Settlements & Billing

Configuration Guide: Measured Demand Over Control Area

**Pre-calculation**

 Version 5.15

Table of Contents

1. Purpose of Document 3

2. Introduction 3

2.1 Background 3

2.2 Description 8

3. Charge Code Requirements 9

3.1 Business Rules 9

3.2 Predecessor Charge Codes 15

3.3 Successor Charge Codes 15

3.4 Inputs – External Systems 16

3.5 Inputs – Predecessor Charge Codes or Pre-calculations 22

3.6 CAISO Formula 26

3.7 Outputs 75

4. Charge Code Effective Date 109

# Purpose of Document

The purpose of this document is to capture the requirements and design specification for a Charge Code in one document.

# Introduction

## Background

In the allocation of various payment and charges, the amounts are divided among Business Associates (BAs) in proportion to their relative contribution to the overall Measured Demand quantity (in MWh) over which the allocation is performed. Thus, an allocation of payment or charges requires the following two Measured Demand calculations that are conducted for the particular time period over which the allocation is performed:

1. the overall metered CAISO Demand plus Real-Time Interchange export schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, in the grid sector or area over which the allocated payments and charges apply and
2. the contribution of each Business Associate to the overall CAISO Demand plus Real-Time Interchange export schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management.

 To provide the Measured Demand quantities that are used in multiple charge code calculations that allocate various payments or charges, the CAISO implements a set of Pre-calculation processes, referred to as Measured Demand Pre-calculations, to calculate particular Measured Demand quantities. There are five (5) Measured Demand Pre-calculation configurations in which an overall Measured Demand quantity is calculated. The five Pre-calculations differ by the composition of the Demand resources, and exports that are included in their Measured Demand outputs. The Measured Demand Pre-calculation process configurations, the Demand resources and export composition of their outputs, and the associated output frequency are identified as follows:

| **Measured Demand Pre-calculation Configurations** |
| --- |
| **Name** | **Output Composition and Frequency** | **Dependent Allocation Configurations** |
| MD over Control Area Pre-calculation | **Composition: Measured Demand:** The sum (as a negative value) of all1. metered CAISO Demand\*
2. Real-Time Interchange export schedules

**Net MSS Measured Demand:** The lesser of1. zero (0)

or the net value defined as1. the sum of Meter Data (as a negative value) for Demand of all Load and other non-export Demand resources internal to an MSS

plus (+) the sum of1. Meter Data representing Generation of all Generating Units for the MSS

to which lesser value is added1. the sum of all of the MSS Real-Time Interchange export schedules (as a negative value).

**Frequency:** 5-minute,10-minute, hourly, daily | CC 6474 – Real Time Unaccounted for Energy Settlement  |
| CC 6475 – Real Time Uninstructed Imbalance Energy Settlement |
| CC 6477 – Real Time Imbalance Energy Offset |
| CC 6480 – Excess Cost Neutrality Allocation |
| CC 6636 – IFM Bid Cost Recovery Tier 1 Allocation |
| CC 6637 – IFM Bid Cost Recovery Tier 2 Allocation |
| CC 6678 – Real Time Bid Cost Recovery Allocation |
| CC 6774 – RT Congestion Offset |
| CC 6790 – CRR Balancing Account |
| CC 6806 – Day Ahead Residual Unit Commitment (RUC) Tier 1 Allocation |
| CC 6807 – Day Ahead Residual Unit Commitment (RUC) Tier 2 Allocation |
| CC 6947 – IFM Marginal Losses Surplus Credit Allocation |
| CC 550 – Monthly FERC Fee Settlement |
|  |  | CC 551 – Annual FERC Fee Settlement |
|  |  | CC 4989 – Daily Rounding Adjustment Allocation |
|  |  | CC 4999 – Monthly Rounding Adjustment |
|  |  | CC 6457 – Declined Hourly Pre-Dispatch Penalty Allocation |
|  |  | CC 7056 – Flexible Ramp Cost Allocation |
|  |  | CC 8999 – Neutrality Adjustment |
|  |  | PC – Metered Demand Over TAC Area And CPM |
|  |  | PC – Standard Capacity Product |
| MD over Control Area Excl MSS Energy Pre-calculation | **Composition:Measured Demand:** The sum (as a negative value) of all1. metered CAISO Demand
2. Real-Time Interchange export schedules

The overall Measured Demand output quantity excludes Energy from MSS entities.**Frequency:**5-minute,10-minute and monthly | CC 1302 – Long-Term Voltage Support Allocation |
| CC 1303 – Supplemental Reactive Energy Allocation |
| MD Emissions over Control Area Excl External Exports Pre-calculation | **Composition:Measured Demand (in-state):** The sum (as a negative value) of all1. metered CAISO Demand
2. in-state Real-Time Interchange export schedules

The sum excludes CAISO-external exports and any external contractual Transmission Loss adjustments.**Net MSS Measured Demand (in-state):** The lesser of1. zero (0)

or the net value defined as1. the sum of Meter Data (as a negative value) for Demand of all Load and other non-export Demand resources internal to an MSS

plus (+) the sum of1. Meter Data representing Generation of all Generating Units for the MSS

to which lesser value is added1. the sum of all of the MSS in-state Real-Time Interchange export schedules (as a negative value).

The sum excludes CAISO-external exports and any external contractual Transmission Loss adjustments.**Frequency:**Monthly | CC 591 – Emissions Cost Recovery |
| MD Black Start Excl Exports Pre-calculation | **Composition:Metered CAISO Demand:**the sum of all metered CAISO Demand (as a negative value). **Net MSS Demand:**The greater of1. zero (0)

or the net value defined as1. the sum of Meter Data (as a negative value) for Demand of all Load and other non-export Demand resources internal to an MSS,

plus (+) the sum of1. Meter Data representing Generation of all Generating Units for the MSS.

**Frequency:**Hourly | CC 1353- Black Start Energy Allocation |
| MD over Control Area Excl Transmission Loss Adjustment Pre-calculation | **Composition:Measured Demand:** The sum (as a negative value) of all1. metered CAISO Demand
2. Real-Time Interchange export schedules

The calculated value excludes contractual Transmission Loss adjustments.**Net MSS Measured Demand:** The greater of1. zero (0)

or the net value defined as1. the sum of Meter Data for Demand (as a negative value) of all Load and other non-export Demand resources internal to an MSS

plus (+) the sum of1. Meter Data representing Generation of all Generating Units for the MSS

to which lesser value is added1. the sum of all of the MSS Real-Time Interchange export schedules (as a negative value).

The calculated value excludes contractual Transmission Loss adjustments.**Frequency:**5-minute,10-minute and Hourly | CC 6977 – Allocation of Transmission Loss Obligation Charge for Real Time Schedules under Control Agreement |

**Note:**

\* Metered CAISO Demand excludes that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management.

Some of the Measured Demand configurations listed above recognize exemptions to the calculation for various Business Associates and resources. In some instances a Measured Demand configuration may produce multiple outputs, each one recognizing a particular exemption or set of exemptions. For each Measured Demand calculation, its exemptions are determined and defined by the requirements of the allocations in which the Measured Demand Pre-calculation outputs are employed.

All of the dependent allocation charge codes listed in the above Measured Demand Pre-calculation configuration summary table do not necessarily use the entire set of Measured Demand output components that the table associates with the charge codes. Some of the outputs used in the allocations are adjusted for exceptions as explained in the prior paragraph. Moreover some outputs used in various allocations are adjusted for various transmission-related contracts in order to exclude Measured Demand that is associated with contract rights from being used in a calculation. Additionally, based on the MRTU Tariff, special rules apply for the application of Measured Demand components for MSS entities that Load Follow, or for the allocation of Unaccounted-For-Energy (UFE). Some allocations may be based on metered CAISO Demand, not the full Measured Demand quantity. Thus, the configuration summary table above is quite simplistic and is intended to present only a top-level view of the output components of the Measured Demand Pre-calculations.

## Description

Generically, the Measured Demand calculations represent the sum of metered CAISO Demand (and net MSS Demand for net-settled MSS entities) and Real-Time Interchange export schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management. Net MSS Demand is defined to be the greater of zero (0) or the net of Meter Data for the Demand of all Load and other non-export Demand resources internal to an MSS, with the Meter Data representing the Generation of all MSS Generating Units. Depending upon the exact Measured Demand calculation, various export components are included or excluded in a summed Measured Demand output value. In the “Measured Demand over Control Area Excl Transmission Loss Adjustment” output calculations, contractual Transmission Losses are excluded as exports (where contractual Transmission Losses are defined to be operational adjustments that are scheduled as export Energy according to operating agreements between transmission line operators and the CAISO). In Measured Demand calculations other than those of the “Measured Demand over Control Area Excl Transmission Loss Adjustment” process, the contractual Transmission Loss export Energy is included. In addition to contractual Transmission Losses, the various Measured Demand Pre-calculations vary in the inclusion of out-of-state exports, or whether any exports at all are included in Measured Demand outputs. The “Measured Demand Over Control Area” outputs defined in the current document include all exports, both in-state and out-of-state, as well as contractual Transmission Losses.

The “Measured Demand Over Control Area” process derives its Measured Demand quantities from all metered CAISO Demand and scheduled Real-Time Interchange export quantities in the CAISO Control Area, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management. Providing for the needs of multiple successor processes, the Pre-calculation calculates a set of Measured Demand outputs. Measured Demand quantities are output at various frequencies. The outputs are expected to serve the allocation charge codes, as stipulated in the prior section. The calculation produces an output at multiple levels of summation for use in allocating charges and payments. For example, the Measured Demand output appears as the sum of the metered CAISO Demand and scheduled Real-Time Interchange export quantities, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, for each Business Associate of the CAISO Control Area. The Measured Demand quantity is then summed over all Business Associates to formulate a value for the overall CAISO Control Area.

