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**MSRS Report Format Documentation**

**Energy Market and Congestion Loss Charge Details**

**Version 1**

Revision History

|  |  |  |
| --- | --- | --- |
| **Date** | **Revision** | **Description** |
| 04/01/2018 | 1 | Initial Distribution |

# Report

**MSRS** Report Name:Energy Market and Congestion Loss Charge Details

Report short name for User Interface: Energy Market and Congestion Loss Charge Details

Download File Name Abbreviation: EnMktConLs

Data Granularity: Sub-Hourly

Frequency: Updated Daily

Range Displayed on Report: Start Date through End Date

# Supported Billing Line Items

* Day-ahead Spot Market Energy (1200)
* Balancing Spot Market Energy (1205)
* DA Transmission Congestion (1210)
* Balancing Transmission Congestion (1215)
* DA Transmission Losses (1220)
* Balancing Transmission Losses (1225)

# Report Content Summary

This report that provides sub-hourly values for a customer’s energy market activity; including spot market energy charges, implicit congestion charges and implicit loss charges.

# Summary of Changes and Special Logic

* The date range total row will only appear in the online version of the report. It will not appear in the CSV and XML versions of the report.

# 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\_CODE | 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) |
| EPT Interval Ending | EPT\_INTERVAL\_ENDING | 4001.40 | VARCHAR2(40)  mm/dd/yyyy HH24:MM format  (Displays first interval of the day as hour 0 minute 05 and last interval of the day as hour 24 minute 00) |
| GMT Interval Ending | GMT\_INTERVAL\_ENDING | 4001.41 | VARCHAR2(40)  mm/dd/yyyy HH24:MM format  (Displays first interval of the day in relation to EPT interval as hour 04 minute 05 or hour 05 minute 05 (EDT/EST depending) and last interval of the day as hour 04 minute 00 of the next day or hour 05 minute 00 of the next day (EDT/EST depending)) |
| PNODE Name | PNODE\_NAME | 4000.19 | VARCHAR2(50) |
| PNODE ID | PNODE\_ID | 4000.20 | NUMBER |
| DA PJM Energy Price ($/MWh) | DA\_PJM\_ENERGY\_PRICE | 3000.01 | NUMBER(12,6) |
| DA Energy Withdrawal MW | DA \_ENERGY\_WITHDRAWAL\_MW | 1200.30 | NUMBER(14,6) |
| DA Energy Withdrawal Charge ($) | DA\_WITHDRAWAL\_ENERGY\_CHARGE | 1200.31 | NUMBER(22,6) |
| DA Energy Injection MW | DA\_ENERGY\_INJECTION\_MW | 1200.32 | NUMBER(14,6) |
| DA Energy Injection Credit ($) | DA\_ENERGY\_INJECTION\_CREDIT | 1200.33 | NUMBER(22,6) |
| DA Spot Market Energy Charge ($) | DA\_SPOT\_MARKET\_ENERGY\_CHARGE | 1200.01 | NUMBER(22,6) |
| PNODE DA Congestion Price ($/MWh) | PNODE\_DA\_CONGESTION\_PRICE | 3000.06 | NUMBER(22,6) |
| DA Congestion Withdrawal MW | DA\_CONGESTION\_WITHDRAWAL\_MW | 1210.30 | NUMBER(14,6) |
| DA Congestion Withdrawal Charge ($) | DA\_CONGESTION\_WITHDRAWAL\_CHARGE | 1210.11 | NUMBER(22,6) |
| DA Congestion Injection MW | DA\_CONGESTION\_INJECTION\_MW | 1210.31 | NUMBER(14,6) |
