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Interface Specification for OASIS

Version: 3.10

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Revision History

Date	Version	Description	Author
May 30, 2006	1.0	Initial release to Market Participants	Venkata Bommaraju, Michael Leppitsch
July 14, 2006	1.1	Major update to Schemas, data description tables and report description tables, listing the first iteration of all the XML tags/enumerations and their descriptions.	Venkata Bommaraju, Michael Leppitsch
July 14, 2006	1.2	Updated title to match New ISO Market standard.	Vidya Mandapudy
Sept 5, 2006	1.3	Updates to the XML schemas to validate date items and update on technical description to the URL request	Venkata Bommaraju
Feb 13, 2007	1.4	Major update to data items and providing way to access the group downloads and adding example URLs. Added query to return the most recent 5-Minute LMP price.	Venkata Bommaraju
April 05, 2007	1.5	Reviewed content for consistency with Market Instruments BPM. Reformatted tables in the document to correct viewing issues.	Darren Lamb
April 12, 2007	1.6	Removed references to TAC area postings on the Forecasted System Demand reports. Modified LMP reports.	Darren Lamb
April 12, 2007	1.7	Updated the following: - URL Examples - OasisReport XSD - Data items for 2 DA AS Requirements - CRR reports. Separated LMP and Interval LMP reports.	Venkata Bommaraju
June 26, 2007	1.8	Updated the following: - Added filets to the URL Examples for ATLAS reports. - OasisReport XSD Updated - Data items and description for Resource Adequacy and AS Results & CRR Reports	Venkata Bommaraju
August 20, 2007	1.9	Updated the following: - Added filets to the URL Examples for LMP reports. - OasisReport XSD,OasisMaster XSD Updated - Data items for Atlas reports	Venkata Bommaraju
November 05, 2007	2.0	Updated the following: - Added the group downloads as per new spec and provided cache feature. All Price reports can be downloaded daily (DAM) and hourly for (HASP, RTM). These cached files will be available for one week back from sysdate.	Venkata Bommaraju

		- Updated HASP LMP report - OasisReport XSD, OasisMaster XSD Updated on the enumerations.	
December 27, 2007	2.1	Updated the following: - Updated sections 7 & 8 with valid information	Venkata Bommaraju
May 21, 2008	2.2	Updated the following: - AS_RESULTS – Added ISO total Cost and removed the AS types. - ENE_SLRS - Added the ISO total cost data items. - PUB_BID – Updated the XSD - In section 2.1: Updated the URL query specifications to distinguish between the New ISO Market Production Environment and the New ISO Market Simulation environment.	Venkata Bommaraju
July 21, 2008	2.3	Updated the following: ➢ AS Clearing Prices Report o Modified to post by AS Region, not by PNode/APNode. o AS HASP results will be posting hourly and be included in the AS Clearing Prices report, and removed from the Interval AS Clearing Prices report. ➢ AS Results Report o Modified to post Costs on an hourly basis, per AS type and Region. o Removed the breakdown by Import, Generation, and Demand.	Venkata Bommaraju
October 08, 2008	2.4	Updated the following: ➢ Atlas Tab: Peak-Off-Peak Definition report o New Report: Posts Hourly Peak/Off-Peak indicator based on the WECC definition. ➢ Atlas Tab: - RUC Zone - PNode Mapping report o New Report: Maps all of PNodes to each Reliability Unit Commitment Zone. ➢ Prices Tab: Nomogram/Branch Shadow Prices report o New Report: Posts hourly prices for Process (DAM, HASP) in $/MWh, and the 15-Minute Shadow Price in $/MWh for the RTPD in RTM. ➢ Energy Tab: Exceptional Dispatch report o Modified: Added a new “Instruction Type” field to this report.	Venkata Bommaraju

February 27, 2009	2.5	Updated the following: - Added notation to the AS Clearing Prices and AS Results reports to indicate that the CAISO will not procure AS in the HASP. ➢ Atlas Tab: Tie Point Listing report o Modified: Added new "TSIN Name" field to this report and added the data item to OASISMaster.xsd. ➢ Prices Tab: Locational Marginal Prices reports o Updated: Example URLs properly updated. ➢ CRR Tab: CRR Inventory and Clearing Prices o Updated: Example URLs properly updated. - Added clarifications on the URL's for the pre and post New ISO Market data.	Darren Lamb
May 15, 2009	2.6	Updated the following: - Added 2 two new reports under prices tab. Prices Tab: Interval Intertie Constraint Shadow Prices Interval Nomogram/Branch Shadow Prices o Updated: Example URLs properly updated. ➢ Updated the OASISReport.xsd ➢ Modified the url for the Market Simulation Environment to http://oasismktsim.caiso.com/mrtu-oasis	Venkata Bommaraju
September 28, 2009	2.7	Updated the following: - In Section 5, added details related to the Public Bids report.	Venkata Bommaraju & Darren Lamb
November 12, 2009	2.8	Updated the following: ➢ In Section 6, added details related to the new HTML page for the Current Trading Hub LMP price posting. ➢ In Section 6, added new report for HUB current LMP price called PRC_CURR_HUB_LMP (Download only). ➢ Modified CURRENT price queries so that there is now no need to pass the startdate and enddate parameters, query will take the current date as the default. ➢ Added the new PRC_CURR_HUB_LMP as enumeration list in the reportname in the OASISReport.XSD ➢ Modified Public Bid Data to indicate postings are now at T+90, as opposed to T+180.	Venkata Bommaraju & Darren Lamb

March 03, 2010	2.9	Updated the following: ➢ In Section 6, added details to AS Results report for HASP posting. ➢ In Section 5, Updated the Note for AS Clearing Prices and AS Results for HASP. The above two functions will be effective upon deployment of the AS Procurement in HASP and Scarcity Pricing initiatives.	Venkata Bommaraju & Darren Lamb
Mar 24, 2010	3.0	Updated the following For Convergence Bidding • In Section 3.12, added new XML Schema for CB PublicBids, Updated OasisReport & OasisMaster Schemas. • In Section 5, added three new reports & updated two reports. The five new reports are: ➢ Reference Prices (Prices) ➢ Convergence Bidding Awards (Energy) ➢ CB Public Bids (Public Bids) The updated reports are PNode Listing and APNode Listing (Atlas). In Section 6, 7, 8: Example URLs provided for the reports. The above functionality will be effective upon deployment of the Convergence Bidding Project.	Venkata Bommaraju
May 05, 2010	3.01	Updated the following For Convergence Bidding • In Section 3.12, Updated XML Schema OasisReport. • In Section 5, added 2 new reports. The two new reports are: ➢ Net Cleared Convergence Bidding Awards (Energy) ➢ Day Ahead Market Summary Report (Energy) In Section 6, 7, 8: Example URLs provided for the reports. The above functionality will be effective upon deployment of the Convergence Bidding Project.	Venkata Bommaraju
Jun 14, 2010	3.02	Updated the following For Convergence Bidding • In Section 3.12, Updated XML Schema OasisMaster. • In Section 5, updated the data items for Atlas APNode and PNode listing reports.	Venkata Bommaraju
Nov 18,2010	3.03	Modifications include per Convergence Bidding project: • Removed all previously highlighted sections • *Single URL Query Strings section:* o Updated the query strings for these reports: ENE_CB_AWARDS, ENE_CB_CLR_AWARDS & PUB_CB_BID o Renamed the report name from "ENE_MKT_RPT" to "ENE_CB_MKT_SUM"; updated its query string	EC

		• *Group URL Query Strings section:* o Updated the query string for these reports: PUB_CB_DAM_GRP, CB_REF_PRC_GRP & CB_CLR_DAM_GRP • *Reports and XML Data Items section:* o Updated the XML_NAME of the Day-Ahead Market Summary report from "ENE_MKT_RPT" to "ENE_CB_MKT_SUM"	
Dec 14,2010	3.04	Modifications include per Convergence Bidding project: • Updated the Section# 5(Reports and Xml Data Items) with new Nodal reports (Nodal Group Constraints & Nodal Limits). Also updated the Single Zip and Group Zip API for these reports.	SK, EC
Jan 28, 2011	3.05	This document version is to be posted on the Production System Access & Documentation caiso.com page: • Merge the document 3.04 version changes per CB functionality, with the previously posted production path document updates under version 2.91 & 2.92 as follows: ▪ ***Document Version 2.91*** In Section 5, updated the four Shadow Price reports under the "Prices" tab to reflect the change associated with the Data Release and Accessibility initiative. o Added the 'Constraint Cause' field to the shadow price reports. o 'Constraint Cause' is the indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency. o Constraint Cause is reported in the <m:REASON> tag in the XML result set. ▪ ***Document Version 2.92*** o In Section 6, Highlighted the market name parameter as required for CRR Inventory report. We cannot allow ALL or NULL any more. This change is related to the huge data volume related to this report. o In Section 7 & 8, updated the CRR1_GRP deprecation. This groupdown load feature is no longer valid. • Added a new Section 9 for namespace domain reference • Updated the CB data request strings from "oasismap" to "oasis" since queries are relevant in production per CB deployment • Clarified the CB report descriptions • Updated document header with the new logo	EC, DL

Mar 28,2011	3.06	Updated the following for Convergence Bidding Day Ahead Market Summary Report: • OasisReport XSD Updated (Enumeration list for data items updated)	VB, AJ, EC
Apr 15,2011	3.06	Section 5 Report and XML data elements updated to add report and xml elements for System Ramping Nomogram Results Report. Section 6 Single URL Query Strings updated to add the System Ramping Nomogram results single report URL examples for XML downloads. Section 7 Group Report Definition updated to inlclude GroupIDs for System Ramping Nomogram Result report Section 8 Group URL Query Strings updated to add the System Ramping Nomogram results group report URL examples for XML downloads.	AJ
May 10, 2011	3:07	Updated API spec to match the XSD elements	AJ
July 15, 2011	3.08	Updated the following • Added Contingency Dispatch Locational Marginal Prices, Contingency Dispatch Intertie Constrainst Shadow Prices,Contingency Dispatch Nomogram/Branch Shadow prices and Contingency Dispatch Resource Schedules report details to the section 5 Reports and XML Data items. • Added Single zip URL query strings for Contingency Dispatch Reports to the section 6 Single URL query string.	AJ
Sep 21, 2011	3.08	Added a new section 10 Schema File changes	AJ
Nov 17,2011	3.08.2	Updated example download URL for PRC_CD_INTVL_LMP to remove extra space and removed invalid URL string for PRC_CURR_LMP	AJ
Jan 10,2012	3.09.0	Updated the following for LMPM project • Added new reports definitions for MPM runs to the section 5 Reports and XML Data items. • Added single zip URL query strings for MPM run reports.to the section 6 Single URL query string. • Added new group ids for MPM run reports to the section 7 Group Report Defintions. • Added Group zip example URLs to the section 8 Group URL query strings.	AJ

		• Updated section 10 Schema Files Changes to include details for OASISReport.xsd changes. • Added notes to the LMP reports	
Feb 02,2012	3.09.1	Updated the section 8 • HASP_MPM_LMP_GRP –added opr_hr parameter • DAM_MPM_SD_PRC_GRP – Corrected the group name	AJ
July 10, 2012	3.10	Updated the following • Updated the section 3.1.2 XML Schema section to add oasisCRRPublicBid.xsd details • Added new reports definitions for CRR Bid data, Aggregated Generation outage, Renewable forecast to the section 5 Reports and XML Data items. • Added single zip URL query strings for new reports.to the section 6 Single URL query string. • Added new group ids for new reports to the section 7 Group Report Defintions. • Added Group zip example URLs to the section 8 Group URL query strings for the new reports • Updated section 10 Schema Files Changes to include details for OASISReport.xsd changes.	

