Sunday, November 1, 2020 02:00 AM is the Daylight Saving Time (DST) transition from DT (Daylight Time) to ST (Standard Time). The ISO is ready to monitor this event and ensure users experience a smooth transition. The information below describes how the transition will occur in the ISO systems. For more information, please contact the ISO Service Desk at (916) 351-2309 or (888) 889-0450, or the RC West Service Desk (for RC West participants only) at (916) 538-5722 or (833) 888-9378.

<table>
<thead>
<tr>
<th>System</th>
<th>Interface</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS (Automated Dispatch System)</td>
<td>Client (Delphi Thick Client)</td>
<td>The ADS UI will display the second HE02 immediately after the first HE02. There are impacts to the interval and trajectory display just prior to and after the transition. Prior to the transition during the first HE02, ADS will display the second upcoming HE02 as HE03. After the transition, the ADS trajectory plot will display the first HE02 as HE01, rather than displaying both hours as HE02. *See Appendix A for examples</td>
</tr>
<tr>
<td>Web UI</td>
<td>Houroly DOT and RT DOT data sets: Any time component that falls between 12:59 AM PDT and 2 AM PST would be prefixed by '*' on the day of transition. The system would not differentiate between the two HE2 intervals. For Example the Hourly dispatch instructions received for the time interval 1 AM PDT &amp; 1 AM PST would both be represented as ‘*1:00’.</td>
<td></td>
</tr>
<tr>
<td>API</td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
<td></td>
</tr>
<tr>
<td>Query Tool</td>
<td><strong>Display</strong> After the transition, days prior to November 1 will be displayed in the DST time convention. The Query Tool will not display different time offsets based on the date queried. This only impacts the times that are displayed on the Query Tool. The ADS Query Tool will output historical data in the prevailing time. For example, after the DST transition, ADS does not have the ability to output data prior to November 1 in PDT. All data ranges will be outputted in PST after the transition. Once the time is transitioned back to PDT, all date ranges will then be outputted in PDT. <strong>Files</strong> Files that are saved from the Query Tool are in GMT format, which will not be impacted by the transition.</td>
<td></td>
</tr>
<tr>
<td>System Name</td>
<td>Interface Type</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>AIM (Access &amp; Identity Management)</td>
<td>UI</td>
<td>Uses GMT and displays in user’s local time. DST is adjusted as expected.</td>
</tr>
<tr>
<td>ALFS (Automated Load Forecast System)</td>
<td>API</td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
</tr>
<tr>
<td>BAAOP (Balancing Authority Area Operations Portal)</td>
<td>UI</td>
<td>System uses GMT and displays in Pacific Prevailing Time (PPT). DST is adjusted as expected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HE02 will be as is. There will be a second HE01, displayed as HE01*:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- HE01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- HE01*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- HE02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- HE03</td>
</tr>
<tr>
<td></td>
<td>API</td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
</tr>
<tr>
<td>CIDI (Customer Inquiry, Dispute, &amp; Information)</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td>CIRA (Customer Interface for Resource Adequacy)</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>API</td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
</tr>
<tr>
<td>CMRI (Customer Market Results Interface)</td>
<td>UI</td>
<td>Uses GMT and displays in user’s local time. DST is adjusted as expected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For all CMRI reports, the second instance of HE02 is displayed as HE25.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For the Day-Ahead Unit Commitment report, if the Start Time or End Time of the record falls on 1:00 AM PDT (or 8:00 AM GMT), its value is incorrectly displayed as the repeating hour/time “1*:00” which usually identifies 1:00 AM PST (or 9:00 AM GMT) under the Start Time or End Time column of the report. User workarounds available. First, for IFM commitments SC’s can check the Day-Ahead Generation Market Results report which contains MW awards in HE format. In the unlikely event of a RUC commitment in the early morning hours SC’s could call the DA desk to verify the commitment start time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For the Day-Ahead Instructions report, if the Start Time of End Time of the record falls on 1:00 AM</td>
</tr>
</tbody>
</table>
PDT (or 8:00 AM GMT), its value is incorrectly displayed as the repeating hour/time "1*:00" which usually identifies 1:00 AM PST (or 9:00 AM GMT) under the Start Time or End Time column of the report. User workarounds available. In the unlikely event of a RUC commitment in the early morning hours SC’s could call the DA desk to verify the commitment start time.