#  Charge Code Requirements

## Business Rules

| Bus Req ID | Business Rule |
| --- | --- |
|  | The Measured Demand Over Control Area shall perform a set of calculations to determine and output Measured Demand (metered CAISO Demand plus Real-Time Interchange export schedules) over the CAISO Control Area, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management. |
| * 1.
 | Measured Demand shall be calculated and output as a total quantity for the overall CAISO Control Area. |
|  | Measured Demand shall be calculated and output as a total quantity for each Utility Distribution Company (UDC) over the CAISO Control Area. |
| * 1.
 | Measured Demand shall be calculated and output as a total quantity over the CAISO Control Area for each Business Associate. |
|  | Measured Demand shall be calculated and output as a total quantity for each combination of UDC and Business Associate over the CAISO Control Area. |
|  | Contractual Transmission Losses, representing Transmission Losses that are covered by agreements between transmission line operators and the CAISO, shall be included in a Measured Demand calculation as Real-Time Interchange export schedules. |
|  | The Measured Demand over Control Area Pre-calculation shall provide two types of Measured Demand outputs for Metered Subsystem (MSS) entities as stipulated in Business Rules 2.1 and 2.2 below.  |
| * 1.
 | For Metered Subsystem (MSS) entities for which Energy is settled via the net-settlement option or where the MSS has selected Load-Following, the Measured Demand over Control Area Pre-calculation shall provide outputs that present MSS Measured Demand based on net MSS Measured Demand.  |
|  | The net MSS Measured Demand quantity shall be input from the MSS Netting Pre-calculation process. |
| * 1.
 | For Metered Subsystem (MSS) entities for which Energy is settled via the gross-settlement option (regardless of whether or not the Load-Following option has been selected), the Measured Demand over Control Area Pre-calculation shall provide outputs that present MSS Measured Demand based on Metered Quantities for MSS Load Demand, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, plus Real-Time Interchange export schedules from the MSS. |
|  | For Load-Following Metered Subsystem (MSS) entities (that have selected the MSS Load-Following option) for which Energy delivered to the CAISO is settled via the gross-settlement option, the Measured Demand over Control Area Pre-calculation shall provide 2 sets of outputs, one set that presents MSS Measured Demand based on Metered Quantities for MSS Load Demand, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, plus Real-Time Interchange export schedules from the MSS (per business rule 2.2), and the other set that presents MSS Measured Demand based on net MSS Measured Demand (per business rule 2.1). |
|  | For MSS entites, regardless of settlement selection options, the Measured Demand Over Control Area Pre-calculation shall provide a set of MSS Measured Demand outputs based on net Measured Demand. |
|  | The Measured Demand Over Control Area shall provide Measured Demand outputs that exclude particular combinations of Business Associate (BA) and resource values. |
|  | Exceptions shall be defined in a standing data table. |
|  | Exceptions shall be organized in the standing data table as “exception sets”.  |
|  | An exception set shall be used to calculate at most one set of Measured Demand outputs. |
|  | Multiple exception sets may be employed to calculate a set of Measured Demand outputs. |
|  | Exception flag inputs shall be provided for each exception set in order to indicate when an exception condition within the exception set is valid. |
|  | The current implementation of the Measured Demand Over Control Area shall provide for nine (9) exception sets, referred to as “Exceptions #1” through “Exceptions #9”.  |
|  | Each exception set shall be effective-dated (with a start data and end date) to indicate the period over which the exception set is in effect. |
|  | The Measured Demand over Control Area Pre-calculation shall compute Measured Demand outputs that subtract Generation and Transmission Rights from the Measured Demand quantity modified for Exceptions, for a set of generators that allow for an offset against Measured Demand for a FERC Fee allocation and for a set of BA-associated transmission rights. |
|  | The Measured Demand Over Control Area shall provide Measured Demand outputs that exclude Measured Demand associated with transmission rights (in MWh) associated with particular Business Associate (BA) values. |
|  | Measured Demand Outputs shall be provided that exclude all Measured Demand associated with transmission rights for a particular Business Associate (BA) value. |
|  | The Measured Demand Over Control Area Pre-calculation shall provide Measured Demand Outputs that exclude all Measured Demand associated with real-time ETC and TOR transmission rights for a particular Business Associate (BA) value. |
|  | The Measured Demand Over Control Area Pre-calculation shall provide Measured Demand Outputs that exclude all Measured Demand associated with real-time TOR transmission rights for a particular Business Associate (BA) value. |
|  | The Measured Demand Over Control Area Pre-calculation shall output the Metered CAISO Demand quantity by Aggregated Price Node. |
|  | The Metered CAISO Demand quantity shall consist of the sum of (a) the interval metered CAISO Demand quantity over all UDC Load and Non-Generator Resources (NGR), excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, and gross-settled MSS Demand (over all MSS Load and NGR resources, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management), where the Energy is associated with a default LAP and (b) the interval Net MSS Demand quantity over all net-settled MSS entities, where the Energy is associated with a MSS/custom LAP. |
|  | The Metered CAISO Demand quantity output shall be calculated on both a Settlement Interval and an hourly basis. In addition, selected outputs shall be calculated on a 10-minute interval basis. |
|  | A Metered CAISO Demand quantity output shall be calculated for each Business Associate (BA) and, additionally, for the entire CAISO Control Area as the sum of the individual BA quantities. |
|  | The Measured Demand Over Control Area Pre-calculation shall, in addition to the outputs that represent the Tariff-defined Measured Demand and its components (Metered CAISO Demand, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, and Real-Time Interchange Export Schedules), provide a similar set of outputs (for gross Measured Demand) that represent MSS Demand on a gross-settled basis, regardless of MSS Gross/Net Energy settlement type. |
|  | The Measured Demand output shall include Metered CAISO Demand, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, plus Real-Time Interchange Export Schedules for all resources associated with a UDC or a gross-settled MSS entity. |
|  | The Measured Demand output shall include MSS gross Demand, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, plus Real-Time Interchange Export Schedules for all net-settled MSS entities. |
|  | The Measured Demand Over Control Area Pre-calculation shall, in addition to the outputs that represent the Tariff-defined Metered CAISO Demand (excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management), provide outputs for gross Metered CAISO Demand that represent MSS Metered Demand on a gross-settled basis, regardless of MSS Gross/Net Energy settlement type. |
|  | For use in BCR Settlement, the Measured Demand Over Control Area Pre-calculation shall present a set of Metered Demand outputs by BA and CAISO Control Area. |
|  | Metered Demand outputs for BCR Settlement shall be calculated with transmission ownership rights (TORs) associated with a BA’s Loads being subtracted from the overall Metered Demand quantities for the BA. |
|  | The BCR-related Measured Demand exceptions (stipulated in the Exceptions #6 exceptions) shall be applied to the calculation of a BA’s BCR-related Metered Demand and Measured Demand outputs. |
|  | The Measured Demand Over Control Area Pre-calculation shall output for all UDC and MSS Gross Load the Metered CAISO Demand quantity, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, minus the valid and balanced TOR contract portion of Load Self-Schedules having TOR contract rights that are eligible for Congestion credits. |
|  | The Metered CAISO Demand minus valid and balanced TOR quantity, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, shall be calculated for each Transmission Access Charge (TAC) Area. |
|  | The Metered CAISO Demand minus valid and balanced TOR quantity, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, shall be calculated for each Gross Load within the TAC Area. |
|  | The total of Metered CAISO Demand minus valid and balanced TOR quantity, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, shall be calculated over the Gross Load resources scheduled within each TAC Area and shall be broken down and output by BA and TAC Area. |
|  | The TAC Area total of Metered CAISO Demand minus valid and balanced TOR quantity, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management, shall be calculated over all BAs who schedule Gross Load within the TAC Area. |
| 9.2 | Excess Behind the Meter Production (EBTMP) is a new type of energy measurement entry which accounts for any excess energy injected into the distribution system from rooftop solar. EBTMP will be reported to CAISO separately from Gross Load in MRI-S using measurement type EBTMP. |
| 9.3 | Gross Load shall be submitted through MRI-s under Measurement type ‘LOAD’ Excess Behind the Meter Load Production shall be submitted through MRI-S as measurement type ‘EBTMP” and shall be mapped a positive energy injected to distribution system reducing distribution Gross Load consumption. |

## Predecessor Charge Codes

| Charge Code/ Pre-calc Name |
| --- |
| Allocation of Transmission Losses Under Control Agreements Pre-calculation |
| System Resource Deemed Delivered Energy Pre-calculation |
| MSS Netting Pre-calculation |
| ETC, TOR, CVR Quantity Pre-calculation |

## Successor Charge Codes

| Charge Code/ Pre-calc Name |
| --- |
| CC 4989 – Daily Rounding Adjustment Allocation |
| CC 4999 – Monthly Rounding Adjustment |
| CC 550 – Monthly FERC Fee Settlement |
| CC 551 – Annual FERC Fee Settlement |
| CC 6457 – Declined Hourly Pre-Dispatch Penalty Allocation |
| CC 6474 – Real Time Unaccounted for Energy Settlement |
| CC 6475 – Real Time Uninstructed Imbalance Energy Settlement |
| CC 6477 – Real Time Imbalance Energy Offset |
| CC 6480 – Excess Cost Neutrality Allocation |
| CC 6636 – IFM Bid Cost Recovery Tier 1 Allocation |
| CC 6637 – IFM Bid Cost Recovery Tier 2 Allocation |
| CC 6678 – Real Time Bid Cost Recovery Allocation |
| CC 6774 – RT Congestion Offset |
| CC 6790 – CRR Balancing Account  |
| CC 6806 – Day Ahead Residual (RUC) Tier 1 Allocation |
| CC 6807 – Day Ahead Residual (RUC) Tier 2 Allocation |
| CC 6947 – IFM Marginal Loss Surplus Credit Allocation |
| CC 6985 – Real Time Marginal Losses Offset |
| CC 7056 – Flexible Ramp Cost Allocation |
| CC 8989 – Dailly Neutrality Adjustment |
| CC 8999 – Monthly Neutrality Adjustment |
| PC – Metered Demand Over TAC Area And CPM |
| PC – Standard Capacity Product |
| PC – Real Time Congestion |