Table of Contents

1. Overview

This document explains the functionality of the Open Access Same-Time Information System (OASIS) API. In this document the following are described:

- Background of OASIS.
- URL Parameter definitions for requesting OASIS data.
- Naming Convention for Returned OASIS files.
- Schema (XSD) for returned OASIS XML data.

1.1 Background – Time Horizons

The California Independent System Operator's (CAISO) Open Access Same-time information System (OASIS) provides energy market and power grid information to the public and market participants, through reports with real time updates. This information includes the following:

- System load requirements
- Market Price information
- Transmission availability
- System demand conditions

The data is categorized into three groups:

Category	Description
OASIS Data	This is the CAISO operational and market data.
Public Bids	This is the Public Bid data published after 90 days.
Atlas Data	This is the reference data supporting OASIS Data.

Its own XSD Schema, described in this document, supports each category.

To automate the download of the OASIS report data in XML, the information in this document describes the OASIS XML format and the download procedures, including URL examples associated with the XML data files.

Time Horizons for CAISO Public Data postings:

- **New ISO Market.** This term refers to the OASIS design beginning with the Trading Date of 04/01/2009. This API document describes the functions for this version of OASIS.

  The URL for accessing this OASIS site is: http://oasis.caiso.com

  The URL for the API for this OASIS is: http://oasis.caiso.com/mrtu-oasis or http://oasissta.caiso.com/mrtu-oasis

- **Pre-New ISO Market OASIS.** This term refers to the OASIS design beginning with the Trading Date of 09/01/2000 and ending with 03/31/2009.

The URL for accessing this OASIS site is: http://oasishis.caiso.com. This site can also be accessed from the home page of the New ISO Market OASIS site, and selecting the "History" link at the bottom of the page. From that page, users can select the "OASIS Help" link, for additional instructions on how to access the OASIS data.

The URL for the API for this OASIS is: http://oasishis.caiso.com/servlet...

- **Pre-OASIS data.** This is data for trading dates from the inception of the CAISO (3/31/1998) and ending with 8/31/2000.

To access this data, users should go to the Pre-New ISO Market OASIS site and select the "Chronicles" button in the middle of the home page.

2. Data Request to API

CAISO's OASIS is redesigned to adapt to the changes in the markets and grid operations initiated by the New ISO Market program. However, the technology of the new OASIS for downloading data is quite similar to the existing OASIS. The process of obtaining data from OASIS by automation using its API can be described as queries implemented through URL Servlet requests. It can be defined as sending URL requests with parameters to the OASIS web servers, from the Users web client.

2.1 API URL for single reports

Single report request will be using the servlet called SingleZip. The return of XML in CIM format will be based on XSDs specified above. The data content will be based on the type parameters will be passed to the SingleZip request. To illustrate the URL and its parameters, we show the pattern that would return an XML file based on the Schemas.

```
URL?queryname=<A>&startdate=<D>&enddate=<D>&market_run_id=<A>&varParameters

Where:
      URL = http://oasiswebsite/context-path/SingleZip

      For production : oasiswebsite = oasis.caiso.com
                       context-path = mrtu-oasis
      For Staging    : oasiswebsite = oasis.caiso.com
                       context-path = mrtu-oasis

Mandatory Parameters:
      startdate = valid operating start date (yyyymmdd)
      enddate = valid operating end date (yyyymmdd)
            which is equal or greater than <dstartdate>
      queryname = valid reportname,
            refer to the XML Query Name in the document
      market_run_id =  valid market type

Variable Parameters:
```

```
varParameters
      variable Parameters are defined for each Report
      and its specific Filter options
```

2.1.1. Example URL for the New ISO Market *Simulation* Environment

To illustrate the use of the URL and its parameters, we show an example based on the pattern above: This string indicates the proper path to query data that exists in our Market Simulation Environment.

```
http://oasismktsim.caiso.com/mrtu-oasis/SingleZip?queryname=AS_REQ&
startdate=20061002&enddate=20061002&market_run_id=DAM&as_type=ALL&as_region=A
LL
```

2.1.2. Example URL for the New ISO Market Production Environment

To illustrate the use of the URL and its parameters, we show an example based on the pattern above. This string indicates the proper path to query the data for Trading Days beginning with the deployment of the New ISO Market:

```
http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=AS_REQ&
startdate=20061002&enddate=20061002&market_run_id=DAM&as_type=ALL&as_region=A
LL
```

Note: This is the preferred URL, as the “oasissta” version will be retired at some point in the future.

OR

```
http://oasissta.caiso.com/mrtu-oasis/SingleZip?queryname=AS_REQ&
startdate=20081001&enddate=20081001&market_run_id=DAM&as_type=ALL&as_region=A
LL
```

2.2. API URL for Group Reports

The group reports depends on the servlet called GroupZip. The GroupZip is going call group of singleZips. The XML/CSVs will be embedded in the Zip file will be based on the group type. The data content will be for entire day that the user is going to be requested at a given time you can only request for single day.

To illustrate the URL and its parameters, we show the pattern that would return an XML files based on the Schemas.

```
URL?groupid=<A>&startdate=<D>

Where:
      URL = http://oasiswebsite/context-path/GroupZip
```

```
      For production : oasiswebsite = oasis.caiso.com
                       context-path = mrtu
      For Staging    : oasiswebsite = oasis.caiso.com
                       context-path = mrtu-oasis

Mandatory Parameters:
      Groupid   = valid groupid
      startdate = valid operating start date (yyyymmdd)
      opr_hr    = valid operating hour (HH)
                  (Only applicable for HASP,RTM groups)
```

2.2.1 Example URL

To illustrate the use of the URL and its parameters, we show an example based on the pattern above:

```
Example 1: http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_LMP_GRP&
startdate=20061002

Example 2: http://oasis.caiso.com/mrtu-
oasis/GroupZip?groupid=HASP_LMP_GRP&startdate=20061002&opr_hr=01
```

3. Returned XML / CSV File

For every request sent to the OASIS web server, the web server will return a “zip” compressed file. In case of single report or group zip functionality, the user then unzips the file to extract the actual XML file/ files, for further processing by any business or report generation application.

The CAISO will also continue to provide a CSV download capability similar to XML for both single and group level.

3.1 File Names for single and group

The returned files will use the following naming convention for singlezip:

```
startdate_enddate_Report Name_MktRunID_Stamp#.Zip
```

Within this zip file, the XML file will use the following naming convention:

```
startdate_enddate_Report Name_MktRunID_Stamp#.XML
or, in the case of the CSV format:
startdate_enddate_Report Name_MktRunID_Stamp#.CSV
```

The returned files will use the following naming convention for groupzip:

```
startdate_startDate_GroupID_N_xml.Zip
or, in the case of CSV format :
```

```
startdate_startDate_GroupID_N_csv.Zip
```

Within this zip file, the XML file will use the following naming convention:

```
startdate_startdate_Report Name_MktRunID.XML
or, in the case of the CSV format:
startdate_startdate_Report Name_MktRunID.CSV
```

3.1.1 XML Format

The structure of the XML (e**X**tensible **M**arkup **L**anguage) format file is based on standard CAISO CIM XML. It is generated by using Servlet call to actuate XML web services framework and using XSLT the xml files will be translated to CIM XML based on xml schemas. The CIM XML is zipped and sent to the requesting users as response, similar to the OASIS operation today.

OASIS will continue to comply with FERC interface requirements and associated implementation standards as it does today. The CAISO believes the use of XML provides information that is more valuable to the end user, and reduces overall development costs as changes occur in the future.

To learn more about the reporting interface and download functionality, please browse through our on-line **OASIS HELP**. Additional support can be obtained by contacting us through the **OASIS Support link**.

3.1.2 XML Schemas

Three XML schemas are developed to conform to the CIM XML standard support data delivery from the OASIS application. The schemas are **oasisReport.xsd, oasisBid.xsd, oasiscbBid.xsd, oasisCRRPublicBid.xsd and oasisMaster.xsd.** Each XML file, when downloaded, will point to the most current version of the Schema.

XSD	Category	Description
oasisReport.xsd	**OASIS Data**	This is the primary schema by which OASIS returns operational and market data.
oasisBid.xsd	**Public Bids**	OASIS returns Public Bid data by this schema. This schema is a derivative of the bid schema used by market participants to submit bids and schedules.
oasiscbBid.xsd	**Public CB Bids**	OASIS returns CB Public Bid data by this schema. This schema is a derivative of the CB bid schema used by market participants to submit CB bids.

oasisMaster.xsd	**Atlas Data**	This schema is tailored to the Atlas / Reference data portion of OASIS.
oasisCRRPublicBid.xsd	**CRR Bid Data**	OASIS returns CRR Bid data by this schema. This schema is a derivative of the CRR bid schema.

3.1.3 CSV Format

To support non-XML OASIS users, OASIS data can also be downloaded in CSV format. This is done by adding a "**resultformat**" parameter to the URL query string: **resultformat = 6** for CSV download, and **resultformat = 5** for XML download. If this parameter is not in the query sting, OASIS uses 5 as the default and generates XML.

To download a CSV file, use the same URL querystring as for the XML download, and add the variable "resultformat =6" in the parameter section:

```
In the case of single report
URL?resultformat=6&queryname=<A>&startdate=<D>&enddate=<D>&market_run_id=<A>
&varParameters
In the case of group report
URL?resultformat=6&groupid=<A>&startdate=<D>
```

3.1.4 Example URLs

To illustrate the use of the URL and its parameters including the request for CSV format, we show an example based on the pattern above:

```
In the case of single report
http://oasis.caiso.com/mrtu-oasis/SingleZip?resultformat=6&
queryname=AS_REQ&startdate=20061002&enddate=20061002&
market_run_id=DAM&as_type=ALL&as_region=ALL
In the case of group reports
http://oasis.caiso.com/mrtu-oasis/GroupZip?resultformat=6&
groupid=DA_GROUP&startdate=20061002
```

3.2 Errors

The XML API will throw errors based on the situation and those are described below. In the XML file, if there is any error comes because of different reasons will be thrown with both error code and error description. The Users will know the valid reason for failure. The error codes and descriptions are described below.

Error Code	Error Description
1000	No data returned for the specified selection.
1001	Invalid Parameters of the given report name.
1002	Invalid date format, please use valid date format.
1003	Timed out waiting for query response.
1004	Data can be requested for period of 31 days only.

1005	Report name does not exit, please use valid report name.
1006	Validation exception during transformation of XML.
1007	Required file for does not exist.
1008	Out of memory exception.
1009	Exceptions in reading and writing of XML files.
1010	System Error.
1011	Empty Query; Please Enter Report Name, Startdate, EndDate and Other Parameters.
1012	Connection refused.
1013	Required Resources (xslt or xml or dir) Unavailable.
1014	Start Date is beyond the limit, Please Use valid Start Date that falls within the prescribed limit.
1015	GroupZip DownLoad is in Processing, Please Submit request after Sometime
1016	GROUPID Does Not Exit, Please Use Valid GROUPID Name

4. Recommended Usage

By observing the Publication and Revisions Log and Publication Schedule reports, users can submit the requests more efficiently. We strongly recommend first to find out whether the data is already published to the OASIS database. Once the required data is published then submit the requests for the required reports. This way the user can eliminate unnecessary requests for the required data.

5. Reports and Xml Data Items

This section contains an overview listing of the individual types of result sets returned from OASIS, corresponding to the online OASIS reports.

