>
<td></td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th>CRR Obligation</th>
<th>A financial instrument that entitles the holder to a CRR payment when Congestion is in the direction of the CRR Source to CRR Sink specification and imposes on its holder a CRR charge when Congestion is in the opposite direction of the CRR Source to CRR Sink specification.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETC</td>
<td>The contracts which grant transmission service rights in existence on the ISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time.</td>
</tr>
<tr>
<td>TOR</td>
<td>The ownership or joint ownership right to transmission facilities, within the ISO Balancing Authority Area of a Non-Participating TO that has not executed the Transmission Control Agreement, which transmission facilities are not incorporated into the ISO Controlled Grid.</td>
</tr>
<tr>
<td>TRTC</td>
<td>Transmission Rights and Transmission Curtailment - Operational directives developed between Existing Rights Holders and the Participating TO, submitted to the ISO by the Participating TO, unless otherwise agreed to by the Participating TO and the Existing Rights Holder to facilitate the accommodation of Existing Rights in the ISO Markets.</td>
</tr>
</tbody>
</table>
Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Change</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3</td>
<td>Section 3.3: Replaced “MSL&quot; with “ITC&quot;.</td>
<td>11/4/2015</td>
</tr>
<tr>
<td>6.4</td>
<td>Changed the role names used in this procedure to their new role names. Changed all references from CAISO to ISO. Updated formatting and grammar.</td>
<td>12/8/2016</td>
</tr>
<tr>
<td>6.5</td>
<td>Updated section 3.4 for ISO Day-Ahead Operations Engineer actions. Updated each step to reflect that ETC reservation table to calculate CRN and ETC is no longer needed. ETCC tool has most calculations included, only Path 15, Path 26, VEA and EOR/WOR require a separate spreadsheet to calculate share on contract during outages. Formatting and grammar corrections.</td>
<td>2/06/2018</td>
</tr>
<tr>
<td>7.0</td>
<td>Periodic Review: Minor format and grammar updates. Removed version history prior to 5-years. Updated review criteria for procedure reference and updated frequency. Added document controlled footer.</td>
<td>10/08/2020</td>
</tr>
</tbody>
</table>

5. Periodic Review Procedure

Review Criteria & Incorporation of Changes

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

Frequency

Every three (3) years.

Appendix

3630A ETC/TOR Instructions