## Inputs – External Systems

Attributes that are listed for a variable name in the table below, but are not described in the associated description are incidental to and do not materially participate in the calculations of Section 3.8 herein.

| Row # | Variable Name | Description |
| --- | --- | --- |
|  | MeasuredDemandControlAreaExceptions1Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #1 standing data input, that indicates whether a condition from Exceptions #1 is met (true) for a given combination of Business Associate, and resource ID values. When an Exceptions #1 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex1hi and BAHourlyMeasuredDemandControlAreaQty\_Ex1Bmdhi Measured Demand outputs. |
|  | BAMeasuredDemandCAMDExceptionsFlag **B**  | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #1 standing data input, that indicates whether a condition from Exceptions #1 is met (true) for a given value for a Business Associate. When an Exceptions #1 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex1hi and BAHourlyMeasuredDemandControlAreaQty\_Ex1Bmdhi Measured Demand outputs. |
|  | MeasuredDemandControlAreaExceptions2Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #2 standing data input, that indicates whether a condition from Exceptions #2 is met (true) for a given combination of Business Associateand resource ID values. When an Exceptions #2 condition is true, the Measured Demand Over Control Area shall exclude any associated meter Load, NGR Demand, or export input from the calculation of the CAISOTotalDailyMeasuredDemandControlAreaQty\_FERCmd and BADailyMeasuredDemandControlAreaQty\_FERCBmd Measured Demand outputs. |
|  | BAMeasuredDemandFERCExceptionsFlag **B** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #2 standing data input, that indicates whether a condition from Exceptions #2 is met (true) for a given value for a Business Associate. When an Exceptions #2 condition is true, the Measured Demand Over Control Area shall exclude any associated meter Load, NGR resource, or export input from the calculation of the CAISOTotalDailyMeasuredDemandControlAreaQty\_FERCmd and BADailyMeasuredDemandControlAreaQty\_FERCBmd Measured Demand outputs. |
|  | MeasuredDemandControlAreaExceptions3Flag **Brt** | Flag value, derived by the data mapping process from the Exceptions #3 standing data input, that indicates whether a condition from Exceptions #3 is met (true) for a given combination of Business Associate and resource ID values. When an Exceptions #3 condition is true, the Measured Demand Over Control Area shall include any associated metered Generation input in the calculation of the CAISOTotalDailyMeasuredDemandControlAreaQty\_FERCmd and BADailyMeasuredDemandControlAreaQty\_FERCBmd Measured Demand outputs. |
|  | BAMeasuredDemandGenFERCExceptionsFlag **B** | Flag value, derived by the data mapping process from the Exceptions #3 standing data input, that indicates whether a condition from Exceptions #3 is met (true) for a given value for a Business Associate.When an Exceptions #3 condition is true, the Measured Demand Over Control Area shall include any associated metered Generation input in the calculation of the CAISOTotalDailyMeasuredDemandControlAreaQty\_FERCmd and BADailyMeasuredDemandControlAreaQty\_FERCBmd Measured Demand outputs. |
|  | MeasuredDemandControlAreaExceptions5Flag **B** | Flag value, derived by the data mapping process from the Exceptions #5 standing data input, that indicates whether a condition from Exceptions #5 is met (true) for a given value for a Business Associate. When an Exceptions #5 condition is true, the Measured Demand Over Control Area shall exclude any associated transmission rights Energy from the calculation of various Measured Demand outputs. For outputs where another exceptions set input also applies (for instance, MeasuredDemandControlAreaExceptions1Flag Brt), the other exceptions set is presumed to exclude any B (or resource r scheduled by B) that is included in Exceptions #5. |
|  | MeasuredDemandControlAreaExceptions6Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #6 standing data input, that indicates whether a condition from Exceptions #6 is met (true) for a given combination of Business Associate and resource ID values. When an Exceptions #6 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex6 mdhi and BAHourlyMeasuredDemandControlAreaQty\_Ex6 Bmdhi Measured Demand outputs. |
|  | BAMeasuredDemandBCRExceptionsFlag **B** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #6 standing data input, that indicates whether a condition from Exceptions #6 is met (true) for a given value for a Business Associate. When an Exceptions #6 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex6 mdhi and BAHourlyMeasuredDemandControlAreaQty\_Ex6 Bmdhi Measured Demand outputs. |
|  | MeasuredDemandControlAreaCONGOFFExceptions7Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #7 standing data input, that indicates whether a condition from Exceptions #7 is met (true) for a given combination of Business Associate and resource ID values. When an Exceptions #7 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **mdh** and BAHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdh** Measured Demand outputs. |
|  | BAMeasuredDemandCONGOFFExceptions7Flag **B** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #7 standing data input, that indicates whether a condition from Exceptions #7 is met (true) for a given value for a Business Associate. When an Exceptions #7 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **mdh** and BAHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdh** Measured Demand outputs. |
|  | MeasuredDemandControlAreaIMBOFFExceptions8Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #8 standing data input, that indicates whether a condition from Exceptions #8 is met (true) for a given combination of Business Associate and resource ID values. When an Exceptions #8 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOSettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **mdhi**, BASettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **Bmdhi**, CAISOSettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **mdhi** and BASettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **Bmdhi** Measured Demand outputs. |
|  | BAMeasuredDemandIMBOFFExceptions8Flag **B** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #8 standing data input, that indicates whether a condition from Exceptions #8 is met (true) for a given value for a Business Associate. When an Exceptions #8 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOSettlementIntervalMeasuredDemandMinusTORQuantity\_EX\_RTM\_IMBOFF **mdhi** and BASettlementIntervalMeasuredDemandMinusTORQuantity\_EX\_RTM\_IMBOFF **Bmdhi** Measured Demand outputs. |
|  | BAResourceMeasuredDemandDeclinedHASPBidsExceptions9Flag **Brt** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #9 standing data input, that indicates whether a condition from Exceptions #9 is met (true) for a given combination of Business Associate and resource ID values. When an Exceptions #9 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **mdh** and BAHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **Bmdh** Measured Demand outputs. |
|  | BAMeasuredDemandDeclinedHASPBids9Flag **B** | Flag value (a binary 0-1 indicator) derived by the data mapping process from the Exceptions #9 standing data input, that indicates whether a condition from Exceptions #9 is met (true) for a given value for a Business Associate. When an Exceptions #9 condition is true, the Measured Demand Over Control Area shall exclude any associated metered CAISODemand, net MSS Measured Demand or export input from the calculation of the CAISOTotalHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **mdh** and BAHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **Bmdh** Measured Demand outputs. |
|  | MSSResourceInfo BrtuT’I’M’AA’VL’pmd | A flag input created by data mapping from Master File information that has a value of 1 for a MSS resource and a value of 0 for a non-MSS resource. This variable contains the information link between resource ID r and a combination of associated UDC/MSS entity u and MSS subgroup M’ values. together with values of some other UDC/MSS attributes related to u and M’. For either a UDC or MSS entity, other attributes for which values are provided include the Business Associate B, entity type T’, Aggregated Pricing Node A and Aggregated Pricing Node Type A’. For cases where T’ = ‘MSS’, u will be associated with the attributes gross/net settlement type I’, RUC Participation Flag V, and Load-Following Flag L’ that specify MSS operational or settlement selections. For a case where M’ is NULL (i.e., a MSS subgroup either does not exist for a MSS in a case where T’ = ‘MSS’ or does not apply to a UDC in a case where T’ = ‘UDC’), the other mapped attributes, if they exist, apply to u instead of u and M’. The input applies to Trading Day d of Trading Month m. |
|  | BAResEntityDispatchIntervalEBTMPQty BrtuQ'mdhcif | Metered Energy quantity (in MWh) which accounts for any excess energy injected into the distribution system from rooftop solar, submitted as generation for a given resource and Dispatch Interval. |

## Inputs – Predecessor Charge Codes or Pre-calculations

Attributes that are listed for a variable name in the table below, but are not described in the associated description are incidental to and do not materially participate in the calculations of Section 3.8 herein.

