California ISO

SIBR - Wheeling Transaction Changes for Fall 2014 Release

Sep 29, 2014

Revision History

Version: 1.0
Release Date: 9/29/2014
<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>By</th>
<th>Description</th>
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</thead>
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<tr>
<td>9/29/2014</td>
<td>1.0</td>
<td>WT</td>
<td>Functionality documentation for Wheeling Transactions.</td>
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1 Introduction

Purpose
This documentation will instruct a Scheduling Coordinator (SC) in the usage of the California ISO Software Infrastructure (SIBR) web services used for Inter-Tie submissions for Wheeling Transactions.

Audience & Prerequisites
This documentation is intended to be used by persons who wish to use the web services for SubmitRawBid to submit bids Wheeling Transactions or those that will generate an xml to be used with the SIBR UI for Advanced Submit.

1.1 References
There are 2 supported versions of the SubmitRawBid that can be used for submission of bids into SIBR for the Fall 2014 Release.

SubmitRawBidSet
https://ws.ecn.wepex.net/sst/sibr/SubmitRawBidSet_SIBRv2_AP  Spring 2014
https://ws.ecn.wepex.net/sst/sibr/SubmitRawBidSet_SIBRv2_DocAttach_AP
https://ws.ecn.wepex.net/sst/sibr/SubmitRawBidSet_SIBRv3_AP  Fall 2014
https://ws.ecn.wepex.net/sst/sibr/SubmitRawBidSet_SIBRv3_DocAttach_AP

1.2 Overview
The following chapter will discuss how the two different services will handle Wheeling Transactions and using the xml for bidding a Wheeling Transaction.

- Wheeling Transaction: Change in terminology and use of a Counter Resource vs. Wheeling Reference.
- Web service for current v2 vs. v3 web service usage: What are the changes.
1.2.1 Wheeling Transaction

With the Fall Release there were terminology changes and functional changes made to SIBR with regard to Wheeling Transactions:

- Wheeling Transactions no longer have a registered Wheeling Reference to use with an Import and Export.
- Wheeling Transactions now use the Counter Resource to indicate the Wheel Transaction.
- There are two types of Inter-Tie Resources

<table>
<thead>
<tr>
<th>Inter-Tie Resource</th>
<th>An Import Resource or an Export Resource at an Inter-Tie Scheduling Point; it is either a Registered Inter-Tie Resource or an Inter-Tie Transaction.</th>
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<tr>
<td>Wheeling Bid Component</td>
<td>A Bid Component used for a Wheeling Transaction.</td>
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<tr>
<td>Wheeling Export Resource</td>
<td>An Export Resource used for Wheeling Transactions.</td>
</tr>
<tr>
<td>Wheeling Import Resource</td>
<td>An Import Resource used for Wheeling Transactions.</td>
</tr>
<tr>
<td>Wheeling Resource</td>
<td>A Wheeling Import Resource or a Wheeling Export Resource; Registered Inter-Tie Resources that are Wheeling Resources are registered with Energy Type of WHL. Inter-Tie Transactions that are Wheeling Resources are specified with Energy Type of WHL.</td>
</tr>
</tbody>
</table>

Rule 23604

An Inter-Tie Resource Wheeling Bid Component must specify the counter Wheeling Resource, if it is a Registered Inter-Tie Resource, or if the counter Wheeling Resource is an Inter-Tie Transaction, all of its following attributes: 1) the Scheduling Coordinator; 2) the Inter-Tie Scheduling Point; 3) the Primary Inter-Tie; and 4) the PSE.

Rule 33619

If there is a Wheeling Bid Component for a Trading Hour in an Inter-Tie Resource Bid, there must be an Energy or Self-Schedule Bid Component for that Trading Hour in that Bid. (for v3 service using the WheelingResource, the WheelingResource specified is written for all 24 hours in DAM bids)

If using the v3 service, a 0 self – schedule would be needed on hours that wheeling would not be intended for to prevent this rule from firing. This is temporary until we fix the xsd to move the WheelingResource into an hourly supported element.
### 1.2.2 Difference between web service versions for API

Wheeling Transaction Elements are different between the 2 services due to the introduction of the Transaction concept for bidding at Inter-Tie Scheduling Points on Inter-Tie Locations (Tie Points).

The difference identified in the xsd for both services is related to the elements of:

V2 -- `<wheelingTransactionReference>`
V3 -- `<WheelingResource>`

The V3 service design was intended to accommodate the Transaction based bids on Inter-ties. When this was initially drafted the `<WheelingResource>` was placed at the Resource level and is not at the hourly level that the `<wheelingTransactionReference>` supports. There will be a change for this service with the next web service upgrade to move the `<WheelingResource>` to be supported hourly.

This v3 service currently impacts Day-Ahead Market Wheel Transactions if using the v3 service. Since it is at the resource level, the Wheel Resource is written for all 24 hours.

Samples for Wheeling using web services (xml).
Below are samples for Wheeling Transaction bids in Day-Ahead Market.

### 1.2.3 V2

There is no change for the v2 except when specifying the `<wheelingTransactionReference>` this is now the counter resource and not the previous wheeling reference.

```xml
<RawBidSet xmlns="http://www.caiso.com/soa/RawBidSet_v2.xsd#">
  <MessageHeader>
    <TimeDate>2014-02-01T10:00:00-08:00</TimeDate>
    <Source>ME</Source>
    <Version>v20140401</Version>
  </MessageHeader>
  <MessagePayload>
    <InterTieBid>
      <name>EXPORT</name>
    </InterTieBid>
  </MessagePayload>
</RawBidSet>
```
<marketType>DAM</marketType>
<startTime>2014-09-27T07:00:00.000-00:00</startTime>
<stopTime>2014-09-28T07:00:00.000-00:00</stopTime>
<ProductBid>
<BidSelfSched>
<timeIntervalEnd>2014-09-28T07:00:00.000-00:00</timeIntervalEnd>
<timeIntervalStart>2014-09-27T07:00:00.000-00:00</timeIntervalStart>
<wheelingTransactionReference>SCID_MALIN500_I_WHL_ABC123</wheelingTransactionReference>
</BidSelfSched>
</ProductBid>
</BidSchedule>
<ProductBid>
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</ProductBid>
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</ProductBid>
</MarketProduct>
</ProductBid>
</SchedulingCoordinator>
<mrid>SCID</mrid>
<RegisteredInterTie>
  <mrid>SCID_MALIN500_I_WHL_ABC123</mrid>
</RegisteredInterTie>
</InterTieBid>
</MessagePayload>
</RawBidSet>

1.2.4 V3

There

<RawBidSet xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
           xmlns:xsd="http://www.w3.org/2001/XMLSchema"
           xmlns="http://www.caiso.com/soa/RawBidSet_v3.xsd#">
  <MessageHeader>
    <TimeDate>2014-09-26T10:34:09.800Z</TimeDate>
    <Source>ME</Source>
    <Version>v20141001</Version>
  </MessageHeader>
  <MessagePayload>
    <InterTieBid>
      <marktType>DAM</marktType>
      <startTrime>2014-10-03T07:00:00.000Z</startTrime>
      <stopTime>2014-10-04T07:00:00.000Z</stopTime>
      <ProductBid>
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          <timeIntervalStart>2014-10-03T07:00:00.000Z</timeIntervalStart>
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        <BidSelfSched>
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          <timeIntervalEnd>2014-10-03T18:00:00.000Z</timeIntervalEnd>
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        <BidSelfSched>
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