| DA Congestion Injection Credit ($) | DA\_CONGESTION\_INJECTION\_CREDIT | 1210.12 | NUMBER(22,6) |
| DA Implicit Congestion Charge ($) | DA\_IMPLICIT\_CONGESTION\_CHARGE | 1210.01 | NUMBER(22,6) |
| PNODE DA Loss Price ($/MWh) | PNODE\_DA\_LOSS\_PRICE | 3000.15 | NUMBER(12,6) |
| DA Loss Withdrawal MW | DA\_LOSS\_WITHDRAWAL\_MW | 1220.30 | NUMBER(14,6) |
| DA Loss Withdrawal Charge ($) | DA\_LOSS\_WITHDRAWAL\_CHARGE | 1220.11 | NUMBER(22,6) |
| DA Loss Injection MW | DA\_LOSS\_INJECTION\_MW | 1220.31 | NUMBER(14,6) |
| DA Loss Injection Credit ($) | DA\_LOSS\_INJECTION\_CREDIT | 1220.12 | NUMBER(22,6) |
| DA Implicit Loss Charge ($) | DA\_IMPLICIT\_LOSS\_CHARGE | 1220.01 | NUMBER(22,6) |
| RT PJM Energy Price ($/MWh) | RT\_PJM\_ENERGY\_PRICE | 3000.02 | NUMBER(14,6) |
| RT Energy Withdrawal MW | RT\_ENERGY\_WITHDRAWAL\_MW | 1205.30 | NUMBER(14,6) |
| Bal Energy Withdrawal Deviation MW | BAL\_ENERGY\_WITHDRAWAL\_DEVIATION\_MW | 1205.31 | NUMBER(14,6) |
| Bal Energy Withdrawal Charge ($) | BAL\_ENERGY\_WITHDRAWAL\_CHARGE | 1205.32 | NUMBER(22,6) |
| RT Energy Injection MW | RT\_ENERGY\_INJECTION\_MW | 1205.33 | NUMBER(14,6) |
| Bal Energy Injection Deviation MW | BAL\_ENERGY\_INJECTION\_DEVIATION\_MW | 1205.34 | NUMBER(14,6) |
| Bal Energy Injection Credit ($) | BAL\_ENERGY\_INJECTION\_CREDIT | 1205.35 | NUMBER(22,6) |
| Bal Spot Market Energy Charge ($) | BAL\_SPOT\_MARKET\_ENERGY\_CHARGE | 1205.01 | NUMBER(22,6) |
| PNODE RT Congestion Price ($/MWh) | PNODE\_RT\_CONGESTION\_PRICE | 3000.09 | NUMBER(12,6) |
| RT Congestion Withdrawal MW | RT\_CONGESTION\_WITHDRAWAL\_MW | 1215.30 | NUMBER(14,6) |
| Bal Congestion Withdrawal Deviation MW | BAL\_CONGESTION\_WITHDRAWAL\_DEVIATION\_MW | 1215.31 | NUMBER(14,6) |
| Bal Congestion Withdrawal Charge ($) | BAL\_CONGESTION\_WITHDRAWAL\_CHARGE | 1215.11 | NUMBER(22,6) |
| RT Congestion Injection MW | RT\_CONGESTION\_INJECTION\_MW | 1215.32 | NUMBER(14,6) |
| Bal Congestion Injection Deviation MW | BAL\_CONGESTION\_INJECTION\_DEVIATION\_MW | 1215.33 | NUMBER(14,6) |
| Bal Congestion Injection Credit ($) | BAL\_CONGESTION\_INJECTION\_CREDIT | 1215.12 | NUMBER(22,6) |
| Bal Implicit Congestion Charge ($) | BAL\_IMPLICIT\_CONGESTION\_CHARGE | 1215.01 | NUMBER(22,6) |
| PNODE RT Loss Price ($/MWh) | PNODE\_RT\_LOSS\_PRICE | 3000.18 | NUMBER(12,6) |
| RT Loss Withdrawal MW | RT\_LOSS\_WITHDRAWAL\_MW | 1225.30 | NUMBER(14,6) |
| Bal Loss Withdrawal Deviation MW | BAL\_LOSS\_WITHDRAWAL\_DEVIATION\_MW | 1225.31 | NUMBER(14,6) |
| Bal Loss Withdrawal Charge ($) | BAL\_LOSS\_WITHDRAWAL\_CHARGE | 1225.11 | NUMBER(22,6) |
| RT Loss Injection MW | RT\_LOSS\_INJECTION\_MW | 1225.32 | NUMBER(14,6) |
| Bal Loss Injection Deviation MW | BAL\_LOSS\_INJECTION\_DEVIATION\_MW | 1225.33 | NUMBER(14,6) |
| Bal Loss Injection Credit ($) | BAL\_LOSS\_INJECTION\_CREDIT | 1225.12 | NUMBER(22,6) |
| Bal Implicit Loss Charge ($) | BAL\_IMPLICIT\_LOSS\_CHARGE | 1225.01 | NUMBER(22,6) |
| Version | VERSION | 4000.07 | VARCHAR2(12) |