| Row # | Variable Name | Predecessor Charge Code/ Pre-calc Configuration |
| --- | --- | --- |
|  | BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif | This input originates in the MSS Netting Pre-calculation.The input represents the net MSS Measured Demand Energy quantity (in MWh as a negative value) attributable to resources For the Measured Demand Over Control Area process, only input values for which T’ = ‘MSS’ and I’ = ‘NET’ are used in calculating a Measured Demand output value. |
|  | BASettlementIntervalMSSDemandQuantity\_MSSNetting **BuT’I’M’AA’W’VL’mdhcif** | This input originates in the MSS Netting Pre-calculation.The input represents the net MSS Demand Energy quantity (in MWh as a negative value) attributable to resources for a settlement interval. In the calculations of the Measured Demand Over Control Area process, only input values for which T’ = ‘MSS’ and I’ = ‘NET’ are used. |
|  | Op\_Agreement\_Export\_Loss\_Allocation\_quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif** | This input originates in the “Pre-Calc Allocation of Transmission Losses under Operating Agreements” pre-calc process. The input (in MWh as a negative value) represents operating agreement export losses quantity (billable) in MWh for a Settlement Interval.In the Measured Demand Over Control Area, resource type t is restricted to the value ‘ETIE’. |
|  | SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif** | This input originates in the System Resource Deemed Delivered Energy Pre-calculation and applies to all Energy types, as denoted by the ‘E’ attribute.The derived input (in MWh as a negative value) represents Real-Time Interchange export schedule Energy as Deemed-Delivered Energy quantity in MWh for a Settlement Interval.In the Measured Demand Over Control Area output derivation, the resource type t is restricted to the value ‘ETIE’. |
|  | BAResSettlementIntervalMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | Received from the MSS Netting Pre-calculation, this input presents five--minute CAISO Metered Demand (in MWh as a negative value).. |
|  | BASettlementIntervalResCAISOMeteredGenerationQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | This input, an output of the MSS Netting Pre-calculation, presents five-minute metered Generation.  |
|  | SettlementIntervalResourceContractMD **Brtz’mdhcif** | Received from the ETC/TOR/CVR Quantity Pre-calculation, the input presents the transmission right-exempted Measured Demand quantity (in MWh as a negative value) for contract type z’ for a Settlement Interval. |
|  | SettlementIntervalResourceRTContractMD Brtz’mdhcif | Received from the ETC/TORCVR Quantity Pre-calculation, this input presents the real-time transmission right-exempted Measured Demand quantity (in MWh as a negative value) for contract type z’ for a Settlement Interval. |
|  | SettlementIntervalResourceContractMDforECA BrtQ’QF’S’z’mdhcif | Received from the ETC/TOR/CVR Quantity Pre-calculation, this input presents the transmission right-exempted Measured Demand quantity (in MWh as a negative value) for contract type z’ for a Settlement Interval. |
|  | BASettlementIntervalResourceEnergyLossCreditEligibleCRNDemandQuantity **Brtz’mdhcif** | Received from the ETC/TOR/CVR Quantity Pre-calculation, this input presents the real-time transmission right-exempted Loss quantity (in MWh as a negative value) for contract type z’ for a Settlement Interval. . |
|  | BAHourlyResourceContractDADemandQuantity **Brtz’mdh** | Received from the ETC/TOR/CVR Quantity Pre-calculation, this input presentsthe hourly transmission right-exempted Day Ahead Demand quantity (in MW as a negative value) for contract type z’.  |
|  | BAResEntitySettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif | Received from the MSS Netting Pre-calculation, this input presents the five-minute CAISO Metered Demand (in MWh as a negative value) for a Business Associate and Resource.. |
|  | BAResEntitySettlementIntervalResourceFilteredCAISODemandQuantity **BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif** | Received from the MSS Netting Pre-calculation, the input represents the five-minute CAISO Metered Demand (in MWh as a negative value) for a Business Associate and Resource.. The input is filtered for Load resources where t = ‘LOAD’ or for NGR resources where ‘F’ = ‘DDR’. |
|  | BAResSettlementIntervalGrossMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif  | Received from MSS Netting Pre-calculation. This input represents the settlement interval resource meter for the calculation of CAISO Metered Demand (in MWh as a negative value) where MSS load is gross. |

##  CAISO Formula

The Measured Demand Over Control Area Pre-calculation process shall follow the requirements specified in the immediately-following subsections. Formulas presented below are intended to represent functional business requirements. Actual design implementation (for instance, representation of numbers in a computer or matrix mathematics employed) is at the discretion of designers.

Measured Demand Quantity over CAISO Control Area (by Trading Hour)

CAISOTotalHourlyMeasuredDemandControlAreaQty **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty **mdhcif**

Measured Demand Quantity over CAISO Control Area (by 10-Minute Interval)

Where

CAISOTotal10MMeasuredDemandControlAreaQty **mdhi** = BA10MMeasuredDemandControlAreaQty **Bmdhi**

Measured Demand Quantity over CAISO Control Area (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty **mdhcif** = BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif**

Measured Demand Quantity over CAISO Control Area (by BA and 10-minute interval, for Flexible Ramp Cost Allocation)

BA10MMeasuredDemandControlAreaQty **Bmdhi** = BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif**

### Measured Demand Ratio of CAISO Control Area (by BA and Trading Hour)

### BAMeasuredDemandRatio Bmdh =

BAHourlyMeasuredDemandControlAreaQty **Bmdh**/ CAISOTotalHourlyMeasuredDemandControlAreaQty **mdh**

Measured Demand Quantity over CAISO Control Area (by BA and Trading Hour)

BAHourlyMeasuredDemandControlAreaQty **Bmdh** = BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif**

Measured Demand Quantity over CAISO Control Area (by BA and Settlement Interval)

Where

BASettlementIntervalMeasuredDemandControlAreaQty**Bmdhcif** =
BAUDCSettlementIntervalMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area (by Settlement Interval)

UDCTotalSettlementIntervalMeasuredDemandControlAreaQty **uT’I’M’W’VL’mdhcif** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area (by BA and Trading Hour)

Where

BAUDCHourlyMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdh** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area (by BA and Settlement Interval)

Where

BAUDCSettlementIntervalMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCExportQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif**

* + - 1. Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif** =

BASettlementIntervalUDCNodalMeteredCAISODemandQuantity **BuT’I’M’AA’W’VL’mdhcif**

Where

BASettlementIntervalUDCNodalMeteredCAISODemandQuantity **BuT’I’M’AA’W’VL’mdhcif**

=  BAResSettlementIntervalGrossMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

And Where (expressed explicitly for formula 3.8.7.1, but not formula 3.8.7.1.1)

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’

)

* + - 1. And Where

BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’

* + - 1. And Where

BASettlementIntervalUDCExportQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

t = ‘ETIE’ and Q’ = ‘CISO’

And Where

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

(

T’ = ‘UDC’

Or Where

 T’ = ‘MSS’ And I’ = ’GROSS’

)

Metered CAISO Demand Quantity (by Aggregated Price Node and Trading Hour)

HourlyNodalMeteredCAISODemandQuantity\_MDOverCA **AA’mdh**=
 Sum over (u,M’,c,i,f)

{SettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **uM’AA’mdhcif**}

Metered CAISO Demand Quantity (by Aggregated Price Node and Settlement Interval)

Where

SettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **uM’AA’mdhcif** =
 BAEntitySettlementIntervalNodalMeteredCAISODemandQuantity **BuM’AA’mdhcif**

* + - 1. Where

# BAEntitySettlementIntervalNodalMeteredCAISODemandQuantity BuM’AA’mdhcif =

Sum (r,t,T’,I’,Q’,F’,R’,p,P,W’,Q,S’,d’,N,z’,V,v,H,n’,L’) {BAResEntitySettlementIntervalMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif**}

Where Resource type (t) = ‘LOAD’ and Entity Component Subtype (S’) = ‘NPL’ OR ’GL’

* + - 1. Where

Metered CAISO Demand Quantity (by BA, Aggregated Price Node and Trading Hour)

BAHourlyNodalMeteredCAISODemandQuantity\_MDOverCA **BAA’mdh** =
 BASettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **BAA’mdhcif**

BATotalDispatchIntervalEBTMPQuantity Bmdhcif =
BAResEntityDispatchIntervalEBTMPQty BrtuQ'mdhcif

TotalDispatchIntervalEBTMPQuantity mdhcif =
BAResEntityDispatchIntervalEBTMPQty BrtuQ'mdhcif

Note: This variable will not be reportable in the xml statements.

Metered CAISO Demand Quantity (by BA, Aggregated Price Node and Settlement Interval)

Where

BASettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **BAA’mdhcif** =

BASettlementIntervalNodalNetMSSDemandQuantity **BAA’mdhcif** + BASettlementInterval\_NodalMeteredCAISODemandQuantity **BAA’mdhcif**

* + - 1. Where

BASettlementIntervalNodalNetMSSDemandQuantity **BAA’mdhcif** =

  BASettlementIntervalMSSDemandQuantity\_MSSNetting **BuT’I’M’AA’W’VL’mdhcif**

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’

* + - 1. And Where

BASettlementInterval\_NodalMeteredCAISODemandQuantity **BAA’mdhcif** =

 BASettlementIntervalUDCNodalMeteredCAISODemandQuantity **BuT’I’M’AA’W’VL’mdhcif**

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’

)

Measured Demand Quantity Excluding All Transmission Rights over CAISO Control Area (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty **mdhcif**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty **mdhcif** = BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty **Bmdhcif**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRightsControlAreaQty **Bmdh** = BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty **Bmdhcif**

* + - 1. Where

BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty **Bmdhcif** =
Min(0, BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif**–- BASettlementIntervalRightsMDControlAreaQty **Bmdhcif**)

Where

BASettlementIntervalRightsMDControlAreaQty **Bmdhcif** = SettlementIntervalResourceContractMD **Brtz’mdhcif**

Measured Demand Quantity Excluding Real-Time Transmission Rights over CAISO Control Area (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusRTRightsControlAreaQty **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **mdhcif**

Measured Demand Quantity Excluding Real-Time Transmission Rights over CAISO Control Area (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **mdhcif** = BASettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **Bmdhcif**

Measured Demand Quantity Excluding Real-Time Transmission Rights over CAISO Control Area (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRTRightsControlAreaQty **Bmdh** = BASettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **Bmdhcif**

* + - 1. Where

BASettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **Bmdhcif** = BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif** – BASettlementIntervalRTRights\_MDControlAreaQty **Bmdhcif**