<table>
<thead>
<tr>
<th>API</th>
<th>The API uses GMT format, which will not be impacted by the transition.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• For DAM reports, requests are submitted by tradeDateStart and tradeDateEnd, so no special treatment for DST is required.</td>
</tr>
<tr>
<td></td>
<td>• For hourly requests for the second instance of HE02, submit requests as indicated:</td>
</tr>
<tr>
<td></td>
<td>&lt;HRList&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;HR&gt;25&lt;/hr&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/HRList&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRR (Congestion Revenue Rights)</th>
<th>UI</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRRS (Demand Response Registration System)</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td>ECC (Enhanced Curtailment Calculator)</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td>GMS (Grid Messaging System)</td>
<td>UI</td>
<td>Messages are stored in GMT and displayed in user’s local time. DST is adjusted as expected.</td>
</tr>
<tr>
<td>HANA (Hosted Advanced Network Applications)</td>
<td>UI</td>
<td>Uses GMT and displays in user’s local time. DST is adjusted as expected.</td>
</tr>
<tr>
<td>Master File</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td>MNS (Market Notification Service)</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>MRI-S (Market Results Interface – Settlements)</td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td>OASIS (Open Access Same-Time)</td>
<td>UI</td>
<td>For all OASIS reports, the second instance of HE02 is displayed as HE25.</td>
</tr>
<tr>
<td><strong>Information System</strong></td>
<td><strong>API</strong></td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>For all OASIS API query requests for the second instance of HE02, submit as indicated:</strong> opr_hr=25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OMS (Outage Management System)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>API</strong></td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
<td></td>
</tr>
<tr>
<td><strong>PI Vision (Plant Information Vision)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>API</strong></td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
<td></td>
</tr>
<tr>
<td><strong>PIOSOA (Plant Information Service Oriented Architecture)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>PLC (Path Limit Calculator)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>RC EIDE (Reliability Coordination Electric Industry Data Exchange)</strong></td>
<td>API</td>
<td>The API uses GMT format, which will not be impacted by the transition.</td>
</tr>
<tr>
<td><strong>RC Portal (Reliability Coordination Portal)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>RIMS (Resource Interconnection Management System)</strong></td>
<td>UI</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>SIBR (Scheduling Infrastructure Business Rules)</strong></td>
<td>UI</td>
<td>System uses GMT and displays in Pacific Prevailing Time (PPT). DST is adjusted as expected. The second HE2 will be displayed as a 2* for all displays.</td>
</tr>
</tbody>
</table>
| **BSAP (Base Schedule Aggregation Portal)** | UI Copy Function | Bids/Schedules/Base Schedules/RC Base Schedules and Trades Copy Forward or Copy From do not function similarly to each other on the UI. **Bids/Schedules/Base Schedules/RC Base Schedules**  
* Do NOT use the copy function for moving Bids/Schedules/Base Schedules/RC Base Schedules into the Long Day (November 1, 2020) or from the Long Day.  
* For Bids/Schedules/Base Schedules/RC Base Schedules the Copy To and Copy From the Long Day...
functionality is disabled on the UI because the time interval for a regular day has 24 hour; this cannot be carried into the long day because the period for the day is not complete in either case. (Portfolios may be saved for Long Day or Short Day use once bids have been submitted.) Do NOT use the copy function for moving bids into the Long Day or from the Long Day.

**Trades**
- Although there is a Day-Ahead Trade it is unique to each hour of the day just like a Real Time Trade or Bid. This allows a copy into the Long Day as well as a copy from the Long Day.
- NOTE on Copy to Long Day: A Trade from a regular day copied into the Long Day will not have HE24; it will contain 24 hours of Trade information but the second HE2 (2*) will show the HE3 data and carry forward until HE23, which would show the HE24 data from the copied Trade.
- NOTE on Copy from Long Day: A Trade from the Long Day copied into a regular day will not have HE24 of the Long Day; it will contain 24 hours of Trade information but the second HE2 (2*) will show the HE3 data and carry forward until HE24, which would show the HE23 data from the copied Trade.