# CSV Report Example

See Excel file titled “Energy Market and Congestion Loss Charge Details CSV Format.csv”

# XML Report Example

See XML file titled “Energy Market and Congestion Loss Charge Details XML Format.xml”

# Supporting Calculations

DA Energy Withdrawal Charge = DA Withdrawal Energy MW \* (DA PJM Energy Price/12)

(1200.31) = (1200.30) \* (3000.01/12)

DA Energy Injection Credit = DA Energy Injection MW \* (DA PJM Energy Price/12)

(1200.33) = (1200.32) \* (3000.01/12)

DA Spot Market Energy Charge = DA Energy Withdrawal Charge - DA Energy Injection Credit

(1200.01) = (1200.31) - (1200.33)

DA Congestion Withdrawal Charge = DA Congestion Withdrawal MW \* (PNODE DA Congestion Price/12)

(1210.11) = (1210.30) \* (3000.06/12)

DA Congestion Injection Credit = DA Congestion Injection MW \* (PNODE DA Congestion Price/12)

(1210.12) = (1210.31) \* (3000.06/12)

DA Implicit Congestion Charge = DA Congestion Withdrawal Charge - DA Congestion Injection Credit

(1210.01) = (1210.11) - (1210.12)

DA Loss Withdrawal Charge = DA Loss Withdrawal MW \* (PNODE DA Loss Price/12)

(1220.22) = (1220.30) \* (3000.15/12)

DA Loss Injection Credit = DA Loss Injection MW \* (PNODE DA Loss Price/12)

(1220.12) = (1220.31) \* (3000.15/12)

DA Implicit Loss Charge = DA Loss Withdrawal Charge - DA Loss Injection Credit

(1220.01) = (1220.22) – (1220.12)

Bal Energy Withdrawal Deviation MW = RT Energy Withdrawal MW - DA Energy Withdrawal MW

(1205.31) = (1205.30) – (1200.30)

Bal Energy Withdrawal Charge = Bal Energy Withdrawal Deviation MW \* (RT PJM Energy Price/12)

(1205.32) = (1205.31) \* (3000.02/12)

Bal Energy Injection Deviation MW = RT Energy Injection MW - DA Energy Injection MW

(1205.34) = (1205.33) – (1200.32)

Bal Energy Injection Credit = Bal Energy Injection Deviation MW \* (RT PJM Energy Price/12)

(1205.35) = (1205.34) \* (3000.02/12)

Bal Spot Market Energy Charge = Bal Energy Withdrawal Charge - Bal Energy Injection Credit

(1205.01) = (1205.32) – (1205.35)

Bal Congestion Withdrawal Deviation MW = RT Congestion Withdrawal MW - DA Congestion Withdrawal MW

(1215.31) = (1215.30) – (1210.30)

Bal Congestion Withdrawal Charge = Bal Congestion Withdrawal Deviation MW \* (PNODE RT Congestion Price/12)

(1215.11) = (1215.31) \* (3000.09/12)

Bal Congestion Injection Deviation MW = RT Congestion Injection MW - DA Congestion Injection MW

(1215.33) = (1215.32) – (1210.31)

Bal Congestion Injection Credit = Bal Congestion Injection Deviation MW \* (PNODE RT Congestion Price/12)

(1215.12) = (1215.33) \* (3000.09/12)

Bal Implicit Congestion Charge = Bal Congestion Withdrawal Charge - Bal Congestion Injection Credit

(1215.01) = (1215.11) – (1215.12)

Bal Loss Withdrawal Deviation MW = RT Loss Withdrawal MW - DA Loss Withdrawal MW

(1225.31) = (1225.30) – (1220.30)

Bal Loss Withdrawal Charge = Bal Loss Withdrawal Deviation MW \* (PNODE RT Loss Price/12)

(1225.11) = (1225.31) \* (3000.18/12)

Bal Loss Injection Deviation MW = RT Loss Injection MW - DA Loss Injection MW

(1225.33) = (1225.32) – (1220.31)

Bal Loss Injection Credit = Bal Loss Injection Deviation MW \* (PNODE RT Loss Price/12)

(1225.12) = (1225.33) \* (3000.18/12)

Bal Implicit Loss Charge = Bal Loss Withdrawal Charge - Bal Loss Injection Credit

(1225.01) = (1225.11) – (1225.12)