Where

BASettlementIntervalRTRights\_MDControlAreaQty **Bmdhcif** = SettlementIntervalResourceRTContractMD **Brtz’mdhcif**

Where

z’ = ‘ETC’ Or z’ = ‘TOR’

Measured Demand Quantity Excluding Real-Time TOR Transmission Rights over CAISO Control Area (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusRT\_TORControlAreaQty **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **mdhcif**

Measured Demand Quantity Excluding Real-Time TOR Transmission Rights over CAISO Control Area (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **mdhcif** = BASettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **Bmdhcif**

Measured Demand Quantity Excluding Real-Time TOR Transmission Rights over CAISO Control Area (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRT\_TORControlAreaQty **Bmdh** = BASettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **Bmdhcif**

* + - 1. Where

BASettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **Bmdhcif** = BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif** – BASettlementIntervalRT\_TOR\_MDControlAreaQty **Bmdhcif**

Where

BASettlementIntervalRT\_TOR\_MDControlAreaQty **Bmdhcif** = SettlementIntervalResourceRTContractMD **Brtz’mdhcif**

Where

z’ = ‘TOR’

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Exceptions #1 (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty\_Ex1 **mdh** =
 CAISOTotal10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **mdhi**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Exceptions #1 (by Settlement Interval)

Where

CAISOTotal10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **mdhi** = BA10MMeasuredDemandMinusRightsControlAreaQtyEx1 **Bmdhi**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Exceptions #1 (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRightsControlAreaQty\_Ex1 **Bmdh** = BA10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **Bmdhi**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Exceptions #1 (by BA and Settlement Interval)

Where

BA10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **Bmdhi** =
Min(0, BASettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **Bmdhcif** – BASettlementIntervalRightsMDControlAreaQty\_Ex5 **Bmdhcif**)

* + - 1. Where

If MeasuredDemandControlAreaExceptions5Flag **B** = ‘True’

Then
(

BASettlementIntervalRightsMDControlAreaQty\_Ex5 **Bmdhcif** = SettlementIntervalResourceContractMD **Brtz’mdhcif**

)

Else

(

BASettlementIntervalRightsMDControlAreaQty\_Ex5 **Bmdhcif** = 0

)

Measured Demand Quantity over CAISO Control Area – Exceptions #1 (by Trading Hour)

CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex1 **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **mdhcif**

Measured Demand Quantity over CAISO Control Area – Exceptions #1 (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **mdhcif** = BASettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **Bmdhcif**

Measured Demand Quantity over CAISO Control Area – Exceptions #1 (by BA and Trading Hour)

BAHourlyMeasuredDemandControlAreaQty\_Ex1 **Bmdh**= BASettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **Bmdhcif**

Measured Demand Quantity over CAISO Control Area – Exceptions #1 (by BA and Settlement Interval)

Where

BASettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **Bmdhcif** =
BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Exceptions #1 (by Settlement Interval)

UDCTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Exceptions #1 (by BA and Trading Hour)

Where

BAUDCHourlyMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdh** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Exceptions #1 (by BA and Settlement Interval)

Where

BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**

* + - 1. Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** = BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’

)

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt** <> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

* + - 1. And Where

BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’

And Where

BAMeasuredDemandCAMDExceptionsFlag **B** <> True

* + - 1. And Where

BASettlementIntervalUDCExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

t = ‘ETIE’ and Q’ = ‘CISO’

And Where

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

(

T’ = ‘UDC’

Or Where

 T’ = ‘MSS’ And I’ = ’GROSS’

)

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt**<> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

Gross Metered Demand Quantity over UDC Area, Excluding Transmission Rights – Exceptions #1, UFE (by Settlement Interval)

UDCTotalSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** = BAUDCSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Gross Metered Demand Quantity over UDC Area, Excluding Transmission Rights – Exceptions #1, UFE (by BA and Trading Hour)

Where

BAUDCHourlyGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdh** = BAUDCSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Gross Metered Demand Quantity over UDC Area, Excluding Transmission Rights – Exceptions #1, UFE (by BA and Settlement Interval)

Where

BAUDCSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCTotalNetMSSGrossLoadQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** – BASettlementIntervalMeteredDemandRightsMDControlAreaQty\_UFE **BuT’I’M’Vmdhcif**

* + - 1. Where

BASettlementIntervalUDCTotalNetMSSGrossLoadQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
 BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt** <> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

* + - 1. And Where

BASettlementIntervalMeteredDemandRightsMDControlAreaQty\_UFE **BuT’I’M’Vmdhcif** = BASettlementIntervalTORMeteredDemand **Bmdhcif** + EntityBasicInfo BuT’I’M’Vmd

Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

And Where

EntityBasicInfo BuT’I’M’Vmd = 0 \* MSSResourceInfo BrtuT’I’M’AA’VL’pmd

Where

t = ‘LOAD’

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt** <> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

And Where

BASettlementIntervalTORMeteredDemand **Bmdhcif** = SettlementIntervalResourceContractMD **Brtz’mdhcif**

Where

t <> ‘ETIE’

And Where

z’ = ‘TOR’

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt** <> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B** <> True

Gross Measured Demand Quantity over UDC Area – Exceptions #1 (by Settlement Interval)

UDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** = BAUDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif**

Gross Measured Demand Quantity over UDC Area – Exceptions #1 (by BA and Settlement Interval)

Where

BAUDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalNetSettledMSSTotalGrossMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**

Total Gross Measured Demand Quantity over Net-Settled MSS Area – Exceptions #1 (by BA and Settlement Interval)

Where

BASettlementIntervalNetSettledMSSTotalGrossMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetSettledMSSTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalNetSettledMSSExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif**

* + - 1. Where

BASettlementIntervalNetSettledMSSTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** = BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

T’ = ‘MSS’ And I’ = ‘NET’

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt** <> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B**<> True

* + - 1. And Where

BASettlementIntervalNetSettledMSSExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

T’ = ‘MSS’ And I’ = ‘NET’

And Where

t = ‘ETIE’

And Where

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

MeasuredDemandControlAreaExceptions1Flag **Brt**<> True

And Where

BAMeasuredDemandCAMDExceptionsFlag **B** <> True

***-- Metered and Measured Demand Charge Types for FERC Fees–-***

Measured Demand Quantity over CAISO Control Area for FERC Exceptions (by Settlement Trading Day)

CAISOTotalDailyMeasuredDemandControlAreaQty\_FERC **md**=
 CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_FERC **mdhcif**

Measured Demand Quantity over CAISO Control Area for FERC Exceptions (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_FERC **mdhcif**= BASettlementIntervalMeasuredDemandControlAreaQty\_FERC **Bmdhcif**

Measured Demand Quantity over CAISO Control Area for FERC Exceptions (by BA and Settlement Trading Day)

BADailyMeasuredDemandControlAreaQty\_FERC **Bmd** = BASettlementIntervalMeasuredDemandControlAreaQty\_FERC **Bmdhcif**

Measured Demand Quantity over CAISO Control Area for FERC Exceptions (by BA and Settlement Interval)

Where

BASettlementIntervalMeasuredDemandControlAreaQty\_FERC **Bmdhcif**= Min (0, BASettlementIntervalTotalMeteredCAISODemandQuantity\_FERC **Bmdhcif** + BASettlementIntervalTotalNetMSSMeasuredDemandQty\_FERC **Bmdhcif**+ BASettlementIntervalExportQuantity\_FERC**Bmdhcif**–- BASettlementIntervalRightsMDControlAreaQty\_Ex5 **Bmdhcif** + BASettlementIntervalGenerationQuantity\_FERC **Bmdhcif**)

* + - 1. Where

BASettlementIntervalTotalMeteredCAISODemandQuantity\_FERC **Bmdhcif**= BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’

)

And Where

MeasuredDemandControlAreaExceptions2Flag **Brt**<> True

And Where

BAMeasuredDemandFERCExceptionsFlag **B** <> True

* + - 1. And Where

BASettlementIntervalTotalNetMSSMeasuredDemandQty\_FERC **Bmdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’

And Where

BAMeasuredDemandFERCExceptionsFlag **B** <> True

* + - 1. And Where

BASettlementIntervalExportQuantity\_FERC **Bmdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

t = ‘ETIE’ and Q’ = ‘CISO’

And Where

E In (‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

(

T’ = ‘UDC’

Or Where

 T’ = ‘MSS’ And I’ = ’GROSS’

)

And Where

MeasuredDemandControlAreaExceptions2Flag **Brt** <> True

And Where

BAMeasuredDemandFERCExceptionsFlag **B** <> True

* + - 1. And Where

BASettlementIntervalGenerationQuantity\_FERC **Bmdhcif** = BASettlementIntervalResCAISOMeteredGenerationQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’

)

And Where

MeasuredDemandControlAreaExceptions3Flag **Brt** = True

And Where

BAMeasuredDemandGenFERCExceptionsFlag **B** = True

***-- Gross Metered and Gross Measured Demand Charge Types --***

Gross Measured Quantity over Control Area – BCR (by Trading Hour)

CAISOHourlyDAGrossMeasuredDemand mdh =
 (BAResIntervalUDCMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** + BAResIntervalGrossMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** + BAResIntervalNetMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** + SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**)

Metered Demand Quantity for UDC Entities – BCR (by BA, Resource and Settlement Interval)

Where

BAResIntervalUDCMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**
= BAResEntitySettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif

* + - 1. Where

T’ = ‘UDC’

Metered Demand Quantity for MSS Gross-Settled Entities – BCR (by BA, Resource and Settlement Interval)