Report/ResultSet	XML Name	XML Data Items	Description
PRICES			
Locational Marginal Prices (LMP) Hourly Locational Marginal Prices for all PNodes and APNodes in $/MWh. For the DAM, posts the LMP, plus the Congestion, Loss and Energy Components that make up the LMP. For the RUC, only the LMP will be posted.	PRC_LMP	LMP_CONG_PRC LMP_ENE_PRC LMP_LOSS_PRC LMP_PRC	LMP - Congestion Component; LMP - Energy Component; LMP - Losses Component; LMP for each Pnode and APnode;
HASP Locational Marginal Prices (LMP) Posts hourly, the 4 15-minute Locational Marginal Prices in $/MWh, for the HASP hour. Posts the LMP, plus the Congestion, Loss and Energy Components that make up the LMP.	PRC_HASP_LMP	LMP_CONG_PRC LMP_ENE_PRC LMP_LOSS_PRC LMP_PRC	LMP - Congestion Component; LMP - Energy Component; LMP - Losses Component; LMP for each Pnode and

Report/ResultSet	XML Name	XML Data Items	Description
Posts the HASP *Binding* LMP for PNodes and APNodes relevant to Hourly Pre-Dispatched Resources. Posts the HASP *Advisory* LMP for PNodes and APnodes relevant to the Non-Hourly Pre-Dispatch Resources. For HASP, SC's should always utilize the CMRI posted price as the valid price for shadow-settlement purposes.			APnode;
Interval Locational Marginal Prices (LMP) Five-minute Locational Marginal Prices for all PNodes and all APNodes in $/MWh, for each five-minute interval RTM. Posts the LMP, plus the Congestion, Loss and Energy Components that makes up the LMP.	PRC_INTVL_LMP	LMP_CONG_PRC LMP_ENE_PRC LMP_LOSS_PRC LMP_PRC	LMP - Congestion Component; LMP - Energy Component; LMP - Losses Component; LMP for each Pnode and APnode;
AS Clearing Prices Ancillary Services Regional Shadow Prices for all Ancillary Service types at each AS Region and Sub-Regional Partition. Posted hourly in $/MW for the DAM and HASP.	PRC_AS	NS_CLR_PRC RD_CLR_PRC RU_CLR_PRC SP_CLR_PRC	NonSpin Cleared Price; Regulation Down Cleared Price; Regulation Up Cleared Price; Spin Cleared Price;
Interval AS Clearing Prices Ancillary Services Regional Shadow Prices for all Ancillary Service types at each AS Region and Sub-Regional Partition. Posts in $/MW. Posts 15-Minute price relevant to the next 15 minute binding interval for RTM on a fifteen minute basis.	PRC_INTVL_AS	NS_CLR_PRC RD_CLR_PRC RU_CLR_PRC SP_CLR_PRC	NonSpin Cleared Price; RegulationDown Cleared Price; RegulationUp Cleared Price; Spin Cleared Price;
Intertie Constraint Shadow Prices Posts the hourly constraint pricing at Transmission Interfaces and Intertie Constraints, for each Market Process (DAM,HASP) in $/MWh, and the 15-Minute Shadow Price in $/MWh for the RTM. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_CNSTR	SHADOW_PRC <m:REASON>	Shadow price by Transmission Interface and Intertie Constraint Will indicate either “Base Case” or specific Contingency ID.
Fuel Prices For each Gas Flow Day, lists the gas price in $/mmBtu by fuel region.	PRC_FUEL	FUEL_PRC	Daily Gas Price.
Current Locational Marginal Price This report is available for download only. Lists Five min Locational Marginal Prices for all Generator PNodes and all APNodes for the current interval. (Returns the most recently posted interval only) Use SingleZip function if specific nodes are required; use GroupZip for downloading if all nodes are required.	PRC_CURR_LMP	LMP_CONG_PRC LMP_ENE_PRC LMP_LOSS_PRC LMP_PRC	LMP - Congestion Component; LMP - Energy Component; LMP - Losses Component; LMP for each Pnode and APnode;
Nomogram/Branch Shadow Prices Posts the hourly constraint pricing at each Nomogram and Branch, for each Market Process (DAM, HASP) in $/MWh, and the 15-Minute Shadow Price in $/MWh for the RTPD in RTM. Report will also include an indication of whether	PRC_NOMOGRAM	SHADOW_PRC <m:REASON>	Shadow price by Nomogram or Branch. Will indicate either “Base Case” or specific

Report/ResultSet	XML Name	XML Data Items	Description
the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.			Contingency ID.
Interval Nomogram/Branch Shadow Prices Posts the 5 minute constraint pricing at each Nomogram and Branch, for each Market Process (RTM) in $/MWh. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_RTM_NOMOGRAM	SHADOW_PRC <m:REASON>	Shadow price by Nomogram or Branch. Will indicate either “Base Case” or specific Contingency ID.
Interval Intertie Constraint Shadow Prices Posts the 5 minute constraint pricing at Transmission Interfaces and Intertie Constraints in $/MWh Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_RTM_FLOWGATE	SHADOW_PRC <m:REASON>	Shadow price by Transmission Interface and Intertie Constraint Will indicate either “Base Case” or specific Contingency ID.
Reference Prices Quarterly Reference prices associated with each node based on historical data, posted for Convergence Bidding purposes.	PRC_DS_REF	SPLY_PRC DMD_PRC	Supply Component Demand Component
Nodal Group Constraints This report displays the upper and lower MW limits, cleared MW value and associated hourly shadow prices for any binding Nodal Group Constraint. Additionally, the list of Eligible Pnodes included in the Nodal Group Constraint is displayed. This report is triggered with the publication of the Day-Ahead results.	CB_NODAL_GRP_CNSTR_PRC	SHADOW_PRC CLEARED_MW MAXIMUM_LIMIT MINIMUM_LIMIT	Shadow price by Nodal Constraint Group Cleared Price Maximum Limit of the Price Minimum Limit of the Price
System Ramping Nomogram Results	PRC_FLEX_RAMP	MKT_RUN_START_TIME INT_START_TIME START_HE OPR_DATE MKT_TYPE	Indicates the start time of the market run in pacific Time format . The start time of the interval in pacific time format for which data is reported. The hour ending component of the interval start time The operating date for which data is reported. An identifier which specifies the market run type (DAM.RTPD& RTD)

Report/ResultSet	XML Name	XML Data Items	Description
		RAMP_UP_CAP_REQ	Upward raming capacity nomogram results
		RAMP_UP_SHADOW_PRC	Shadow price of the upward ramping nomogram results
		RAMP_DOWN_CAP_REQ	Downward ramping capacity nomogram results.
		RAMP_DOWN_SHADOW_PRC	Shadow price of the downward nomogram results.
Contingency Dispatch Locational Marginal Prices Similar to the Interval Locational Marginal Prices (LMP) report, but for Real Time Contingency Dispatch (RTCD) runs. Posts the ten-minute Locational Marginal Prices for PNodes and APNodes in $/MWh, for each ten-minute interval RTCD.	PRC_CD_INTVL_LMP	LMP_CONG_PRC	LMP Marginal Cost of Congestion for ten-minute Contingency Dispatch.
		LMP_ENE_PRC	LMP Marginal Cost of Energy for ten-minute Contingency Dispatch.
		LMP_LOSS_PRC	LMP Marginal Cost of Losses for ten-minute Contingency Dispatch.
		INT_START_TIME	The start time of the Contingency Dispatch interval in pacific time format for which data is reported.
		OPR_DATE	The date component of the Contingency Dispatch interval start time.
		START_HE	The hour ending component of the Contingency Dispatch interval start time.
Contingency Dispatch Intertie Constraint Shadow Prices Similar to the Interval Intertie Constraint Shadow Prices report, but for Real Time Contingency Dispatch (RTCD) runs. Posts the 10-Minute constraint pricing at Transmission Interfaces and Intertie Constraints in $/MWh, for the RTCD run in the RTM. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_CD_RTM_FLOWGATE	SHADOW_PRC	Shadow price by Transmission Interface and Intertie Constraint for ten-minute Contingency Dispatch.
		REASON	Will indicate either “Base Case” or specific Contingency ID.
		INT_START_TIME	The start time of the Contingency Dispatch interval in pacific time format for which data is reported.
		OPR_DATE	The date component of the

Report/ResultSet	XML Name	XML Data Items	Description
		START_HE	Contingency Dispatch interval start time. The hour ending component of the Contingency Dispatch interval start time.
Contingency Dispatch Nomogram/Branch Shadow Prices Similar to the Interval Nomogram/Branch Shadow Prices report, but for Real Time Contingency Dispatch (RTCD) runs. Posts the 10-Minute constraint pricing at each Nomogram and Branch in $/MWh, for the RTCD run in the RTM. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_CD_RTM_NOMOGRAM	SHADOW_PRC REASON INT_START_TIME OPR_DATE START_HE	Shadow price by Nomogram or Branch for ten-minute Contingency Dispatch. Will indicate either “Base Case” or specific Contingency ID. The start time of the Contingency Dispatch interval in pacific time format for which data is reported. The date component of the Contingency Dispatch interval start time. The hour ending component of the Contingency Dispatch interval start time.
MPM DA Locational Marginal Prices (LMP): Hourly Locational Marginal Prices from the Day-Ahead MPM run for all PNodes and APNodes in $/MWh. Posts the LMP, plus the Competitive Congestion, Non-Competitive Congestion, Loss and Energy Components that make up the LMP.	PRC_MPM_LMP	LMP_PRC LMP_CONG_CC_PRC LMP_CONG_NC_PRC LMP_ENE_PRC LMP_LOSS_PRC	LMP for each nodes LMP - Competitive Congestion Component LMP- Non-Competitive Congestion Component LMP - Energy Component LMP - Losses Component
MPM RT Locational Marginal Prices (LMP): Posts hourly, the 4 15-minute Locational Marginal Prices from the HASP MPM run for all PNodes and APNodes in $/MWh. Posts the LMP, plus the Competitive Congestion, Non-Competitive Congestion, Loss and Energy Components that make up the LMP.	PRC_MPM_RTM_LMP	LMP_PRC LMP_CONG_CC_PRC LMP_CONG_NC_PRC LMP_ENE_PRC LMP_LOSS_PRC	LMP for each nodes LMP - Competitive Congestion Component LMP- Non-Competitive Congestion Component LMP - Energy Component LMP - Losses Component
MPM Nomogram/Branch Shadow Prices (DAM): Posts the hourly constraint pricing at each binding Nomogram and Branch, for Day Ahead	PRC_MPM_NOMOGRAM	SHADOW_PRC	Shadow price by Nomogram or Branch.

