Open Access Same-time Information System (OASIS) Frequently Asked Questions (FAQ)

QUESTION ONE: Where can users find additional information about the OASIS application?

Answer: There are three primary resources that provide additional information and training about OASIS:

1. The California ISO provides a Computer Based Training (CBT) overview of OASIS. This CBT is located in our Learning Center on CAISO.com under Participate > Learning Center > Reference.

2. Section 12 of the Market Instruments Business Process Manual (BPM) provides more information regarding the reports available in OASIS. This BPM is located on CAISO.com under Rules > Business Process Manuals > BPM Library > Market Instruments.

3. The California ISO Developer Site https://developer.caiso.com contains the OASIS Interface Specification, additional API URL Examples documents, and our Acceptable Use Policy (AUP) information.
   a. Note: Developer Site access requires Users to sign up with an ISO recognized @domain email address and a detailed justification. (e.g. @yahoo.com, @hotmail.com, @gmail.com, etc. would be subject to rejection)

QUESTION TWO: How long is data available on the OASIS website?

Answer: The OASIS data retention for the majority of the reports available is the previous 39 months.

QUESTION THREE: When generating a report that allows pulling a range in dates, are there limitations to how many days a user can generate the report for?

Answer: Yes. Note that differing reports have differing date/time ranges available to generate due to the amount of data returned. One report may limit a user to 1 full day, while another may limit a user to 31 days. In some cases, this will cause the report generation to fail (a notice should appear at the bottom of the OASIS website), while other reports may still produce a report that provides data that will begin from the starting point and run to the range limit. If no data is returned in a user's report, it is suggested to reduce the amount of variables being reporting on. For example: nodes, dates, intervals, etc.

QUESTION FOUR: Does OASIS data match the data available on Today's Outlook?

Answer: The data provided on OASIS does not directly match the data found on Today's Outlook. Today's Outlook is designed to provide data in a summarized manor and is Telemetry based, while OASIS is Market output based.

QUESTION FIVE: How can a user utilize the OASIS Application Programming Interface (API) to download a large amount of data?

Answer: A user can obtain a large amount of data in an automated way by utilizing the OASIS API queries. The questions below represent a few examples on how to construct these queries.

Below are OASIS API Questions with Examples

QUESTION SIX: How can a user obtain the CAISO Demand Forecast via API and construct a query?

Answer: For the trade date range the user is seeking to download, the user can simply change the dates accordingly (highlighted in yellow). If the user wants the data returned in XML, they should delete the red text from the query (resultformat=6&). Highlighted in blue is the "Market/Process"; if the user wants to retrieve a different one, they can simply change the value to one of the following (2DA, 7DA, DAM, ACTUAL, RTM).

The query below will retrieve all the demand forecast results for DAM on 4/15/2023:
http://oasis.caiso.com/oasisapi/SingleZip?queryname=SLD_FCST&market_run_id=DAM&resultformat=6&startdatetime=20230415T07:00-0000&enddatetime=20230416T07:00-0000&version=1

QUESTION SEVEN: If a user wants to obtain the Wind and Solar Forecast via API, how would they construct a query?

Answer: For the trade date range the user is looking to download, the user can simply change the dates accordingly (highlighted in yellow). If the user wants the data returned in XML, they should delete the red text from the query (resultformat=6&). Highlighted in blue is the "Market/Process"; if

the user wants to retrieve a different one, they can simply change the value to one of the following (DAM, ACTUAL, HASP, RTD, RTPD).

The query below will retrieve all the demand forecast results for DAM on 4/15/2023:
http://oasis.caiso.com/oasisapi/SingleZip?resultformat=6&queryname=SLD_REN_FCST&version=1&market_run_id=DAM&startdatetime=20230415T07:00-0000&enddatetime=20230416T07:00-0000

The sample query below will retrieve all the demand forecast results for RTPD on 4/15/23 for HE1 through HE7:
http://oasis.caiso.com/oasisapi/SingleZip?resultformat=6&queryname=SLD_REN_FCST&version=1&market_run_id=RTPD&startdatetime=20230415T07:00-0000&enddatetime=20230415T14:00-0000

QUESTION EIGHT: If a user wants to obtain the 5-minute Real-Time Dispatch (RTD) Locational Marginal Price's via API, how would they construct a query?

Answer:

Figure 1 OASIS Interval Locational Marginal Prices Report

This query will provide the same results as the Interval Locational Marginal Prices Report in OASIS (Figure 1); the only important parameters are highlighted in the sample query below.

If the user wants to target a given hour, simply move the Greenwich Mean Time (GMT) offset accordingly (highlighted in yellow). If the user wants data returned in Extensive Markup Language (XML), delete the red text from the query (resultformat=6&). Highlighted in blue are the nodes. If the user is looking to retrieve all nodes, simply replace the last section in query from *node=NODENAME*, to *grp_type=ALL*.

Remember, when retrieving ALL, the user is only able to retrieve **one hour** for a given trade date at a time.