Where

BAResIntervalGrossMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**=

BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

* + - 1. Where

T’ = ‘MSS’ And I’ = ’GROSS’

Metered Demand Quantity for MSS Net-Settled Entities – BCR (by BA, Resource and Settlement Interval)

Where

BAResIntervalNetMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** = BAResEntitySettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif

* + - 1. Where

S’ = ‘GL’

* + - 1. And Where

T’ = ‘MSS’ And I’ = ’NET’

***-- Metered and Measured Demand Charge Types for BCR–-***

Gross Metered Demand Quantity for Resource – BCR (by BA and Trading Hour)

BAHourlyResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdh** = BASettlementIntervalResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif**

* + - 1. Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

* + - 1. And Where

BAMeasuredDemandBCRExceptionsFlag **B** <> True

Gross Metered Demand Quantity for Resource, Excluding TOR Transmission Rights for UDC and MSS Entites – BCR (by BA and Trading Hour)

BAHourlyResMeteredDemandMinusTORControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdh**=  BASettlementIntervalResMeteredDemandMinusTORControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif**

Gross Metered Demand Quantity for Load Resource, Excluding TOR Transmission Rights for UDC and MSS Entites – BCR (by BA and Settlement Interval)

Where

BASettlementIntervalResMeteredDemandMinusTORControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif** = Min (0, BASettlementIntervalResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif**–- BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif**)

* + - 1. Where

t <> ‘ETIE’

* + - 1. And Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

* + - 1. And Where

BAMeasuredDemandBCRExceptionsFlag **B** <> True

* + - 1. And Where

If z’ = ‘TOR’

Then

BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif** = SettlementIntervalResourceContractMDforECA BrtQ’QF’S’z’mdhcif

Else

BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif** = 0

End If

* + - 1. Gross Metered Demand Quantity for Resource – BCR (by BA and Settlement Interval)

And Where

BASettlementIntervalResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif** =  BAResSettlementIntervalUDCMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif + BAResSettlementIntervalGrossMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif + BAResSettlementIntervalNetMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif

* + - 1. Where

BAResSettlementIntervalUDCMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif = BAResEntitySettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif

Where

T’ = ‘UDC’

* + - 1. And Where

BAResSettlementIntervalGrossMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif = BAResEntitySettlementIntervalResourceFilteredCAISODemandQuantity **BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif**

Where

T’ = ‘MSS’ And I’ = ‘GROSS’

* + - 1. And Where

BAResSettlementIntervalNetMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif = BAResEntitySettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif

Where

S’ = ‘GL’

And Where

T’ = ‘MSS’ And I’ = ‘NET’

* + 1. Real Time TOR Transmission Rights for Loads of UDC and MSS Entites with Exemptions #6 – BCR (by BA and Trading Hour)

BAHourlyResRealTimeTORLoadQty\_Ex6\_BCR **Brmdh** = SettlementIntervalResourceContractMDforECA **BrtQ’QF’S’z’mdhcif**

* + - 1. Where

t <> ‘ETIE’

* + - 1. And Where

z’ = ‘TOR’

* + - 1. And Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

* + - 1. And Where

BAMeasuredDemandBCRExceptionsFlag **B**<> True

* + 1. Day Ahead TOR Transmission Rights for Loads of UDC and MSS Entites with Exemptions #6 – BCR (by BA and Trading Hour)

BAHourlyResDayAheadTORLoadQty\_Ex6\_BCR **Brmdh** = BAHourlyResourceContractDADemandQuantity Brtz’mdh

* + - 1. Where

t <> ‘ETIE’

* + - 1. And Where

z’ = ‘TOR’

* + - 1. And Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

* + - 1. And Where

BAMeasuredDemandBCRExceptionsFlag **B** <> True

***-- BCR-Related Measured Demand for Load-Following MSS Entities–-***

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **mdh** =
CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **mdhcif**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **mdhcif** = BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdhcif**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdh** = BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdhcif**

Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by BA and Settlement Interval)

Where

BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdhcif** =
MIN(0, BASettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **Bmdhcif** – BASettlementIntervalTOR\_MDControlAreaQty\_BCR **Bmdhcif**)

* + - 1. Where

BAMeasuredDemandBCRExceptionsFlag **B**  <> True

* + - 1. And Where

BASettlementIntervalTOR\_MDControlAreaQty\_BCR **Bmdhcif** = BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif**

Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

Measured Demand Quantity over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by Trading Hour)

CAISOTotalHourlyMeasuredDemandControlAreaQty\_LFEx6 **mdh** =
 CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **mdhcif**

Measured Demand Quantity over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by Settlement Interval)

Where

CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **mdhcif** = BASettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **Bmdhcif**

Measured Demand Quantity over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by BA and Trading Hour)

BAHourlyMeasuredDemandControlAreaQty\_LFEx6 **Bmdh**= BASettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **Bmdhcif**

Measured Demand Quantity over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by BA and Settlement Interval)

Where

BASettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **Bmdhcif** =
BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Load-Following Net Settlement and Exceptions #6 (by Settlement Interval)

UDCTotalSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **uT’I’M’W’VL’mdhcif** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Load-Following Net Settlement and Exceptions #6 (by BA and Trading Hour)

Where

BAUDCHourlyMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdh** = BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Load-Following Net Settlement and Exceptions #6 (by BA and Settlement Interval)

Where

BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCExportQuantity\_Ex6\_MDOverCA **BuT’I’M’W’VL’mdhcif**

* + - 1. Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif** = BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

And Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

And Where

BAMeasuredDemandBCRExceptionsFlag **B**  <> True

* + - 1. And Where

BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’ Or L’ = ‘YES’

And Where

BAMeasuredDemandBCRExceptionsFlag **B**  <> True

* + - 1. And Where

BASettlementIntervalUDCExportQuantity\_Ex6\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

t = ‘ETIE’ and Q’ = ‘CISO’

And Where

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

And Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

And Where

BAMeasuredDemandBCRExceptionsFlag **B**  <> True

***-- BCR-Related Measured Demand for Load-Following MSS Entities–-***

BCR Tier 1 Measured Demand Quantity Excluding Transmission Rights over CAISO Control Area – Load-Following Net Settlement and Exceptions #6 (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusRightsQuantity\_NON\_LF\_EX\_RTM\_BCR **Bmdh**  =
Min (0, (BAHourlyUDCOrMSSMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **Bmdh**  - BAHourlyTORContractDemandQuantity\_EX\_BCR **Bmdh**))

* + - 1. Where

BAHourlyTORContractDemandQuantity\_EX\_BCR **Bmdh**  = 
BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif**

Where

MeasuredDemandControlAreaExceptions6Flag **Brt** <> True

And Where

BAMeasuredDemandBCRExceptionsFlag **B** <> True

* + - 1. Where

BAHourlyUDCOrMSSMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **Bmdh**  = (BASettlementIntervalMSSNetMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **BuT’I’M’W’VL’mdhcif**  + BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalUDCExportQuantity\_Ex6\_MDOverCA **BuT’I’M’W’VL’mdhcif** )

* + - 1. And Where

BASettlementIntervalMSSNetMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’

And Where

I’ = ‘NET’ And L’ = ‘NO’

And Where

BAMeasuredDemandBCRExceptionsFlag **B**  <> True

***-- CC6774 – Related Measured Demand for UDC and All MSS Entities independent of Gross/Net Settlement Option, Excluding Transmission Loss Energy for Demand having Contract Rights–-***

Real-time Congestion Offset-associated Measured Demand Quantity Excluding Energy having Transmission Rights, calculated over the CAISO Control Area (CAISO Total by Trading Hour and applying Exceptions #7)

CAISOHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **mdh** = BAHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdh**

Real-time Congestion Offset-associated Measured Demand Quantity Excluding Energy having Transmission Rights, calculated over the CAISO Control Area (by BA and Trading Hour and applying Exceptions #7)

BAHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdh** = BASettlementIntervalMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdhcif**

Real-time Congestion Offset-associated Measured Demand Quantity Excluding Energy having Transmission Rights, calculated over the CAISO Control Area (by BA and Settlement Interval and applying Exceptions #7)

Where

BASettlementIntervalMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdhcif** =
(BASettlementIntervalEntityMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **BuT’I’M’W’VL’mdhcif**)

* + - 1. Where

BAMeasuredDemandCONGOFFExceptions7Flag **B** <> True

* + - 1. And Where

BASettlementIntervalEntityMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **BuT’I’M’W’VL’mdhcif** = (BASettlementIntervalMSSNetMeasuredDemandMinusBalancedRightsQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif**  + BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalUDCExportQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalNonNetBalancedRightsDemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalMSSNetMeasuredDemandMinusBalancedRightsQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSDemandMinusBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalExportsMinusBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif**

Where

T’ = ‘MSS’

And Where

BASettlementIntervalNetMSSDemandMinusBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** =

MIN(0, BASettlementIntervalNetMSSDemandTotalQuantity **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_CONGOFF BuT’I’M’W’VL’mdhcif–- BASettlementIntervalEntityBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalNetMSSDemandTotalQuantity BuT’I’M’W’VL’mdhcif =
 BASettlementIntervalMSSDemandQuantity\_MSSNetting **BuT’I’M’AA’W’VL’mdhcif**

And Where

BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_CONGOFF BuT’I’M’W’VL’mdhcif = BASettlementIntervalEntityExceptionsQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’VL’mdhcif

Where

t <> ‘ETIE’

And Where

BASettlementIntervalEntityExceptionsQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’VL’mdhcif =

 MeasuredDemandControlAreaCONGOFFExceptions7Flag Brt \* (BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif+ SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**)

Where

SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**= (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And Where

t = ‘ETIE’ and Q’ = ‘CISO’