Report/ResultSet	XML Name	XML Data Items	Description
MPM run in $/MWh. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.		<m:REASON>	Will indicate either “Base Case” or specific Contingency ID.
MPM Nomogram/Branch Shadow Prices (RTM): Posts the hourly, the 4 15-minute interval constraint pricing at each binding Nomogram and Branch, for HASP MPM run in $/MWh. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_MPM_ RTM_NOMOGRAM	SHADOW_PRC <m:REASON>	Shadow price by Nomogram or Branch. Will indicate either “Base Case” or specific Contingency ID.
MPM Nomogram/Branch Competitive Paths (DAM): Posts the hourly results of the dynamic competitiveness constraint for the Day-Ahead MPM run, for nomograms and flowgates. Posts a flag indicating whether each binding constraint was competitive or not .	PRC_MPM_ NOMOGRAM_CMP	MPM_CMP_STATUS_FLG	Competitive Path indicator (Y/N)
MPM Intertie Constraint Shadow Prices (DAM): Posts the hourly constraint pricing at Transmission Interfaces and Intertie Constraints, for Day Ahead market MPM run in $/MWh. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency.	PRC_MPM_ CNSTR	SHADOW_PRC <m:REASON>	Shadow price by Transmission Interface and Intertie Constraint Will indicate either “Base Case” or specific Contingency ID.
MPM Intertie Constraint Shadow Prices (RTM): Posts the hourly, the 4 15-minute interval constraint pricing at Transmission Interfaces and Intertie Constraints, for HASP market MPM run in $/MWh. Report will also include an indication of whether the Constraints were binding because of the base operating conditions or contingencies, and if caused by a Contingency, the identity of the specific Contingency	PRC_MPM_ RTM_FLOWGATE	SHADOW_PRC <m:REASON>	Shadow price by Transmission Interface and Intertie Constraint Will indicate either “Base Case” or specific Contingency ID.
MPM Intertie Constraint Competitive Paths (DAM): Posts the hourly results of the dynamic competitiveness constraint for the Day-Ahead MPM run, for interchanges, market scheduling limits, and branch groups. Posts a flag indicating whether each binding constraint was competitive or not.	PRC_MPM_ CNSTR_CMP	MPM_CMP_STATUS_FLG	Competitive Path indicator (Y/N)
MPM Reference Bus (DAM) : Posts the reference bus used in the MPM run. Posted hourly for the Day-Ahead market.	PRC_MPM_ REF_BUS	REFERENCE_BUS_ID	Reference Bus Name

Report/ResultSet	XML Name	XML Data Items	Description
Note, the IFM, RUC, and regular HASP runs use a distributed reference bus.			
MPM Reference Bus (RTM) : Posts the reference bus used in the MPM run. Posted hourly, the 4 15-minute interval for the HASP market. Note, the IFM, RUC, and regular HASP runs use a distributed reference bus.	PRC_MPM_RTM_REF_BUS	REFERENCE_BUS_ID	Reference Bus Name
Greenhouse Gas Allowance Price For each real-time trade date, posts the index price for the California Carbon Allowance and for day-ahead bids, use the index price from the previous day's index price	PRC_GHG_ALLOWANCE	OPR_DATE GHG_ALLOWANCE_PRC	The operating date. Greenhouse gas allowance price index value
TRANSMISSION			
Current Transmission Usage Consolidated report for Current transmission capacity and usage per Transmission Interface. Starts with 7-days ahead and is updated continuously as outages occur. AS, Energy and ETC/TOR utilization values are updated in conjunction with the publication of the DAM and RTM market results.	TRNS_CURR_USAGE	ATC_MW AS_IMPORT_MW ENE_IMPORT_MW CBM_MW OTC_MW TTC_MW CONSTRAINT_MW USEAGE_MW TRM_MW TRM_UF_MW TRM_FTO_MW TRM_SPI_MW	Current Hourly ATC; Current Hourly Tagged AS from Imports; Current Hourly Tagged Net Energy from Imports / Exports; Current Hourly CBM; Current Hourly OTC; For Fall Release 2012, data item name will not be changed, yet going forward will refer to the "Hourly TTC" value Current Hourly TTC; For Fall Release 2012, data item name will not be changed, yet going forward will refer to the "Seasonal TTC" value Current Hourly Constraint; Current Hourly Unused TR Capacity Total TRM Unscheduled Flow Forced Topology outages Simultaneous Path Interaction
Market Available Transmission Capacity Available Transmission Capacity per Transmission Interface for DAM, HASP. ATC = OTC (TTC-CBM-Constraint)-AS From Imports-Net Energy flow from Imports/Exports-Unscheduled Transmission Rights capacity.	TRNS_ATC	ATC_MW	DAM or HASP Hourly ATC

Report/ResultSet	XML Name	XML Data Items	Description
Transmission Outages List planned and actual Transmission Outage events per Transmission Interface and direction. Updated with every outage event.	TRNS_OUTAGE	OUTAGE_LIMIT_MW	Curtailed Line Rating for each Transmission Interface MW.
Transmission Interface Usage Consolidated report for transmission capacity, usage, ETC/TOR utilization and schedules resulting from CAISO market operations for DAM or HASP by Transmission Interface.	TRNS_USAGE	ATC_MW	DAM or HASP Hourly ATC;
		AS_IMPORT_MW	DAM or HASP Hourly Tagged AS from Imports;
		ENE_IMPORT_MW	DAM or HASP Hourly Tagged Net Energy from Imports / Exports;
		CBM_MW	DAM or HASP Hourly CBM;
		OTC_MW	DAM or HASP Hourly OTC; For Fall Release 2012, data item name will not be changed, yet going forward will refer to the “Hourly TTC” value
		TTC_MW	DAM or HASP Hourly TTC; For Fall Release 2012, data item name will not be changed, yet going forward will refer to the “Seasonal TTC” value
		CONSTRAINT_MW	DAM or HASP Hourly Constraint;
		USEAGE_MW	DAM or HASP Hourly Unused TR Capacity
			Total TRM
		TRM_MW	Unscheduled Flow
		TRM_UF_MW	Forced Topology outages
		TRM_FTO_MW	Simultaneous Path Interaction
		TRM_SPI_MW	
SYSTEM DEMAND			
CAISO Peak Demand Forecast Peak Demand Forecast per CAISO control area total. Posting begins at 7 days before Trading Day. Also posts Peak Demand Forecast by TAC Area.	SLD_FCST_PEAK	SYS_PEAK_MW	The forecast peak demand in MW for the Forecast Day.

Report/ResultSet	XML Name	XML Data Items	Description
CAISO Demand Forecast Daily posting for the 2-DA hourly forecast and the DAM hourly forecast, Hourly posting for the hourly Actual Demand. Also posts the 2-DA, DAM and Actual Demand by TAC Area. RTM 5-Minute Load Forecast is posted every five minutes, for the next 11 intervals. The postings occur every 5-minutes for a rolling 11 interval period.	SLD_FCST	SYS_FCST_DA_MW	The forecast MW demand for each hour of the Operating Day, posted in the morning the day before the Operating Day, before the markets run;
		SYS_FCST_2DA_MW	The forecast MW demand for each hour of the Operating Day, posted two days before the Operating day;
		SYS_FCST_ACT_MW	The actual demand measurement by Hourly basis
		SYS_FCST_5MIN_MW	The VSTLF forecast MW demand used for the Operating Interval, for use in RTID
Wind and Solar Forecast Forecast and actual wind and solar generation by hour. Aggregated by trading hub (NP15, ZP26, and SP15). Day-Ahead forecast is posted daily in advance of the Day-Ahead Market, Hour-Ahead forecast is posted in advance of each HASP market. Actual production is posted the day after the operating day. Note: to ensure a high level of accuracy only Eligible Intermittent Resources (EIR), including those that participate in the Participating Intermittent Resource program (PIRP) are included in the report	RENEWABLE_FCST	RENEW_FCST_DA_MW RENEW_FCST_HASP_MW RENEW_FCST_ACT_MW	The forecast MW value for each hour of the Operating Day, posted in the morning the day before the each markets run
		OPR_DATE	The operating date.
		TRADING_HUB	The trading hub name. Valid values are NP15,SP15,ZP26 and ALL
		RENEWABLE_TYPE	Renewable Type include one of the following - “Wind” (Include: Wind PIRP & EIR resources). - “Solar” (Include: Solar PIRP & EIR resources).
		INTERVAL_NUM	Interval num provides corresponding operating hour.
ENERGY			
System Load and Resource Schedules Balanced System Load, Generation, Import and Export per TAC Area, and for CAISO total. Posts results for DAM, RUC Capacity, HASP and 5-Minute RTM, as indicated below: **DAM** Load, Generation, Import and Export Schedules per TAC Area and CAISO total for each Operating Hour, in MW. **RUC** Capacity from Generation and Imports for each TAC Area and CAISO total for each Operating Hour, in MW Hour-Ahead Scheduling Process **(HASP)** Import and Export per TAC Area and CAISO total, in MW.	ENE_SLRS	ISO_TOT_GEN_MW	ISO Total MW cleared as Generation in DAM, RUC, HASP, RTM.
		ISO_TOT_LOAD_MW	ISO Total MW cleared as Demand in DAM, HASP, RTM.
		ISO_TOT_IMP_MW	ISO Total MW cleared as imports in DAM, RUC, HASP, RTM.
		ISO_TOT_EXP_MW	ISO Total MW cleared as Exports in DAM, HASP, RTM.
		TOT_GEN_MW	Total MW cleared as Generation in DAM, RUC, HASP, RTM, by TAC Area.
		TOT_LOAD_MW	

Report/ResultSet	XML Name	XML Data Items	Description
5 minute **RTM** Generation, Import and Export per TAC Area and CAISO total, in MW.		TOT_IMP_MW TOT_GEN_MW	ISO Total MW cleared as Demand in DAM, HASP, RTM, by TAC Area. ISO Total MW cleared as imports in DAM, RUC, HASP, RTM, by TAC Area. ISO Total MW cleared as Exports in DAM, HASP, RTM, by TAC Area.
Expected Energy After-the-Fact Energy Accounting, per Energy Type. Posted daily at T+1, in MWh for ISO total. Please refer to the table in the BPM for Market Operations, Appendix C.4 for the complete list of valid Expected Energy Types.	ENE_EA	DASE_MWH DSSE_MWH DABE_MWH OE_MWH HASE_MWH SRE_MWH RED_MWH EDE_MWH RMRE_MWH MSSLFE_MWH RE_MWH MLE_MWH SE_MWH RTSSE_MWH DMLE_MWH PE_MWH TEE_MWH	DA Scheduled Energy DA Self-Scheduled Energy DA Bid Award Energy Optimal Energy HourAhead Scheduled Energy Standard Ramping Energy Ramping Energy Deviation Exceptional Dispatch Energy RMR Energy MSS Load Following Energy Residual Energy Minimum Load Energy Slic Energy RT Self Scheduled Energy DA Minimum Load Energy Pumping Energy Total Expected Energy
Market Power Mitigation Status Mitigation Indicator showing whether any bids were replaced by Reference Curves. Value will be “Y” or “N”.	ENE_MPM	MPM_STATUS_FLG	Indicator whether mitigation occurred in that Operating Interval
RMR Pre-Dispatched and MPM Determined RMR capacity (MW) summed for all resources, for the DAM and RTM market processes.	CMMT_RMR	DISPATCH_MW TOT_AVAIL_MW DETER_MW	The RMR capacity dispatched ahead of the Market. Total RMR capacity available to the market in that hour. RMR capacity determined by MPM before market run.
Exceptional Dispatch Summary of Exceptional Dispatch Data. Posted daily at T+1, in MWh by TAC area and Instruction Type. Please refer to the table in the BPM for Market Operations, Appendix C.4 for the complete list of valid Exceptional Dispatch Instruction Types.	ENE_DISP	EXPT_DIS_PRC EXPT_DIS_MWH	Exceptional Dispatch Price. Exceptional Dispatch MW
Marginal Losses CAISO Total Marginal Loss costs ($) and Total System losses (MWh). Posted hourly for the DAM and HASP.	ENE_LOSS	TOT_LOSS_PRC TOT_LOSS_MW	Total costs incurred due to Losses in this hour/interval. Total MWh lost
Resource Adequacy and Minimum Load Commitment data for each market. All data for all markets posted daily at T+1. All commitment	CMMT_RA_MLC	RA_CAP_COMM_MW MIN_LD_MW	RA Capacity Committed Minimum Load