The sample query below will retrieve all the hours that are available for the 4/1/2023 trade date:
http://oasis.caiso.com/oasisapi/SingleZip?queryname=PRC_INTVL_LMP&startdatetime=20230401T07:00-0000&enddatetime=20230402T07:00-0000&version=2&resultformat=6&market_run_id=RTM&node=ELAP_NEVP-APND,ELAP_PACWAPND,ELAP_PACE-APND,MALIN_5_N101

QUESTION NINE: If a user wants to obtain the Day-Ahead Locational Marginal Price's via API, how would they construct a query?

Answer:

Figure 2 OASIS Locational Marginal Prices Report

This query will provide the same results as the Locational Marginal Prices Report in OASIS (Figure 2); the only important parameters are highlighted in the sample query below.

If the user wants to target a given hour, simply move the GMT offset accordingly (highlighted in yellow). If the user wants data returned in XML, delete the red text from the query (resultformat=6&). Highlighted in blue are the nodes. If the user is looking to retrieve all nodes, simply replace the last section in query from *node=NODENAME*, to *grp_type=ALL*.

Remember, when retrieving ALL, the user is only able to retrieve **one trade date** at a time.

The sample query below will retrieve all the hours that are available for the 4/2/2023 trade date:
http://oasis.caiso.com/oasisapi/SingleZip?resultformat=6&queryname=PRC_LMP&version=12&startdatetime=20230402T07:00-0000&enddatetime=20230403T07:00-0000&market_run_id=DAM&node=0096WD_7_N001,10TH_STW_1_1LNODE

QUESTION TEN: If a user wants to obtain the Fifteen Minute Market (FMM) Locational Marginal Price's via API, how would they construct a query?

Answer:

Figure 3 OASIS FMM Locational Marginal Prices Report

This query will provide the same results as the FMM Locational Marginal Prices report in OASIS (Figure 3); the only important parameters are highlighted in the sample query below.

If the user wants to target a given hour, simply move the GMT offset accordingly (highlighted in yellow). If the user wants data returned in XML, delete the red text from the query (resultformat=6&). Highlighted in blue are the nodes. If the user is looking to retrieve all nodes, simply replace the last section in query from *node=NODENAME*, to *grp_type=ALL*.

Remember, when retrieving ALL, the user is only able to retrieve **one trade date** at a time.

The sample query below will retrieve all the hours that are available for 4/21/2023 trade date:
http://oasis.caiso.com/oasisapi/SingleZip?queryname=PRC_RTPD_LMP&startdatetime=20230421 T07:00-0000&enddatetime=20230422T07:00- 0000&version=2&resultformat=6&market_run_id=RTPD&node=4C687_1_B1

QUESTION ELEVEN: Is there a quick way to construct an OASIS API for any specific report?

Answer: A user can generate a quick template API for any report by utilizing the OASIS User Interface (UI). To do so, one would need to follow the provided steps.

1. Go to the OASIS UI. http://oasis.caiso.com/mrioasis/logon.do

2. Navigate to a specific OASIS report of interest. In this example, the "AS Requirements" report was accessed by selecting the "ANCILLARY SERVICES" tab, and subsequent AS Requirements option from the drop down that follows.
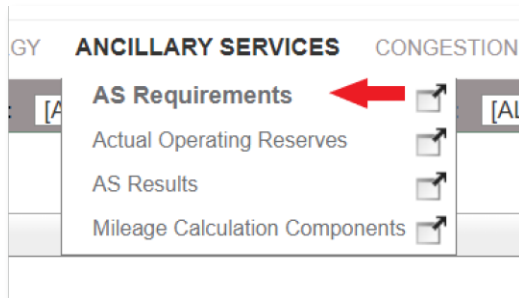

Figure 4 OASIS AS Requirements Report

3. Select the desired parameters for the report. For the example in Figure 5, the entire day of Jun 6th was selected by inputting From: "06/08/2023" To: "06/08/2023" (Note: A user can select the calendar icon next to each date entry to select the date), Market/Process: "2DA", Region: "ALL", AS Type: "ALL", and then pressing the Apply button.
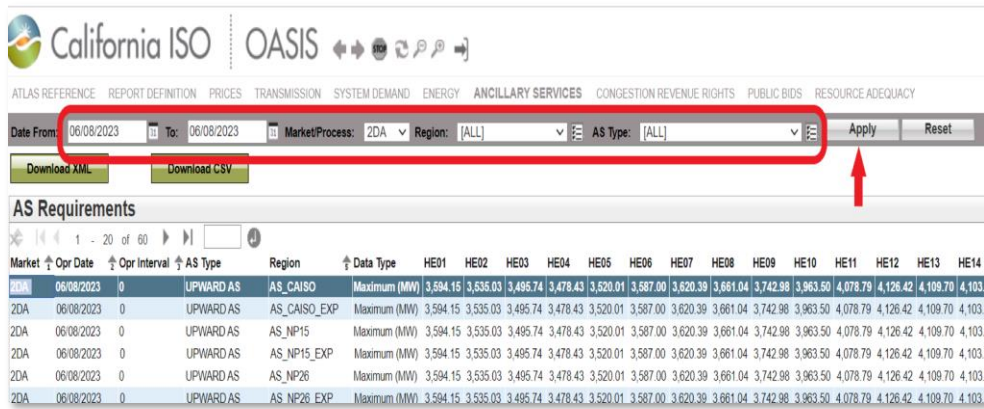
Figure 5 OASIS AS Requirements Report