And Where

BASettlementIntervalEntityBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

t <> ‘ETIE’

And Where

BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’z’VL’mdhcif = BASettlementIntervalEntityBalancedContractTypeDemandQuantity BtuT’I’M’AA’W’z’VL’mdhcif–- BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

BASettlementIntervalEntityBalancedContractTypeDemandQuantity BtuT’I’M’AA’W’z’VL’mdhcif =
(SettlementIntervalResourceContractMD **Brtz’mdhcif** + BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif** )

1. Where

BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif** = 0 \* (BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif+ SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**)

And Where

BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’z’VL’mdhcif = MeasuredDemandControlAreaCONGOFFExceptions7Flag Brt \* (SettlementIntervalResourceContractMD **Brtz’mdhcif** + BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif**)

And Where

BASettlementIntervalExportsMinusBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** =
(BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsExportQuantity\_EX\_CONGOFF BuT’I’M’AA’W’VL’mdhcif–- BASettlementIntervalEntityBalancedRightsExportQuantity\_EX\_CONGOFF **BuT’I’M’AA’W’VL’mdhcif**)

Where

BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif** = BASettlementIntervalEntityQuantity **BtuT’I’M’AA’W’VL’mdhcif**

Where

t = ‘ETIE’

And Where

BASettlementIntervalEntityQuantity **BtuT’I’M’AA’W’VL’mdhcif** = (BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif+ SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**)

And Where

BASettlementIntervalEntityExceptionsExportQuantity\_EX\_CONGOFF BuT’I’M’AA’W’VL’mdhcif = BASettlementIntervalEntityExceptionsQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’VL’mdhcif

Where

t = ‘ETIE’

And Where

BASettlementIntervalEntityBalancedRightsExportQuantity\_EX\_CONGOFF **BuT’I’M’AA’W’VL’mdhcif** = BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_CONGOFF BtuT’I’M’AA’W’z’VL’mdhcif)

Where

t = ‘ETIE’

And Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** =

BASettlementIntervalEntityNonExportTotalDemandQuantity **BuT’I’M’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_CONGOFF BuT’I’M’W’VL’mdhcif

Where

T’ = ‘UDC’

And Where

BASettlementIntervalEntityNonExportTotalDemandQuantity **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityQuantity **BtuT’I’M’AA’W’VL’mdhcif**

Where

t <> ‘ETIE’

And Where

BASettlementIntervalUDCExportQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** = (BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsExportQuantity\_EX\_CONGOFF BuT’I’M’AA’W’VL’mdhcif)

Where

T’ = ‘UDC’

And Where

BASettlementIntervalNonNetBalancedRightsDemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** =

 BASettlementIntervalEntityBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalEntityBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif**

Where

T’ = ‘UDC’

And Where

BASettlementIntervalEntityBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** = (BASettlementIntervalEntityBalancedRightsExportQuantity\_EX\_CONGOFF **BuT’I’M’AA’W’VL’mdhcif**)

***-- CC6477 – Related Measured Demand for UDC, Gross-Settled Non-Load-Following MSS, Net-Settled MSS and Load-Following MSS Entities, Excluding Transmission Loss Energy for Demand having TOR Rights–-***

Real-time Imbalance Energy Offset–- associated Measured Demand Quantity Excluding Transmission Loss Energy for Demand having TOR Rights, calculated over the CAISO Control Area (CAISO Total by Settlement Interval and applying Exceptions #8)

CAISOSettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **mdhcif** = BASettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **Bmdhcif**

Real-time Congestion Offset-associated Measured Demand Quantity Excluding Transmission Loss Energy for Demand having TOR Rights, calculated over the CAISO Control Area (by BA and Settlement Interval and applying Exceptions #8)

Where

BASettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **Bmdhcif** =
(BASettlementIntervalEntityMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

* + - 1. Where

BAMeasuredDemandIMBOFFExceptions8Flag **B** <> True

* + - 1. And Where

BASettlementIntervalEntityMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif** = (BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**  + BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalUDCExportQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalNonNetBalancedTORDemandLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalExportsMinusBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**

Where

T’ = ‘MSS’

And Where

(

I’ = ‘NET’

Or Where

L’ = ‘YES’

)

And Where

BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =

MIN(0, BASettlementIntervalNetMSSDemandTotalQuantity **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_IMBOFF BuT’I’M’W’VL’mdhcif–- BASettlementIntervalEntityBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_IMBOFF BuT’I’M’W’VL’mdhcif = BASettlementIntervalEntityExceptionsQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’VL’mdhcif

Where

t <> ‘ETIE’

And Where

BASettlementIntervalEntityExceptionsQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’VL’mdhcif =

 MeasuredDemandControlAreaIMBOFFExceptions8Flag Brt \* (BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif+ SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif**)

And Where

BASettlementIntervalEntityBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

t <> ‘ETIE’

And Where

z’ = ‘TOR’

And Where

BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif = BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity BtuT’I’M’AA’W’z’VL’mdhcif–- BASettlementIntervalEntityBalancedContractTypeExceptionsDemandLossQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity BtuT’I’M’AA’W’z’VL’mdhcif =
 (BASettlementIntervalResourceEnergyLossCreditEligibleCRNDemandQuantity **Brtz’mdhcif** + BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif**)

And Where

BASettlementIntervalEntityBalancedContractTypeExceptionsDemandLossQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif =  MeasuredDemandControlAreaIMBOFFExceptions8Flag Brt \* (BASettlementIntervalResourceEnergyLossCreditEligibleCRNDemandQuantity **Brtz’mdhcif** + BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif**)

And Where

BASettlementIntervalExportsMinusBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =
(BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsExportQuantity\_EX\_IMBOFF BuT’I’M’AA’W’VL’mdhcif–- BASettlementIntervalEntityBalancedTORExportLossQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif**)

And Where

BASettlementIntervalEntityExceptionsExportQuantity\_EX\_IMBOFF BuT’I’M’AA’W’VL’mdhcif = BASettlementIntervalEntityExceptionsQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’VL’mdhcif

Where

t = ‘ETIE’

And Where

BASettlementIntervalEntityBalancedTORExportLossQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif** = (BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif)

Where

z’ = ‘TOR’

And Where

t = ‘ETIE’

And Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =

(BASettlementIntervalEntityNonExportTotalDemandQuantity **BuT’I’M’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_IMBOFF BuT’I’M’W’VL’mdhcif)

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

And Where

BASettlementIntervalUDCExportQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** = (BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsExportQuantity\_EX\_IMBOFF BuT’I’M’AA’W’VL’mdhcif)

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

And Where

BASettlementIntervalNonNetBalancedTORDemandLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =

BASettlementIntervalEntityBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalEntityBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**

Where

(

T’ = ‘UDC’

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

And Where

BASettlementIntervalEntityBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityBalancedTORExportLossQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif**

***-- CC6477 – Related Measured Demand for UDC, Gross-Settled Non-Load-Following MSS, Net-Settled MSS and Load-Following MSS Entities, Excluding Measured Demand Energy for Demand having TOR Rights–-***

Real-time Imbalance Energy Offset–- associated Measured Demand Quantity Excluding Measured Demand Energy for Demand having TOR Rights, calculated over the CAISO Control Area (CAISO Total by Settlement Interval and applying Exceptions #8)

CAISOSettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **mdhcif** = BASettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **Bmdhcif**

Real-time Congestion Offset-associated Measured Demand Quantity Excluding Transmission Measured Demand Energy for Demand having TOR Rights, calculated over the CAISO Control Area (by BA and Settlement Interval and applying Exceptions #8)

Where

BASettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **Bmdhcif** =
(BASettlementIntervalEntityMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

* + - 1. Where

BAMeasuredDemandIMBOFFExceptions8Flag **B** <> True

* + - 1. And Where

BASettlementIntervalEntityMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif**= (BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**  + BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalUDCExportQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalNonNetBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportDemandTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalExportsMinusBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**

Where

T’ = ‘MSS’

And Where

(

I’ = ‘NET’

Or Where

L’ = ‘YES’

)

And Where

BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportDemandTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =

MIN(0, BASettlementIntervalNetMSSDemandTotalQuantity **BuT’I’M’W’VL’mdhcif–**- BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_IMBOFF BuT’I’M’W’VL’mdhcif–- BASettlementIntervalEntityBalancedTORNonExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**)

Where

BASettlementIntervalEntityBalancedTORNonExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

t <> ‘ETIE’

And Where

z’ = ‘TOR’

And Where

BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif = BASettlementIntervalEntityBalancedContractTypeDemandQuantity BtuT’I’M’AA’W’z’VL’mdhcif–- BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif

Where

BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif =  MeasuredDemandControlAreaIMBOFFExceptions8Flag Brt \* (SettlementIntervalResourceContractMD **Brtz’mdhcif** + BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif**)

And Where

BASettlementIntervalExportsMinusBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =
(BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif**–- BASettlementIntervalEntityExceptionsExportQuantity\_EX\_IMBOFF BuT’I’M’AA’W’VL’mdhcif–- BASettlementIntervalEntityBalancedTORExportQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif**)

Where

BASettlementIntervalEntityBalancedTORExportQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif** = (BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_IMBOFF BtuT’I’M’AA’W’z’VL’mdhcif)

Where

z’ = ‘TOR’

And Where

t = ‘ETIE’

And Where

BASettlementIntervalNonNetBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** =

BASettlementIntervalEntityBalancedTORNonExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** + BASettlementIntervalEntityBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif**

Or Where

T’ = ‘MSS’ And I’ = ’GROSS’ And L’ = ‘NO’

)

Where

(

T’ = ‘UDC’