Report/ResultSet	XML Name	XML Data Items	Description
data is related to ISO committed resources.		RA_MLC_PRC	RA Minimum Load Cost (MLC)
		MIN_LD_MLC_PRC	Minimum Load cost
		TOT_STRT_CST_PRC	Total Start Up Cost
		RA_STRT_PRC	RA Start-Up Cost
		RA_COMM_UNITS_CNT	RA Number of Units Committed
		TOT_COMM_UNITS_CNT	Total Number of Units Committed
		TOT_COMM_CAP_MW	Total Capacity Committed
Convergence Bidding Aggregate Awards Posts Day Ahead CAISO aggregate Virtual Bidding Awards for Energy for Supply & Demand Publishes with the Day Ahead Market results	ENE_CB_AWARDS	ISO_TOT_SPLY_MW	Supply Component
		ISO_TOT_DMD_MW	Demand Component
Net Cleared Convergence Bidding Awards Posts Net Cleared MW for Virtual Bids for every Virtual Bidding Node per Trade Hour within a Trading Day including Trading Hubs and default LAPs. This report will post after all Real Time markets have closed for the associated Trading Day. Posts Convergence Bidding Supply Awards, Less Convergence Bidding Demand Awards per node. Under this convention, positive net cleared virtual quantities will indicate net Virtual Supply, whereas negative net cleared virtual quantities will indicate net Virtual Demand at a given node. A value of null Net Cleared Virtual quantities at a given node will indicate no virtual bids submitted at that node while a value of zero will indicate virtual supply and demand Awards netted to zero. .	ENE_CB_CLR_AWARDS	CLR_MW	Cleared MW
Day Ahead Market Summary Summary of the Day Ahead market showing physical and virtual breakdowns of energy submitted, dollars submitted, energy cleared and dollars cleared as well as the totals. Posts after the completion of the DAM Market publication.	ENE_CB_MKT_SUM	DMD_SLF_ENE_SUB_MW	Sum of demand self schedule energy bids submitted for all internal resources for a specific trade date in the day ahead market
		DMD_SLF_ENE_CLR_MW	Sum of demand self schedule energy bids awarded (cleared) for all internal resources for a

Report/ResultSet	XML Name	XML Data Items	Description
			specific trade date in the day ahead market
		DMD_SLF_CLR_CST	Sum of dollars associated with demand self schedule energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		DMD_ENE_SUB_MW	Sum of demand economic energy bids submitted for all internal resources for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation
		DMD_ENE_SUB_CST	Sum of dollars associated with demand economic energy submitted for all internal resources for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation
		DMD_ENE_CLR_MW	Sum of demand economic energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		DMD_ENE_CLR_CST	Sum of dollars associated with demand economic energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		DMD_VIR_ENE_SUB_MW	Sum of demand convergence bidding (virtual) energy bids submitted for all internal resources for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation
		DMD_VIR_SUB_CST	Sum of dollars associated with demand convergence bidding (virtual) energy submitted for all internal resources for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation
		DMD_VIR_ENE_CLR_MW	Sum of demand convergence bidding (virtual) energy bids awarded (cleared) for all internal resources for a specific trade date in the day

Report/ResultSet	XML Name	XML Data Items	Description
			ahead market
		DMD_VIR_CLR_CST	Sum of dollars associated with demand convergence bidding (virtual) energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		DMD_TOT_ENE_SUB_MW	Sum of demand self schedule energy bids submitted, demand economic energy bids submitted, demand virtual bids submitted for all internal resources (and nodes) for a specific trade date in the day ahead market
		DMD_TOT_SUB_CST	Sum of dollars associated with demand self schedule energy bids submitted, demand economic energy bids submitted, demand virtual bids submitted for all internal resources (and nodes) for a specific trade date in the day ahead market
		DMD_TOT_ENE_CLR_MW	Sum of demand self schedule energy bids awarded (cleared) , demand economic energy bids awarded (cleared), demand virtual bids awarded (cleared) for all internal resources (and nodes) for a specific trade date in the day ahead market
		DMD_TOT_CLR_CST	Sum of dollars associated with demand self schedule energy bids awarded (cleared) , demand economic energy bids awarded (cleared), demand virtual bids awarded (cleared) for all internal resources (and nodes) for a specific trade date in the day ahead market
		SPLY_ENE_SUB_MW	Sum of supply physical energy bids submitted for all internal resources for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation.
		SPLY_ENE_SUB_CST	Sum of dollars associated with supply physical energy submitted for all internal resources for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this

Report/ResultSet	XML Name	XML Data Items	Description
			calculation.
		SPLY_ENE_CLR_MW	Sum of supply physical energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_ENE_CLR_CST	Sum of dollars associated with supply physical energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_SLF_ENE_SUB_MW	Sum of supply self schedule energy bids submitted for all internal resources for a specific trade date in the day ahead market
		SPLY_SLF_ENE_CLR_MW	Sum of supply self schedule energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_SLF_CLR_CST	Sum of dollars associated with supply self schedule energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_VIR_ENE_SUB_MW	Sum of supply convergence bidding (virtual) energy bids submitted for all internal resources for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation.
		SPLY_VIR_SUB_CST	Sum of dollars associated with supply convergence bidding (virtual) energy submitted for all internal resources for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation.
		SPLY_VIR_ENE_CLR_MW	Sum of supply convergence bidding (virtual) energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_VIR_CLR_CST	

Report/ResultSet	XML Name	XML Data Items	Description
		SPLY_TOT_ENE_SUB_MW	Sum of dollars associated with supply convergence bidding (virtual) energy bids awarded (cleared) for all internal resources for a specific trade date in the day ahead market
		SPLY_TOT_SUB_CST	Sum of supply economic energy bids submitted, supply virtual bids submitted for all internal resources (and nodes) for a specific trade date in the day ahead market.
		SPLY_TOT_ENE_CLR_MW	Sum of dollars associated with supply economic energy bids submitted, supply virtual bids submitted for all internal resources (and nodes) for a specific trade date in the day ahead market
		SPLY_TOT_CLR_CST	Sum of supply economic energy bids awarded (cleared), supply virtual bids awarded (cleared) for all internal resources (and nodes) for a specific trade date in the day ahead market
			Sum of dollars associated with supply economic energy bids awarded (cleared), supply virtual bids awarded (cleared) for all internal resources (and nodes) for a specific trade date in the day ahead market
		EXP_SLF_ENE_SUB_MW	Sum of Exports self schedule energy bids submitted for a specific trade date in the day ahead market
			N/A
		EXP_SLF_ENE_CLR_MW	Sum of Exports self schedule energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP_SLF_CLR_CST	Sum of dollars associated with Exports self schedule energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP__ENE_SUB_MW	Sum of Exports economic energy bids submitted for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation
			Sum of dollars associated with Exports economic

Report/ResultSet	XML Name	XML Data Items	Description
		EXP_ENE_SUB_CST	energy submitted for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation
		EXP_ENE_CLR_MW	Sum of Exports economic energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP__ENE_CLR_CST	Sum of dollars associated with Exports economic energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP_VIR_ENE_SUB_MW	Sum of Exports convergence bidding (virtual) energy bids submitted for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation
		EXP_VIR_SUB_CST	Sum of dollars associated with Exports convergence bidding (virtual) energy submitted for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation
		EXP_VIR_ENE_CLR_MW	Sum of Exports convergence bidding (virtual) energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP_VIR_CLR_CST	Sum of dollars associated with Exports convergence bidding (virtual) energy bids awarded (cleared) for a specific trade date in the day ahead market
		EXP_TOT_ENE_SUB_MW	Sum of Exports self schedule energy bids submitted, Exports economic energy bids submitted, Exports virtual bids submitted (and nodes) for a specific trade date in the day ahead market
		EXP_TOT_SUB_CST	Sum of dollars associated with Exports self schedule energy bids submitted, Exports economic energy bids submitted, Exports virtual bids submitted (and nodes) for a specific trade date in the day ahead market
			Sum of Exports self schedule energy bids awarded (cleared) , Exports economic energy bids

Report/ResultSet	XML Name	XML Data Items	Description
		EXP_TOT_ENE_CLR_MW	awarded (cleared), Exports virtual bids awarded (cleared) (and nodes) for a specific trade date in the day ahead market
		EXP_TOT_CLR_CST	Sum of dollars associated with Exports self schedule energy bids awarded (cleared) , Exports economic energy bids awarded (cleared), Exports virtual bids awarded (cleared) (and nodes) for a specific trade date in the day ahead market
		IMP_SLF_ENE_SUB_MW	
		IMP_SLF_ENE_CLR_MW	Sum of Imports self schedule energy bids submitted for a specific trade date in the day ahead market
		IMP_SLF_CLR_CST	Sum of Imports self schedule energy bids awarded (cleared) for a specific trade date in the day ahead market
		IMP__ENE_SUB_MW	Sum of dollars associated Sum of Imports self schedule energy bids submitted for a specific trade date in the day ahead market. All the MW values in each price curve
		IMP_ENE_SUB_CST	Sum of Imports physical energy bids submitted for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation.
		IMP__ENE_CLR_MW	Sum of dollars associated with Imports physical energy submitted for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation.
		IMP_ENE_CLR_CST	Sum of Imports physical energy bids awarded (cleared) for a specific trade date in the day ahead market
		IMP_VIR_ENE_SUB_MW	Sum of dollars associated with Imports physical energy bids awarded (cleared) for a specific trade date in the day ahead market

Report/ResultSet	XML Name	XML Data Items	Description
		IMP_VIR_SUB_CST	Sum of Imports convergence bidding (virtual) energy bids submitted for a specific trade date in the day ahead market. All the MW values in each price curve will be included in this calculation.
		IMP_VIR_ENE_CLR_MW	Sum of dollars associated with Imports convergence bidding (virtual) energy submitted for a specific trade date in the day ahead market. All the MW/price pair values in each price curve will be included in this calculation.
		IMP_VIR_CLR_CST	Sum of Imports convergence bidding (virtual) energy bids awarded (cleared) for a specific trade date in the day ahead market
		IMP_TOT_ENE_SUB_MW	Sum of dollars associated with Imports convergence bidding (virtual) energy bids awarded (cleared) for a specific trade date in the day ahead market
		IMP_TOT_SUB_CST	Sum of Imports economic energy bids submitted, Imports virtual bids submitted (and nodes) for a specific trade date in the day ahead market
		IMP_TOT_ENE_CLR_MW	Sum of dollars associated with Imports economic energy bids submitted, Imports virtual bids submitted (and nodes) for a specific trade date in the day ahead market
		IMP_TOT_CLR_CST	Sum of Imports economic energy bids awarded (cleared), Imports virtual bids awarded (cleared) (and nodes) for a specific trade date in the day ahead market
			Sum of dollars associated with Imports economic energy bids awarded (cleared), Imports virtual bids awarded (cleared) (and nodes) for a specific trade date in the day ahead market
Convergence Bidding Nodal MW Limits This report displays the MW limits used by the ISO in formulating nodal MW constraints in conjunction with convergence bidding. An upper and lower limit is defined for each Eligible Pnode other than an Eligible Pnode established for an Intertie. This report is	CB_NODAL_LIMITS	PHYSICAL_TYPE	'Supply' or 'Demand'