4. Once a report is generated, select the Download XML or the Download CSV dependent on your desired outcome. In this example, Download CSV was selected.
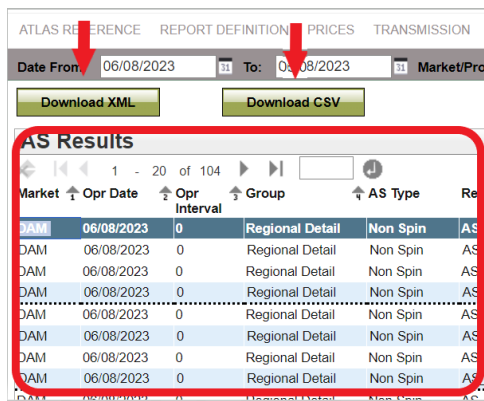

Figure 6 OASIS AS Results Report Downloading

5. A pop up will appear showing the option to click on a zip file with the desired report. Instead, select and copy the entire address circled in red below.
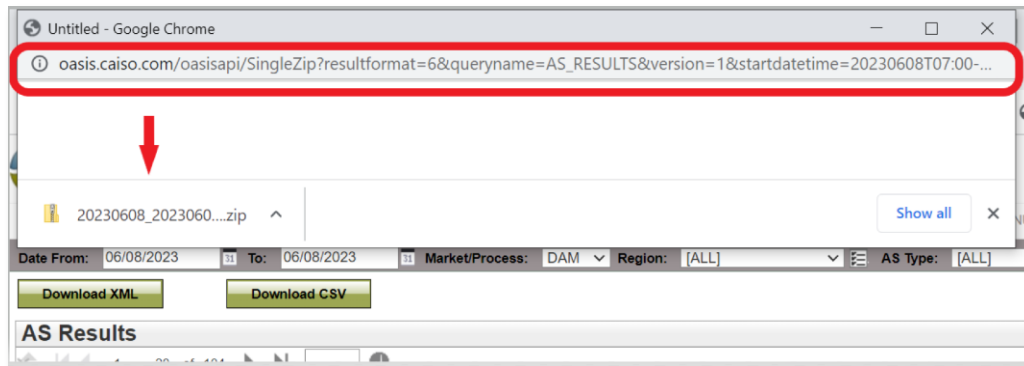

Figure 7 OASIS AS Results Report Zip File

6. Below is the pasted address we just copied in our example:
http://oasis.caiso.com/oasisapi/SingleZip?resultformat=6&queryname=AS_RESULTS&version=1&startdatetime=20230608T07:00-0000&enddatetime=20230609T07:00-0000&market_run_id=DAM&anc_type=ALL&anc_region=ALL

This can now be used as your new template API for this report. By editing this http:// (such as Date, Time, etc...) as shown by examples provided in the previous questions and inputting it into a browser, you will be able to pull a desired report. **[REMINDER: The API uses GMT for its Time Zone]**

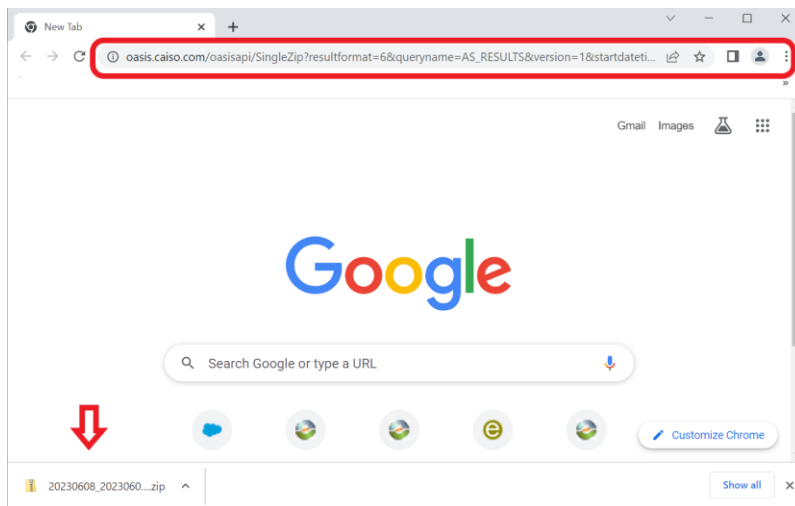7. When the link is pasted into a Brower and the search is initiated, a zip file will generate with the desired report data.

Figure 8 OASIS Zip File in Browser Search