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Purpose

Provides guidance for reviewing, correcting and confirming hourly, daily and monthly, Net Scheduled Interchange (NSI) and Net Actual Interchange (NAI) data with adjacent Balancing Authorities (BAs). Ensures compliance with NERC Reliability Standards and WECC Criteria regarding Arranged Interchange.
# 1. Responsibilities

| ISO Transmission Desk | • Performs hourly and daily checkout with all adjacent Balancing Authorities.  
|                       | • Validates Arranged Interchange against the WIT.  
|                       | • Uses the electronic confirmation process provided by the Reliability Assurer WIT as the primary means to confirm NSI for next hour checkout (from current operating hour), current operating hour checkout upon change, and to acknowledge agreement of NAI for past hour checkout in the current day.  
|                       | • Assures that Net Scheduled Interchange (NSI) does not exceed the Total Transfer Capability of the path prior to implementation of Arranged Interchange for the next hour.  
|                       | • Performs a comparative check of daily totals of Scheduled Interchange and daily totals of Actual Telemetered Interchange.  
|                       | • Reviews Accumulated Inadvertent Interchange (AII) totals from hourly checks, using the Interchange transaction scheduler (ITS).  
|                       | • Ensures all E-Tags are within their market awards.  
|                       | • Provides an audit trail of electronic confirmation through the use of the WIT hourly and daily check out boxes.  
|                       | • Logs any disagreements with and any discrepancies to the electronic confirmation process in SLIC (Scheduling Logging in California).  
|                       | • Maintains/Reports AII totals to WECC, directly and via WIT.  
|                       | • Performs next day checkout process.  
|                       | • Uses the electronic confirmation procedure provided by the Reliability Assurer WIT as the primary means to confirm NSI and NAI for past day checkout. |
### 2. Scope/Applicability

#### 2.1. Background

The ISO checks the NSI and telemetered NAI for each Intertie point, each hour, with the respective adjacent BAs, such that NSI does not exceed the Total Transfer Capability of the path prior to implementation of Arranged Interchange for the next hour. The ISO validates Arranged Interchange against the WIT Checkouts with WIT and each adjacent BA are conducted in the Real-Time (RT) and ATF timeframes per NERC Interchange Standards and WECC Criteria. Any Scheduled or actual Interchange related discrepancies are resolved with the respective BAs prior to the Operating Hour. If significant deviations in NAI are detected during RT, the ISO EMS group will be advised to investigate and take corrective actions.

#### 2.2. Scope/Applicability

This procedure applies to the Transmission Dispatcher and System Operations Specialist.
3. Procedure Detail

3.1. RT Schedule Validation and Implementation

The following describes the RT Schedule validation and implementation:

1. The WECC uses WIT as the single E-Tag authority for WECC. Accordingly, all RFI and, subsequently, Arranged Interchange are validated via WIT. BAs confirm Arranged Interchange with each other, and with WIT, during the pre-scheduling check-out process and again just prior to RT.
2. WIT is used to validate all Arranged Interchange prior to implementation as NSI is reflected in the ISO EMS/AGC system for each Operating Hour. WIT serves as the definitive Arranged Interchange validation tool for both (NSI) and (NAI) between BAs and inadvertent for the WECC.
3. The ISO Interchange transaction scheduler is used to approve and manage Interchange Scheduling between adjacent BAs and WIT for grid reliability purposes. NERC E-Tag Interchange Schedules are received from the E-Tag authority into the ISO operating systems, via ITS.
4. The ITS application compares ISO market awards which result from ISO Market Participants submitted bids and Self-Schedules into the ISO’s market system (SIBR), with Interchange Schedules (E-Tags) submitted by the Market Participants and Purchasing Selling Entity (PSE), to assure that each Interchange Schedule has a valid corresponding ISO transmission market reservation.
5. The ITS functionality is used to assure implementation of accurate NSI via EMS/AGC, predicated upon this Arranged Interchange, such that the NSI for each tie point does not exceed the Total Transfer Capability of the path. The ITS functionality is used to assure that accurate NAI is checked out with adjacent BAs and published to WIT and to ISO Settlements.

3.2. RT Hourly Check-out

3.2.1. Before Each Hourly Ramp

Take the following actions before the hourly ramp:

<table>
<thead>
<tr>
<th>ISO Transmission Desk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Verify</strong> Schedules with adjacent BAs and WIT prior to the start of the hourly ramp.</td>
</tr>
<tr>
<td>2. <strong>Prior to</strong> implementing Interchange Schedules into the ACE equation, using ITS, <strong>use</strong> ITS to:</td>
</tr>
<tr>
<td>• <strong>Confirm</strong> that Arranged Interchange Schedules do not exceed market awards.</td>
</tr>
</tbody>
</table>
3.2.2. After the Close of Each Hour

Take the following actions after the close of each hour:

**ISO Transmission Desk**

1. If the disagreement cannot be resolved:
   - **Contact** the involved Scheduling Coordinator (SC/PSE) responsible for the Interchange transaction.
   - **Verify** the Schedule, and
   - **Implement** any necessary ATF E-Tag or ITS changes.