Report/ResultSet	XML Name	XML Data Items	Description
triggered with the publication of the Day-Ahead results.			
Contingencvy Dispatch Resource Schedules Similar to the System Load and Resource Schedules report, but for Real Time Contingency Dispatch (RTCD) runs. RTM Generation, Import and Export per TAC Area and CAISO total, in MW for all 10-minute RTCD runs.	ENE_CD_SLRS	ISO_TOT_GEN_MW	ISO Total MW cleared as Generation for all 10-Minute Contingency Dispatch run.
		ISO_TOT_IMP_MW	ISO Total MW cleared as imports for all 10-Minute Contingency Dispatch run.
		ISO_TOT_EXP_MW	ISO Total MW cleared Exports for all 10-Minute Contingency Dispatch run.
		TOT_GEN_MW	Total MW cleared as Generation per TAC area for all 10-Minute Contingency Dispatch run.
		TOT_IMP_MW	Total MW cleared as imports per TAC area for all 10-Minute Contingency Dispatch run.
		TOT_EXP_MW	Total MW cleared as Exports per TAC area for all 10-Minute Contingency Dispatch run.
		INT_START_TIME	The start time of the Contingency Dispatch interval in pacific time format for which data is reported.
		OPR_DATE	The date component of the Contingency Dispatch interval start time.
		START_HE	The hour ending component of the Contingency Dispatch interval start time.
Aggregated Generation Outages Generator de-rates and outages which are considered in the Day-Ahead Market. Report is generated from the list of de-rates and outages that are known at the time of publication, typically 5:00 AM PPT the day prior to the operating day. Aggregated into a total MW capacity reduction amount by trading hub (NP15, ZP26, and SP15) and resource type (thermal, hydro, renewable).	AGGR_OUTAGE_SCH	REPORT_DATE	The date when the data was published
		OUTAGE_DATE	Outage date
		OUTAGE_HOUR	Outage hour
		FUEL_CATEGORY	Fuel Category
		TRADING_HUB	Trading Hub name
		OUTAGE_MW	Outage MW

Report/ResultSet	XML Name	XML Data Items	Description
ANCILLARY			
AS Requirements Ancillary Service Capacity Minimum and Maximums per AS Region. Report will post for the 2-Day-Ahead forecast, DAM and HASP. Note: When encountering a max A/S limit of zero, please interpret this as "no limit".	AS_REQ	NS_REQ_MAX_MW	Max capacity to be acquired for NonSpin
		RD_REQ_MAX_MW	Max capacity to be acquired for RegulationDown
		RU_REQ_MAX_MW	Max capacity to be acquired for RegulationUp
		SP_REQ_MAX_MW	Max capacity to be acquired for Spin
		NS_REQ_MIN_MW	Min capacity to be acquired for NonSpin
		RD_REQ_MIN_MW	Min capacity to be acquired for RegulationDown
		RU_REQ_MIN_MW	Min capacity to be acquired for RegulationUp
		SP_REQ_MIN_MW	Min capacity to be acquired for Spin
		AS_REQ_MAX_MW	Max capacity UP to be acquired for RegulationUp,Spin,Non Spin For 2DA Market.
AS Results Ancillary Service Capacity procured and self-scheduled, by AS type, posted for each AS Region. Also posts the sum of the procured and self-scheduled. Posts Hourly for the Day-Ahead (DAM), HASP. and in 15 Minute (RTPD) intervals, by AS type. Also posts Total AS Cost for each AS Region, by AS Type. Results will only post for AS Regions that are binding for that market run.	AS_RESULTS	RU_TOT_CST_PRC	The Total line cost across AS Region for Regulation Up.
		RD_TOT_CST_PRC	The Total line cost across AS Region for Regulation Down.
		SP_TOT_CST_PRC	The Total line cost across AS Region for Spin.
		NS_TOT_CST_PRC	The Total line cost across AS Region for NonSpin.
		NS_PROC_MW	The MW of capacity procured from the AS market bids for NonSpin. The MW of capacity self-provided by market participants.
		NS_SPROC_MW	Total MW of capacity obtained.
		NS_TOT_MW	The MW of capacity procured from the AS market bids for Spin.
		SP_PROC_MW	The MW of capacity self-provided by market participants Total MW of capacity obtained
		SP_SPROC_MW	
		SP_TOT_MW	The MW of capacity procured from the AS market bids for RegulationUp.
		RU_PROC_MW	The MW of capacity self-provided by market participants. Total MW of capacity obtained.

Report/ResultSet	XML Name	XML Data Items	Description
		RU_SPROC_MW	The MW of capacity procured from the AS market bids for RegulationDown.
		RU_TOT_MW	The MW of capacity self-provided by market participants.
		RD_PROC_MW	Total MW of capacity obtained
		RD_SPROC_MW	
		RD_TOT_MW	
Actual Operating Reserves Total Actual Load, AS, and Operating Reserves maintained during delivery.	AS_OP_RSRV	OP_RSRV_ACT_PCT	Total Actual Operating Reserves maintained during delivery.
CRR			
CRR Clearing Prices Congestion Revenue Rights Auction Clearing Prices by PNode for CRR segments.	CRR_CLEARING	ON_PRC OFF_PRC Note : These the XML tags for corresponding data items CRR_MARKET_NAME RESOURCE_NAME START_DATE_TIME END_DATE_TIME REASON	On-peak Price Off-peak Price CRR MARKET NAME APNODE ID START DATE End DATE MARKET TERM
CRR Inventory Congestion Revenue Rights Daily Inventory.	CRR_INVENTORY	ON_MW OFF_MW Note : These are the XML tags for corresponding data items CRR_MARKET_NAME SOURCE SINK RESOURCE_NAME OPTION INVENTORY_DATE_TIME START_DATE_TIME END_DATE_TIME REASON STATUS_TYPE CRR_CATEGORY CRR_NSR CRR_SEGMENT	On-peak capacity Off-peak capacity CRR MARKET NAME Source APNODE Sink APNODE OWNER NAME CRR OPTION INVENTORY DATE START DATE END DATE MARKET TERM CRR Type CRR CATEGORY NSR INDEX SEGMENT ID
PUBLIC BIDS			
Public Bids Clean Bid payloads used as the input in the markets, with certain fields replaced by pseudo data as indicated. Posted for DAM and RTM. Posted at T+90. The Public Bid Data is downloadable to XML and CSV only, for a	PUB_BID	Note: Below structure is common for --GENERATION, LOAD, and INTERTIE. STARTTIME STOPTIME REGISTEREDGENERATOR	 Start time of bid End time of bid Pseudo ID of Resource

Report/ResultSet	XML Name	XML Data Items	Description
single day at a time. Data is available for downloading at midnight on the 90th day after the trading day. The Publications and Revisions log will not create records for the Public Bid data when it is becomes available for downloading on T+90.			
		SCHEDULINGCOORDINATOR	Pseudo ID of SC_ID
		PRODUCTBID	Description of product
		DESCRIPTION	
		MRID	All the possible types like EN, LFD, LFU, NR,
		MARKETPRODUCT	RC,RD,RU,SR
		DESCRIPTION	
		MARKETPRODUCTTYPE	Selfscheduled bid start and end time with the MW.
		BIDSELFSCHED	
		TIMEINTERVALSTART	Bid Schedule with start and
		TIMEINTERVALEND	end time
		SELFSCHEDMW	
		BIDSCHEDULE	
		TIMEINTERVALSTART	Curve details contains X and
		TIMEINTERVALEND	Y axis data.
		BIDPRICECURVE	
		MRID	
		CURVESCHEDDATA	
		XAXISDATA	
		Y1AXISDATA	
CB Public Bids Convergence Bidding Clean Bid payloads used as the input in the markets, with certain fields replaced by pseudo data as indicated. Posted for DAM. Posted at T+90. The Public Bid Data is downloadable to XML and CSV only, for a single day at a time. Data is available for downloading at midnight on the 90th day after the trading day.	PUB_CB_BID		
		STARTTIME	Start time of Virtual bid
		STOPTIME	End time of Virtual bid
		AggregatedPnode	Pseudo ID of APnode
		IndividualPnode	Pseudo ID of Pnode
		VirtualBidType	Supply/Demand Bid
		SCHEDULINGCOORDINATOR	Pseudo ID of SC_ID
		ENERGYPRODUCTBID	Bid Schedule with start and end time
		BIDSCHEDULE	
		TIMEINTERVALSTART	Curve details contains X and Y axis data.
		TIMEINTERVALEND	
		BIDPRICECURVE	
		CURVESCHEDDATA	
		XAXISDATA	
		Y1AXISDATA	
Congestion Revenue Rights (CRR) Public Bids Bids submitted and used in the CRR auction markets, with certain fields replaced by pseudo data as indicated. Posted for the monthly auctions 90 days after the close of markets and seasonal auctions after each relevant quarter has passed. The Public Bid Data is downloadable to XML and CSV only, for a single market at a time.	PUB_CRR_BID		
		STARTTIME	Effective Start Date of the CRR
		STOPTIME	Effective End Date of the CRR
		MARKETTERM	CRR auction type . Valid values are Seasonal or Monthly
		MARKETNAME	CRR auction name
		SOURCEID	Source id

Report/ResultSet	XML Name	XML Data Items	Description
		SINKID	Sink id
		TIMEOFUSE	Time of use of the CRR bid
		MWQUANTITY	The MW Quantity of the bid point
		CRR_PRICE	The Price of the bid point
		CRRBID_ID	CRR Bid identifier
		CRRBIDSEG_ID	The point number in the CRR Bid
		AUCTION_CLOSE_DATE	CRR aution Close date.
ATLAS			
PNode Listing	ATL_PNODE	N/A	All Pricing Node locations in CAISO Markets. For CB, Y/N flag will be added. For CB, Maximum CB MW Limit, with effective start and end dates will be added.
APNode Listing	ATL_APNODE	N/A	All Aggregated Pricing Node locations used in CAISO Markets. For CB , Y/N flag will be added. For CB, Maximum CB MW Limit, with effective start and end dates will be added.
Load Distribution Factors (LDFs)	ATL_LDF	N/A	Typical Load Distribution Factors that map PNodes to APNodes.
Load Aggregation Point Listing	ATL_LAP	N/A	All Load Aggregation Points in CAISO, by type.
Market Resource Listing	ATL_RESOURCE	N/A	List of CAISO Resources and their associated PNode/APNode
Trading Hub Listing	ATL_HUB	N/A	All Trading Hub APNodes in CAISO.
Trading Hub - PNode Mapping	ATL_PNODE_MAP	N/A	Map of all PNodes to each Trading Hub APNode.
AS Region - PNode Mapping	ATL_AS_REGION_MAP	N/A	Map of all PNodes to each Ancillary Services Region.
RUC Zone - PNode Mapping	ATL_RUC_ZONE_MAP	N/A	Map of all PNodes to each Reliability Unit Commitment Zone.
TAC Area – Pnode Mapping	ATL_TAC_AREA	N/A	Map of all Pnodes to each Transmission Access Charge Area.
Intertie Constraint Mapping	ATL_TIEPOINT	N/A	Map of all Intertie Constraints with respective Transmission Interface and TSIN.
Transmission Interface Listing	ATL_TI	N/A	All Transmission Interfaces in CAISO.
Publications and Revisions	ATL_PUB	N/A	List of all OASIS data publication and revisions. Users can track all data

Report/ResultSet	XML Name	XML Data Items	Description
			additions and updates to OASIS through these entries.
OASIS Publication Schedule	ATL_PUB_SCHED	N/A	Expected publication schedule by which all OASIS reports are published.
System Operating Messages	ATL_OSM	N/A	System Operating Messages posted by Severity. Severity : Green = Normal, Red = Emergency, Blue = Urgent
Peak-Off-Peak Definition	ATL_PEAK_ON_OF F	N/A	Posts Hourly Peak/Off-Peak indicator based on the WECC definition.

6. Single URL Query Strings

This section contains examples of all single report URL Examples for XML downloads. For CSV need as resultformat=6 as specified above.

