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**MSRS Report Format Documentation**

**Hydro Peak Period Average LMP Details**

**Version 1**

Revision History

|  |  |  |
| --- | --- | --- |
| **DATE** | **Revision** | **Description** |
| 10/1/2025 | 1 | Initial Distribution |

# Report

**MSRS** Report Name: Hydro Peak Period Average LMP Details

Report short name for User Interface: Hydro Peak Period Average LMP Details

Download File Name Abbreviation: HydroAvLMP

Data Granularity: Hourly

Frequency: Updated daily

Range Displayed on Report: Start Date through End Date

# Supported Billing Line Items

# Report Content Summary

This report displays the supporting details to calculate a hydro generation unit’s on-peak and off-peak Hydro Average LMP. The on-peak and off-peak Hydro Average LMPs are used in the calculation of hydro opportunity costs and can be found on the Balancing Secondary Reserve Credits report, Balancing Synchronized Reserve Credits report, and the Regulation Market Lost Opportunity Cost Credits report.

# Summary of Changes and Special Logic

* The plant availability indicator will be displayed if the market participant account has ownership for all of the hydro units in the plant as modeled in the energy market model.

# Report Columns

The following columns will appear in the body of the report:

|  |  |  |  |
| --- | --- | --- | --- |
| **Online and CSV Column Name** | **XML Column Name** | **Column Number** | **Data Type** |
| Customer ID | CUSTOMER\_ID | 4000.01 | INTEGER |
| Customer Code | CUSTOMER\_SHORT | 4000.02 | VARCHAR2(6) |
| EPT Hour Ending | EPT\_HOUR\_ENDING | 4000.05 | VARCHAR2(40)  mm/dd/yyyy HH24 format  (Displays first hour of the day as hour 1 and last hour of the day as hour 24) |
| GMT Hour Ending | GMT\_HOUR\_ENDING | 4000.06 | VARCHAR2(40)  mm/dd/yyyy HH24 format  (Displays first hour of the day as hour 1 and last hour of the day as hour 00 of the following day) |
| Unit ID | UNIT\_ID | 4000.63 | NUMBER |
| Unit Name | UNIT\_NAME | 4000.64 | VARCHAR2(60) |
| Plant Id | PLANT\_ID | 4000.71 | NUMBER |
| RT Generation MW | RT\_GEN\_MW | 3000.33 | NUMBER(12,6) |
| RT Unit Status | RT\_UNIT\_STATUS | 4000.16 | NUMBER(1,0) |
| Positive MW Threshold | POS\_MW\_THRESHOLD | 4001.75 | NUMBER(12,3) |
| Negative MW Threshold | NEG\_MW\_THRESHOLD | 4001.76 | NUMBER(12,3) |
| On Peak Indicator | ON\_PEAK\_IND | 4000.7 | NUMBER(1,0) |
| RT Generator LMP ($/MWh) | RT\_GENERATOR\_LMP | 3000.25 | NUMBER(12,6) |
| Available Unit Offline Indicator | AVAIL\_UNIT\_OFFLINE\_IND | 4000.73 | NUMBER(1,0) |
| Plant Availability Indicator | PLANT\_AVAIL\_IND | 4000.76 | NUMBER(1,0) |
| Version | VERSION | 4000.07 | VARCHAR2(12) |

# CSV Report Example

See Excel file titled “Hydro Peak Period Average LMP Details CSV Format.csv”

# XML Report Example

See XML file titled “Hydro Peak Period Average LMP Details XML Format.xml”

# Supporting Calculations

On Peak Indicator (4000.7) = 1 when the EPT Hour Ending is an on-peak (08 – 23) hour.

On Peak Indicator (4000.7) = 0 when the EPT Hour Ending is an off-peak (01 – 07, 24) hour.

RT Unit Status (4000.16) = 1 when the unit is available, otherwise 0.

Available Unit Offline Indicator (4000.73) = 1 when RT Generation MW (3000.33) <= Positive MW Threshold (4001.75) and RT Generation MW (3000.33) >= Negative MW Threshold (4001.76) and RT Unit Status (4000.16) = 1, otherwise Available Unit Offline Indicator (4000.73) = 0

Plant Availability Indicator (4000.76) = 1 when any unit at the plant has Available Unit Offline Indicator (4000.73) = 1

Plant Availability Indicator (4000.76) = 0 when all units at the plant have Available Unit Offline Indicator (4000.73) = 0

On Peak Hydro Avg LMP = Average (RT Generator LMP (3000.25)) where On Peak Indicator (4000.70) = 1 and Plant Availability Indicator (4000.76) = 1

Off Peak Hydro Avg LMP = Average (RT Generator LMP (3000.25)) where On Peak Indicator (4000.70) = 0 and Plant Availability Indicator (4000.76) = 1