3.3. Final Daily Schedules and NAI Totals Comparison

Take the following actions daily, after midnight, for prior Operating Day:

**ISO Transmission Desk**

1. **Perform** a comparative check of daily totals of Net Scheduled Interchange and daily totals of telemetered Net Actual Interchange.
2. **Check-out** with each of the 11 adjacent BAs using the electronic confirmation process provided by the Reliability Assurer WIT as the primary means to confirm NSI and NAI.
ISO Transmission Desk

3. **Confirm** actual daily Arranged Interchange with adjacent BAs using WIT to verify final daily NSI and NAI using the electronic confirmation process provided by the Reliability Assurer WIT as the primary means to confirm NSI and NAI.

4. **Provide** an audit trail of electronic confirmation using WIT hourly and daily check-out boxes.

5. **Log** any unresolved NSI and NAI disagreements in SLIC, including Dynamic Schedules.

### 3.4. RT Scheduling or System Tagging Failure

Take the following actions if ITS or WIT are unavailable:

ISO Transmission Desk

1. If the ISO Interchange transaction scheduler system is not able to produce net Scheduled Interchange Schedule data for use in EMS AGC control,
   - **Use** WIT and **agree** with adjacent BAs on the total amount of implemented E-Tags in WIT.
   - If both ITS and WIT are unavailable to communicate NSI with BAs:
     - **Use** an NSI value, as agreed upon between the ISO and each adjacent BA Area.
     - **Hold** to the last NSI, unless changed by mutual agreement.

### 3.5. Monthly Checks

Take the following actions monthly:

ISO System Operations Specialist

1. **Perform** final monthly Schedules NSI and NAI checks.
3.6. Discrepancies and Final Resolution

Take the following actions in the event of any unresolved NSI or NAI issues:

<table>
<thead>
<tr>
<th>ISO System Operations Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Coordinate</strong> final resolution, as appropriate, with Settlements and the adjacent Balancing Authorities:</td>
</tr>
<tr>
<td>• If by the 15th calendar day of the following month NAI or NSI quantities have not been resolved,</td>
</tr>
<tr>
<td>o Submit a report to the WIT Survey Contact.</td>
</tr>
<tr>
<td>2. <strong>Log</strong> any disagreements with any discrepancies to the electronic confirmation process, any abnormal after-the-fact changes made, and the monthly End of the Month checkout in SLIC.</td>
</tr>
</tbody>
</table>

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>ISO Operating Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>NERC Requirements</td>
<td>BAL-004-WECC-01 R4.2</td>
</tr>
<tr>
<td>WECC Criterion</td>
<td>INT-021-WECC-CRT-1</td>
</tr>
<tr>
<td></td>
<td>BAL-005-0.2b R11</td>
</tr>
<tr>
<td></td>
<td>INT-001-3 R2</td>
</tr>
<tr>
<td></td>
<td>INT-003-3 R1</td>
</tr>
<tr>
<td></td>
<td>INT-003-3 R1.1.2</td>
</tr>
<tr>
<td>Other References</td>
<td>WECC Interchange Tool (WIT)</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:

None

Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Change</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0</td>
<td>Annual Review: Section 1: Updated the responsibility of the Interchange scheduler and removed the ATF Scheduler. Section 3.1: Added the acronym for Interchange transaction scheduler (ITS). Section 3.2.2: Step 1 - Removed EMA and Pi, added via ITS, PI, and/or EMS. In the note - removed ATF and added An Interchange. Step 2 - Removed ATF Scheduler from the actions bar. Section 3.5.1: Removed ATF and Added Interchange to the actions bar. Revised Step 3. Deleted Step 4. Section 3.5.2: Removed ATF and Added Interchange to the actions bar. Section 3.6: Removed ATF Scheduler from the action bar and added Interchange Scheduler.</td>
<td>7/30/2015</td>
</tr>
<tr>
<td>8.1</td>
<td>Updated to version 8.1 and converted to Centric</td>
<td>1/05/2016</td>
</tr>
<tr>
<td>8.2</td>
<td>Removed “WECC” from “WECC WIT” Defined roles between ISO Interchange Scheduler and ISO System Operations Specialist Section 3.3: Since two BAs merged, checkouts occur with 11 adjacent BAs rather than 12. Section 3.2.1: Changed Section title from “Before Each Ramp” to “Before Each Hourly Ramp” to clarify that the steps in the section are outlining the hourly ramp process.</td>
<td>6/20/2016</td>
</tr>
<tr>
<td>8.3</td>
<td>• Replaced references of SOL with highest emergency rating due to retirement of WECC TOP-007. • Removed WECC TOP-007 from References.</td>
<td>6/15/2017</td>
</tr>
<tr>
<td>8.4</td>
<td>Minor corrections (highlighted).</td>
<td>6/22/2017</td>
</tr>
<tr>
<td>8.5</td>
<td>Eliminated Section 3.5.1 on “ATF Recheck of Prior Operating Day’s Totals,” as it was already performed in Section 3.3 Final Daily Schedules and NAI Totals Comparison. Minor format and grammar updates.</td>
<td>11/21/2017</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 Procedure 5510.

Frequency

Every three (3) Years.

Appendix

No references at this time.