XML Name	Example URL for XML Download
PRICES	
PRC_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_LMP &startdate=20061002&enddate=20061002&market_run_id=DAM&grp_type=ALL_APNODES OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_LMP &startdate=20070508&enddate=20070508&market_run_id=DAM&node=LAPLMG1_7_B2 NOTE: 1. Recommend to use grp_type or node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES. 2. The “end-date” is ignored if the query is to pull “ALL” or “ALL_APNODES” nodes; ie query will return only 1-day’s worth of data for all nodes at a time based on the “start-date” supplied 3. The “end-date” is referenced only when a node is supplied in the query
PRC_INTVL_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_INTVL_LMP&startdate=20061002&enddate=20061002&market_run_id=RTM&grp_type=ALL_APNODES&opr_hr=1 OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_INTVL_LMP &startdate=20061002&enddate=20061002&market_run_id=RTM&node= LAPLMG1_7_B2&opr_hr=1 NOTE: 1. Recommend to use grp_type or node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES. 2. The “end-date” is ignored if the query is to pull “ALL” or “ALL_APNODES” nodes; ie query will return only 1-day’s worth of data for all nodes at a time based on the “start-date” supplied 3. The “end-date” is referenced only when a node is supplied in the query

XML Name	Example URL for XML Download
PRC_HASP_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_HASP_LMP&startdate=20061002&enddate=20061002&market_run_id=HASP&grp_type=ALL_APNODES&opr_hr=1 OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_HASP_LMP &startdate=20061002&enddate=20061002&market_run_id=HASP&node= LAPLMG1_7_B2&opr_hr=1 NOTE: 1. Recommend to use grp_type or node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES. 2. The "end-date" is ignored if the query is to pull "ALL" or "ALL_APNODES" nodes; ie query will return only 1-day's worth of data for all nodes at a time based on the "start-date" supplied 3. The "end-date" is referenced only when a node is supplied in the query .
PRC_AS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_AS &market_run_id=DAM&startdate=20061222&enddate=20061222&anc_type=ALL&anc_region=ALL Note: For HASP replace, 'DAM' with 'HASP'.
PRC_INTVL_AS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_INTVL_AS &market_run_id=RTM&startdate=20061222&enddate=20061222&anc_type=ALL&anc_region=ALL&opr_hr=1
PRC_CNSTR	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CNSTR &market_run_id=DAM&ti_id=ALL&startdate=20061222&enddate=20061222
PRC_FUEL	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FUEL &fuel_region_id=ALL&startdate=20060724&enddate=20060724
PRC_CURR_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CURR_LMP&node=ALL&startdate=20061002&enddate=20061002
PRC_CURR_HUB_LMP **HTML Version:**	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CURR_HUB_LMP&startdate=20091002&enddate=20091002 or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CURR_HUB_LMP An htlm page containing the most current RTD 5-Minute Interval LMP's for the three Trading Hubs is available at: http://oasis.caiso.com/mrtu-oasis/prc_hub_lmp/PRC_HUB_LMP.html A link (to this data is located on the bottom of the OASIS home page. The time interval is posted in the Interval Ending format.
PRC_NOMOGRAM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_NOMOGRAM &market_run_id=DAM&nomogram_id=ALL&startdate=20081026&enddate=20081026
PRC_RTM_NOMOGRAM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_RTM_NOMOGRAM&market_run_id=RTM&nomogram_id=ALL&startdate=20090526&enddate=20090526
PRC_RTM_FLOWGATE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_RTM_FLOWGATE&market_run_id=RTM&ti_id=ALL&startdate=20090526&enddate=20090526
PRC_DS_REF	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_DS_REF &startdate=20110201&market_run_id=DAM&grp_type=ALL

XML Name	Example URL for XML Download
	OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_DS_REF &startdate=20110201&market_run_id=DAM&node=LAPLMG1_7_B2 NOTE: Prices are the same for the entire quarter. Recommend to use grp_type or single node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES.
CB_NODAL_GRP_CNSTR_PRC	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CB_NODAL_GRP_CNSTR_PRC&startdate=20101113&enddate=20101113&resultformat=5
PRC_FLEX_RAMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FLEX_RAMP&market_run_id=DAM&startdate=20110501 or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FLEX_RAMP&market_run_id=RTPD&startdate=20110501&grp_type=ALL or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FLEX_RAMP&market_run_id=RTPD&startdate=20110501&grp_type=CURR or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FLEX_RAMP&market_run_id=RTD&startdate=20110501&grp_type=ALL or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_FLEX_RAMP&market_run_id=RTD&startdate=20110501&grp_type=CURR
PRC_CD_INTVL_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CD_INTVL_LMP&startdate=20061002&enddate=20061002&market_run_id=RTM&grp_type=ALL_APNODES or http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CD_INTVL_LMP &startdate=20061002&enddate=20061002&market_run_id=RTM&node= LAPLMG1_7_B2
PRC_CD_RTM_FLOWGATE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CD_RTM_FLOWGATE&market_run_id=RTM&ti_id=ALL&startdate=20090526&enddate=20090526
PRC_CD_RTM_NOMOGRAM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_CD_RTM_NOMOGRAM&market_run_id=RTM&nomogram_id=ALL&startdate=20090526&enddate=20090526
TRANSMISSION	
TRNS_CURR_USAGE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=TRNS_CURR_USAGE &ti_id=ALL&ti_direction=ALL&startdate=20061223&enddate=20061223
TRNS_ATC	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=TRNS_ATC &market_run_id=DAM&ti_id=ALL&ti_direction=ALL&startdate=20061223&enddate=20061223
TRNS_OUTAGE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=TRNS_OUTAGE &ti_id=ALL&ti_direction=ALL&startdate=20061223&enddate=20061223
TRNS_USAGE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=TRNS_USAGE &market_run_id=DAM&ti_id=ALL&ti_direction=ALL&startdate=20061223&enddate=20061223

PRC_MPM_ LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_LMP &startdate=20061002&enddate=20120102&market_run_id=DAM&grp_type=ALL_APNODES OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_LMP&startdate=20111215&enddate=20111215&market_run_id=DAM&node=3EMIDIO_6_N001 NOTE: 4. Recommend to use grp_type or node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES. 5. The "end-date" is ignored if the query is to pull "ALL" or "ALL_APNODES" nodes; ie query will return only 1-day's worth of data for all nodes at a time based on the "start-date" supplied 6. The "end-date" is referenced only when a node is supplied in the query
PRC_MPM_RTM_LMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_RTM_LMP&startdate=20111215&enddate=20111215&market_run_id=HASP&grp_type=ALL_APNODES&opr_hr=24 OR http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_RTM_LMP&startdate=20120105&enddate=20120105&market_run_id=HASP&node=3EMIDIO_6_N001&opr_hr=1 NOTE: 1. Recommend to use grp_type or node only. Grp_type will give all the APNODES or ALL NODES groups and node can enable users to select individual APNODES or PNODES. 2. The "end-date" is ignored if the query is to pull "ALL" or "ALL_APNODES" nodes; ie query will return only 1-day's worth of data for all nodes at a time based on the "start-date" supplied 3. The "end-date" is referenced only when a node is supplied in the query
PRC_MPM_ NOMOGRAM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_NOMOGRAM&market_run_id=DAM&nomogram_id=ALL&startdate=20120106&enddate=20120106
PRC_MPM_RTM_NOMOGRAM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_RTM_NOMOGRAM&market_run_id=HASP&nomogram_id=ALL&startdate=20120111&enddate=20120111
PRC_MPM_NOMOGRAM_CMP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_NOMOGRAM_CMP&market_run_id=DAM&startdate=20120106&enddate=20120106
PRC_MPM_CNSTR	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_CNSTR&market_run_id=DAM&ti_id=ALL&startdate=20120105&enddate=20120105
PRC_MPM_RTM_FLOWGATE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_RTM_FLOWGATE&market_run_id=HASP&ti_id=ALL&startdate=20120105&enddate=20120105
PRC_MPM_CNSTR_CM	http://oasis.caiso.com/mrtu-

P	oasis/SingleZip?queryname=PRC_MPM_CNSTR_CMP&market_run_id=DAM&startdate=20120201&enddate=20120201
PRC_MPM_REF_BUS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_REF_BUS&market_run_id=DAM&startdate=20120105&enddate=20120105
PRC_MPM_RTM_REF_BUS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_MPM_RTM_REF_BUS&market_run_id=HASP&startdate=20120105&enddate=20120105
PRC_GHG_ALLOWANCE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=PRC_GHG_ALLOWANCE&startdate=20120603&enddate=20120615
SYSTEM DEMAND	
SLD_FCST_PEAK	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=SLD_FCST_PEAK&startdate=20061219&enddate=20061219
SLD_FCST	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=SLD_FCST&market_run_id=DAM&startdate=20061219&enddate=20061219
SLD_REN_FCST	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=SLD_REN_FCST&startdate=20120603&enddate=20120615&market_run_id=DAM
ENERGY	
ENE_SLRS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_SLRS&market_run_id=DAM&startdate=20070419&enddate=20070419&tac_zone_name=ALL&schedule=ALL
ENE_EA	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_EA&energy_type=ALL&opr_interval=ALL&startdate=20061002&enddate=20061002
ENE_MPM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_MPM&market_run_id=DAM&startdate=20070429&enddate=20070429
CMMT_RMR	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CMMT_RMR&market_run_id=DAM&startdate=20061223&enddate=20061223
ENE_DISP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_DISP&startdate=20061223&enddate=20061223
ENE_LOSS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_LOSS&market_run_id=DAM&startdate=20061223&enddate=20061223
CMMT_RA_MLC	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CMMT_RA_MLC&market_run_id=DAM&startdate=20061226&enddate=20061226
ENE_CB_AWARDS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_CB_AWARDS&startdate=20110201&enddate=20110201
ENE_CB_CLR_AWARDS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_CB_CLR_AWARDS&startdate=20110201&enddate=20110201
ENE_CB_MKT_SUM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_CB_MKT_SUM&startdate=20110201&enddate=20110201
CB_NODAL_LIMITS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CB_NODAL_LIMITS&startdate=20101213&enddate=20101213&node_id=RNCHSECO_2_N108&resultformat=5
ENE_CD_SLRS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ENE_CD_SLRS&market_run_id=RTM&startdate=20070419&enddate=20070419&tac_zone_name=ALL&schedule=ALL
AGGR_OUTAGE_SCH	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=AGGR_OUTAGE_SCH&startdate=20120525&fuel_category=Renewable&trading_hub=NP15
ANCILLARY	
AS_REQ	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=AS_REQ&startdate=20070412&enddate=20070412&market_run_id=DAM&anc_type=ALL&anc_region=ALL

AS_RESULTS	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=AS_RESULTS &market_run_id=DAM&anc_type=ALL&anc_region=ALL&startdate=20070422&enddate=20070422 Note: For HASP replace, 'DAM' with 'HASP'.
AS_OP_RSRV	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=AS_OP_RSRV &startdate=20061217&enddate=20061217
CRR	
CRR_CLEARING	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CRR_CLEARING&startdate=20090101&enddate=20090101&market_name=SAT Auction 2&market_term=ALL&time_of_use=ALL
CRR_INVENTORY	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=CRR_INVENTORY&startdate=20081001&enddate=20081001&**market_name=ALLOC_AN_20081001_20081231_T2**&market_term=ALL&time_of_use=ALL
PUBLICBIDS	
PUB_BID	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_RTM_GRP&startdate=20071105 (for RTM) or http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_DAM_GRP&startdate=20071105 (for DAM)
PUB_CB_BID	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CB_DAM_GRP&startdate=20110205 (for DAM)
PUB_CRR_BID	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CRR_BID_SEASONAL_GRP&startdate=20120103 http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CRR_BID_MONTHLY_GRP&startdate=20120102
ATLAS	
ATL_PNODE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_PNODE &Pnode_id=12THST_6_N101&Pnode_type=ALL&startdate=20061002&enddate=20061002
ATL_APNODE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_APNODE &APnode_type=ALL&startdate=20061002&enddate=20061002
ATL_LDF	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_LDF&apnode_id=AGRICO_6_PL3N5_APND&startdate=20061002&enddate=20061002
ATL_LAP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_LAP &APnode_type=ALL&startdate=20061002&enddate=20061002
ATL_RESOURCE	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_RESOURCE &startdate=20061002&enddate=20061002&resource_id=8MILE_2_V200LD&agge_type=ALL&resource_type=ALL
ATL_HUB	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_HUB &startdate=20061002&enddate=20061002
ATL_PNODE_MAP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_PNODE_MAP&pnode_id=KEARNY_7_KY2D&startdate=20061002&enddate=20061002
ATL_AS_REGION_MAP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_AS_REGION_MAP&as_region_id=A54_CNTR&startdate=20061002&enddate=20061002
ATL_RUC_ZONE_MAP	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_RUC_ZONE_MAP &startdate=20061002&enddate=20061002
ATL_TAC_AREA	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_TAC_AREA_MAP &startdate=20061002&enddate=20061002
ATL_TIEPOINT	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_TIEPOINT &resource_type=ALL&startdate=20061002&enddate=20061002
ATL_TI	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_TI