<table>
<thead>
<tr>
<th>API</th>
<th>Uses Coordinated Universal Time (UTC) so can use just the UTC or identify the offset.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td>Bid <strong>Start</strong> time</td>
</tr>
<tr>
<td></td>
<td><code>&lt;startTime&gt;2020-11-01T00:00:00.0-07:00&lt;/startTime&gt;</code>  -- with an offset</td>
</tr>
<tr>
<td></td>
<td><code>&lt;stopTime&gt;2020-11-02T00:00:00.0-08:00&lt;/stopTime&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;marketType&gt;DAM&lt;/marketType&gt;</code></td>
</tr>
<tr>
<td></td>
<td>Bid <strong>Start</strong> time</td>
</tr>
<tr>
<td></td>
<td><code>&lt;startTime&gt;2020-11-01T07:00:00.000-00:00&lt;/startTime&gt;</code>  -- <strong>UTC</strong></td>
</tr>
<tr>
<td></td>
<td><code>&lt;stopTime&gt;2020-11-02T08:00:00.000-00:00&lt;/stopTime&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;marketType&gt;DAM&lt;/marketType&gt;</code></td>
</tr>
<tr>
<td></td>
<td>Bid <strong>IntervalStart/Stop</strong>  -- <strong>with the offset</strong></td>
</tr>
</tbody>
</table>
If the report is run for all 24 hours, the report will time out and not return results. The same results are true if the second HE2 (2*) is selected.

The work-around for this is to select just HE2 to get the results for HE2; these are the same results for the second HE2 (2*).

Please check the Ind Viewer tab on the SIBR display for contracts that do not have priority and run the report for that hour to see the Entitlement value.
<table>
<thead>
<tr>
<th>TR (Transmission Registry)</th>
<th>UI</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIT (WECC (Western Electricity Coordinating Council) Interchange Tool)</td>
<td>UI</td>
<td>Switch time zones for the WIT during that timeframe. <strong>WIT</strong>: Homepage → Misc → Change Time zone → PD</td>
</tr>
<tr>
<td>Settlements</td>
<td>Statements</td>
<td>N/A</td>
</tr>
<tr>
<td>Metering</td>
<td>Submissions</td>
<td>The ISO receives Settlement Quality Meter Data (SQMD) in Standard Time year round, so there is no transition back to Standard Time. All SQMD meter data should continue to be submitted to the ISO in Standard Time.</td>
</tr>
</tbody>
</table>
Appendix A for ADS Client (Delphi Thick Client)

When current time is at-
(screenshot taken at this time)

<table>
<thead>
<tr>
<th>The -</th>
<th>Displays as-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch Interval:</td>
<td>Note the Dispatch Intervals are displaying start times of 02:00 (HE03). This is not correct since the transition will repeat start time 01:00 (HE02).</td>
</tr>
<tr>
<td>DOT Start Times in the Resource panel</td>
<td>The 5 minute and Hourly DOT Start Times are showing HE03 times prior to the transition. They should repeat HE02 (01:02, 01:00).</td>
</tr>
<tr>
<td>Trajectory Plot</td>
<td>The trajectory plot also shows HE03 times rather than repeating HE02.</td>
</tr>
</tbody>
</table>

First HE2 @ 1:56:00 AM prior to the transition

When current time is at-
(screenshot taken at this time)

<table>
<thead>
<tr>
<th>The -</th>
<th>Displays as-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch Interval:</td>
<td>Dispatch Intervals are now correctly displaying start times of 01:XX (HE02).</td>
</tr>
</tbody>
</table>
received after the time transition.

### DOT Start Times in the Resource panel

<table>
<thead>
<tr>
<th>Time</th>
<th>DOT Start Time</th>
<th>Hourly DOT Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>06:07</td>
<td>06:07</td>
<td>06:00</td>
</tr>
<tr>
<td>07:07</td>
<td>07:07</td>
<td>07:00</td>
</tr>
<tr>
<td>08:07</td>
<td>08:07</td>
<td>08:00</td>
</tr>
<tr>
<td>09:07</td>
<td>09:07</td>
<td>09:00</td>
</tr>
<tr>
<td>10:07</td>
<td>10:07</td>
<td>10:00</td>
</tr>
</tbody>
</table>

The 5 minute and Hourly DOT Start Times are still showing HE03 times, which is incorrect.

### Trajectory Plot

The trajectory plot also shows HE03 times.

---

**When current time is at- (screenshot taken at this time)**

<table>
<thead>
<tr>
<th>The -</th>
<th>Displays as-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch Interval: Hourly DOT</td>
<td>Dispatch Intervals are still correct</td>
</tr>
<tr>
<td>Hourly DOT Start Times</td>
<td>The DOT start times are now correct. Note that the Hourly DOT Start Time is showing 01:00 because a new set of Hourly Instructions have not been received yet. Once the new Hourly Instructions are received, the Hourly DOT Start Time and Hourly Dispatch Interval will be 02:00.</td>
</tr>
<tr>
<td>Trajectory Plot</td>
<td>After the transition, ADS is displaying the first HE02 as HE01, rather than displaying HE02 times twice.</td>
</tr>
</tbody>
</table>

---

**Second HE2 @ 1:03:00 AM**

New instructions were received after the transition.