	&Ti_type=ALL&wecc_path=ALL&startdate=20061002&enddate=20061002
ATL_PUB	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_PUB&startdate=20061002&enddate=20061002&market_run_id=DAM&oasis_section=ALL&status=ALL&version=ALL
ATL_PUB_SCHED	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_PUB_SCHED&startdate=20080219&enddate=20080219&market_run_id=DAM&oasis_section=ALL&publication_type=ALL
ATL_OSM	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_OSM &msg_severity=ALL&startdate=20011002&enddate=20011031
ATL_PEAK_ON_OFF	http://oasis.caiso.com/mrtu-oasis/SingleZip?queryname=ATL_PEAK_ON_OFF&startdate=20081026&enddate=20081026

7. Group Report Definitions

This section contains all GroupIDs and corresponding reports.

GroupID	Reports In Group	Market Type	Report XML Names
DAM_LMP_GRP	Locational Marginal Prices (LMP)	DAM	PRC_LMP (Note: 4 files will be created LMP, MCC, MCE, MCL for the trade date & will be cached for all nodes)
RUC_LMP_GRP	Locational Marginal Prices (LMP)	RUC	PRC_LMP (Note: 1 file will be created LMP for the trade date & will be cached for all nodes)
HASP_LMP_GRP	HASP Locational Marginal Prices (LMP)	HASP	PRC_HASP_LMP (Note: Hourly 4 intervals cached files for trade date & will be cached for all nodes)
RTM_LMP_GRP	Interval Locational Marginal Prices (LMP)	RTM	PRC_INTVL_LMP (Note: Hourly 12 intervals cached files for trade date & will be cached for all nodes)
DAM_PRC_AS_GRP	AS Clearing Prices	DAM	PRC_AS (Note: Daily cached files for trade date & will be cached for all AS Regions)
HASP_PRC_AS_GRP	AS Clearing Prices	HASP	PRC_AS (Note: Daily cached files for trade date & will be cached for all AS Regions)
RTM_PRC_AS_GRP	Interval AS Clearing Prices	RTM	PRC_INTVL_AS (Note: Hourly 4 intervals cached files for trade date & will be cached for all AS Regions)
DAM_TRNS_GRP	Transmission Interface Usage Market Available Transmission Capacity	DAM DAM	TRNS_USAGE TRNS_ATC
HASP_TRNS_GRP	Transmission Interface Usage Market Available Transmission Capacity	HASP HASP	TRNS_USAGE TRNS_ATC
DAM1_GRP	TAC Area Demand Forecast System Load and Resource Schedules Market Power Mitigation	DAM DAM DAM	SLD_FCST ENE_SLRS ENE_MPM CMMT_RMR

	Status RMR Marginal Losses	DAM	ENE_LOSS
RTM1_GRP	TAC Area Load Forecast System Load and Resource Schedules	RTM RTM	SLD_FCST ENE_SLRS
HASP1_GRP	System Load and Resource Schedules Market Power Mitigation Status RMR Marginal Losses	HASP HASP HASP HASP	ENE_SLRS ENE_MPM CMMT_RMR ENE_LOSS
POST1_GRP	Expected Energy Exceptional Dispatch	N/A	ENE_EA ENE_DISP
DAM_AS_GRP	AS Requirements AS Results	DAM DAM	AS_REQ AS_RESULTS
HASP_AS_GRP	AS Requirements AS Results	HASP	AS_REQ AS_RESULTS
CRR1_GRP (Deprecated)	CRR Clearing Prices CRR Inventory	N/A	CRR_CLEARING CRR_INVENTORY
PUB_DAM_GRP	Public Bids	DAM	PUB_BID
PUB_RTM_GRP	Public Bids	RTM	PUB_BID
CURR_LMP_GRP	Current interval Price	RTM	PRC_CURR_LMP
DAM_SD_PRC_GRP	Constraint Shadow Prices Nomogram/Branch Shadow Prices	DAM	PRC_CNSTR PRC_NOMOGRAM

HASP_SD_PRC_GRP	Constraint Shadow Prices Nomogram/Branch Shadow Prices	HASP	PRC_CNSTR PRC_NOMOGRAM
RTM_SD_PRC_GRP	Constraint Shadow Prices Nomogram/Branch Shadow Prices	RTM	PRC_CNSTR PRC_NOMOGRAM
PUB_CB_DAM_GRP	Public CB Bids	DAM	PUB_CB_BID
CB_REF_PRC_GRP	Reference Prices	DAM	PRC_DS_REF (Note: File will be created for Supply & Demand Prices for the effective date ranges (quarterly) for all nodes.)
CB_CLR_DAM_GRP	Net Cleared Awards	DAM	ENE_CB_CLR_AWARDS
CB_NODAL_LMT_GRP	Nodal Limit MW values	DAM	CB_NODAL_LIMITS
DAM_FLEX_RAMP_GRP	System ramping nomogram results from DAM market run	DAM	PRC_FLEX_RAMP
RTPD_FLEX_RAMP_GRP	System ramping nomogram results from RTPD market run	RTPD	PRC_FLEX_RAMP
RTD_FLEX_RAMP_GRP	System ramping nomogram results from RTD market run	RTD	PRC_FLEX_RAMP
DAM_MPM_LMP_GRP	MPM Locational Marginal Prices (LMP	DAM	PRC_MPM_LMP
HASP_MPM_LMP_GRP	MPM HASP Locational Marginal Prices (LMP)	HASP	PRC_MPM_RTM_LMP

DAM_MPM_SD_PRC_GRP	MPM Constraint Shadow Prices MPM Constraint Competitive Paths MPM Nomogram/Branch Shadow Prices MPM Nomogram/Branch Competitive Paths	DAM	PRC_MPM_CONSTR PRC_MPM_CONSTR_CMP PRC_MPM_NOMOGRAM PRC_MPM_NOMOGRAM_CMP
HASP_MPM_SD_PRC_GRP	MPM Constraint Shadow Prices MPM Nomogram/Branch Shadow Prices	HASP	PRC_MPM_RTM_FLOWGATE PRC_MPM_RTM_NOMOGRAM
PUB_CRR_BID_SEASONAL_GRP	Congestion Revenue Rights (CRR) Public Bids From the Annual Auction	SEASONAL	PUB_CRR_BID
PUB_CRR_BID_MONTHLY_GRP	Congestion Revenue Rights (CRR) Public Bids From the Monthly Auction	MONTHLY	PUB_CRR_BID
AGGR_OUTAGE_SCH_GRP	Aggregated Generation Outages data	N/A	AGGR_OUTAGE_SCH

8. Group URL Query Strings

This section contains examples of all Group report URL Examples for XML Downloads. For CSV need as resultformat=6 as specified above.

For the HASP and RTM queries that indicate the opr_hr value, multiple entries and "All" are not allowable. The opr_hr field is a required field. This design significantly reduces the downloading of data that has been previously posted/downloaded.

Group ID	Example URL for XML Download
PRICES	
DAM_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_LMP_GRP&startdate=20071105
RUC_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RUC_LMP_GRP&startdate=20071105
HASP_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_LMP_GRP&startdate=20071105&opr_hr=01
RTM_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RTM_LMP_GRP&startdate=20071105&opr_hr=01
DAM_PRC_AS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_PRC_AS_GRP&startdate=20071105
HASP_PRC_AS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_PRC_AS_GRP&startdate=20071105

Group ID	Example URL for XML Download
DAM_TRNS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_TRNS_GRP&startdate=20061002
HASP_TRNS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_TRNS_GRP&startdate=20061002
DAM1_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM1_GRP&startdate=20061002
RTM1_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RTM1_GRP&startdate=20061002
HASP1_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP1_GRP&startdate=20061002
POST1_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=POST1_GRP&startdate=20061002
DAM_AS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_AS_GRP&startdate=20061002
HASP_AS_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_AS_GRP&startdate=20061002
CRR1_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CRR1_GRP&startdate=20061002
PUB_DAM_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_DAM_GRP&startdate=20071105
PUB_RTM_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_RTM_GRP&startdate=20071105
CURR_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CURR_LMP_GRP&startdate=20071105 or http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CURR_LMP_GRP
DAM_SD_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_SD_PRC_GRP&startdate=20081026
HASP_SD_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_SD_PRC_GRP&startdate=20081026
RTM_SD_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RTM_SD_PRC_GRP&startdate=20081026
PUB_CB_DAM_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CB_DAM_GRP&startdate=20110201
CB_REF_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CB_REF_PRC_GRP&startdate=20110201
CB_CLR_DAM_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CB_CLR_DAM_GRP&startdate=20110201
CB_NODAL_LMT_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=CB_NODAL_LMT_GRP&startdate=20101213&resultformat=5
DAM_FLEX_RAMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_FLEX_RAMP_GRP&startdate=20110501
RTPD_FLEX_RAMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RTPD_FLEX_RAMP_GRP&startdate=20110501
RTD_FLEX_RAMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=RTD_FLEX_RAMP_GRP&startdate=20110501
DAM_MPM_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_MPM_LMP_GRP&startdate=20120102
HASP_MPM_LMP_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_MPM_LMP_GRP&startdate=20120102&opr_hr=01
DAM_MPM_SD_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=DAM_MPM_SD_PRC_GRP&startdate=20120102
HASP_MPM_SD_PRC_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=HASP_MPM_SD_PRC_GRP&startdate=20120102
PUB_CRR_BID_SEASONAL_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CRR_BID_SEASONAL_GRP&startdate=20120103

Group ID	Example URL for XML Download
PUB_CRR_BID_MTHLY_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=PUB_CRR_BID_MONTHLY_GRP&startdate=20120102
AGGR_OUTAGE_SCH_GRP	http://oasis.caiso.com/mrtu-oasis/GroupZip?groupid=AGGR_OUTAGE_SCH_GRP&startdate=20120525

9. Namespace domain reference

This section contains the namespace domain to be used for each environment:

Environment	Namespace Domain
Production	oasis.caiso.com (where oasissta.caiso.com is no longer relevant)
MAP-Stage	oasismap.caiso.com
Stage	oasismktsim.caiso.com

10. Schema Files Changes

This section contains the summary of the schema changes involved in the OASIS 6.1.0 release.

Schema File Name	Change Description
OASISReport.xsd	Updated to include new report name enumeration to the OASISReportType, new enumeration values to OASISDataItems
OASISBid.xsd	No Change
OASISCBBid.xsd	No Change
OASISMaster.xsd	No Change
OASISCRRPublicBid.xsd	New xsd file for CRR Bid data