And Where

BASettlementIntervalEntityBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** = BASettlementIntervalEntityBalancedTORExportQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif**

***Pre-calculation Measured Demand over TAC Area – CPM
– Related Metered Load by TAC Area, excluding Load having TOR Rights –***

BAResource10MMeteredTACAreaDemandQuantity **Brtvmdhi** **=**

 BAResSettlementIntervalGrossMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

BAResource10MTORContractMD **Brtmdhi** =

SettlementIntervalResourceContractMD **Brtz’mdhcif**

* + - 1. Where

z’ = ‘TOR’

***CC 6457 – Related Measured Demand, excluding Load or Exports having TOR Rights –***

Measured Demand Quantity Minus Balanced TOR Rights over CAISO Control Area – Exceptions #9 (by Trading Hour)

CAISOTotalHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **mdh** =
 BAHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **Bmdh**

Measured Demand Quantity Minus Balanced TOR Rights over CAISO Control Area – Exceptions #9 (by BA and Trading Hour)

BAHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **Bmdh**= MIN (0, BAHourlyMeasuredDemand\_DeclinedHASPBidsQty **Bmdh**–- BAHourlyBalancedTOR\_DeclinedHASPBidsQty **Bmdh**)

Measured Demand Quantity over CAISO Control Area – Exceptions #9 (by BA and Trading Hour)

BAHourlyMeasuredDemand\_DeclinedHASPBidsQty **Bmdh**=

BAUDCSettlementIntervalMeasuredDemandControlAreaDeclinedHASPBidsQty **BuT’I’M’W’VL’mdhcif**

Measured Demand Quantity over UDC Area – Exceptions #9 (by BA and Settlement Interval)

Where

BAUDCSettlementIntervalMeasuredDemandControlAreaDeclinedHASPBidsQty **BuT’I’M’W’VL’mdhcif** =

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif**
+ BASettlementIntervalUDCExportQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif**

* + - 1. Where

BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** = BAResSettlementIntervalMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif

Where

T’ = ‘UDC’

Or

T’ = ‘MSS’ And I’ = ’GROSS’

And Where

BAResourceMeasuredDemandDeclinedHASPBidsExceptions9Flag **Brt** <> True

And Where

BAMeasuredDemandDeclinedHASPBids9Flag **B** <> True

* + - 1. And Where

BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
BASettlementIntervalNetMSSMeasuredDemandQuantity BuT’I’M’AA’W’VL’mdhcif

Where

T’ = ‘MSS’ And I’ = ‘NET’

And Where

BAMeasuredDemandDeclinedHASPBids9Flag **B** <> True

* + - 1. And Where

BASettlementIntervalUDCExportQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** =
  (SettlementIntervalDeemedDeliveredInterchangeEnergyQuantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**+ Op\_Agreement\_Export\_Loss\_Allocation\_Quantity **BrtEuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’oVvHn’L’mdhcif**)

Where

t = ‘ETIE’ and Q’ = ‘CISO’

And

E In ( ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’, ‘UCTG’)

And

T’ = ‘UDC’ Or T’ = ‘MSS’ And I’ = ’GROSS’

And Where

BAResourceMeasuredDemandDeclinedHASPBidsExceptions9Flag **Brt** <> True

And Where

BAMeasuredDemandDeclinedHASPBids9Flag **B** <> True

Balanced TOR not Subject to Declined HASP Bids Exceptions (by BA and Settlement Interval)

Where

BAHourlyBalancedTOR\_DeclinedHASPBidsQty **Bmdh** =

SettlementIntervalResourceContractMD **Brtz’mdhcif**

* + - 1. Where

z’ = ‘TOR’

* + - 1. And Where

BAResourceMeasuredDemandDeclinedHASPBidsExceptions9Flag **Brt** <> True

* + - 1. And Where

BAMeasuredDemandDeclinedHASPBids9Flag **B** <> True

##

## Outputs

| Output Req ID | Name | Description |
| --- | --- | --- |
| 1 | In addition to any outputs listed below, all external inputs shall be included as outputs. | All inputs.  |
| 2 | CAISOTotalHourlyMeasuredDemandControlAreaQty **mdh** | Total Measured Demand quantity calculated over the CAISO Control Area for a Trading Hour. |
| 3 | CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty **mdhcif** | Total Measured Demand quantity calculated over the CAISO Control Area for a settlement interval. |
| 4 | BAHourlyMeasuredDemandControlAreaQty **Bmdh** | Hourly Measured Demand quantitycalculated over the CAISO Control Area . |
| 5 | BASettlementIntervalMeasuredDemandControlAreaQty **Bmdhcif** | Measured Demand quantity calculated over the CAISO Control Area in for a settlement interval. |
| 6 | BAMeasuredDemandRatio Bmdh | Load ratio share by BA within the CAISO BAA |
| 7 | UDCTotalSettlementIntervalMeasuredDemandControlAreaQty **uT’I’M’W’VL’mdhcif** | UDCTotal Measured Demand quantity calculated over the CAISO Control Area for a settlement interval. |
| 8 | BAUDCHourlyMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdh** | Hourly UDC Measured Demand quantity calculated for a Business Associate. |
| 9 | BAUDCSettlementIntervalMeasuredDemandControlAreaQty **BuT’I’M’W’VL’mdhcif** | UDC Measured Demand quantity calculated over the CAISO Control Area for a settlement interval. |
| 10 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of meter input values for all Loads and other non-export Demand resources, where the quantity is calculated for all UDC and gross-settled MSS entities for a settlement interval. The summed quantity is restricted to Energy from non-MSS entities or from gross-settled MSS entities. |
| 11 | BASettlementIntervalUDCNodalMeteredCAISODemandQuantity **BuT’I’M’AA’W’VL’mdhcif** | Sum of the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities over the Aggregated Pricing, where the quantity is calculated for all UDC and MSS entities for a settlement interval. |
| 12 | BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand, where the quantity is calculated over all net-settled MSS entities for a settlement interval. |
| 13 | BASettlementIntervalUDCExportQuantity\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of real-time deemed-delivered export quantities, including export losses settled under contractual operating agreements for a settlement interval. |
| 14 | HourlyNodalMeteredCAISODemandQuantity\_MDOverCA **AA’mdh** | Hourly summation of meter input values over the Aggregated Pricing. The summed quantity includes the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities, and also includes the calculated net MSS Demand value for each net-settled MSS entity. |
| 15 | SettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **uM’AA’mdhcif** | Sum of meter input values over the Aggregated Pricing for a settlement interval. The summed quantity includes the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities, and also includes the calculated net MSS Demand value for each net-settled MSS entity. |
| 16 | BAEntitySettlementIntervalNodalMeteredCAISODemandQuantity **BuM’AA’mdhcif** | Sum of meter input values over the Aggregated Pricing for a settlement interval. The summed quantity includes the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities. Includes only entity component subtype with value ‘GL’ or ‘NPL’. |
| 17 | BAHourlyNodalMeteredCAISODemandQuantity\_MDOverCA **BAA’mdh** | Hourly sum of meter input values over the Aggregated Pricing Node. The summed quantity includes the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities, and also includes the calculated net MSS Demand value for each net-settled MSS entity. |
| 18 | BASettlementIntervalNodalMeteredCAISODemandQuantity\_MDOverCA **BAA’mdhcif** | Sum over the Aggregated Pricing Node for asettlement interval of the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities, and of the calculated net MSS Demand values for all net-settled MSS entities. |
| 19 | BASettlementIntervalNodalNetMSSDemandQuantity **BAA’mdhcif** | Sum of the calculated net MSS Demand values for all net-settled MSS entities over the Aggregated Pricing for a settlement interval. The summed quantity includes the calculated net MSS Demand value for each net-settled MSS entity. |
| 20 | BASettlementInterval\_NodalMeteredCAISODemandQuantity **BAA’mdhcif** | Sum of the individual meter readings for Loads and other non-export Demand resources of non-MSS entities and gross-settled MSS entities over the Aggregated Pricing for a settlement interval. |
| 21 | CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty **mdh** | Hourly total Measured Demand quantity minus Demand served through transmission rights of Business Associates, where the Measured Demand quantity represents the Demand of the CAISO Control Area. |
| 22 | CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty **mdhcif** | Total Measured Demand quantity minus Demand served through transmission rights of Business Associates, where the Measured Demand quantity represents the Demand of the CAISO Control Area for a settlement interval. |
| 23 | BAHourlyMeasuredDemandMinusRightsControlAreaQty **Bmdh** | Houly Measured Demand quantity minus Demand served through transmission rights of Business Associates. |
| 24 | BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty **Bmdhcif** | Measured Demand quantity minus Demand served through transmission rights of Business Associates, where the Measured Demand quantity represents the Demand served by a Business Associate over the CAISO Control Area for a settlement interval. |
| 25 | BASettlementIntervalRightsMDControlAreaQty **Bmdhcif** | Transmission rights of a Business Associate. The Business Associate is excluded from Measured Demand for a settlement interval. |
| 26 | CAISOTotalHourlyMeasuredDemandMinusRTRightsControlAreaQty **mdh** | Hourly total Measured Demand quantity minus Demand served through real-time transmission rights of Business Associates. |
| 27 | CAISOTotalSettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **mdhcif** | Total Measured Demand quantity minus Demand served through real-time transmission rights of Business Associates, where the Measured Demand quantity represents the Demand of the CAISO Control Area for a settlement interval. |
| 28 | BAHourlyMeasuredDemandMinusRTRightsControlAreaQty **Bmdh** | Hourly Measured Demand quantity minus Demand served through real-time transmission rights of Business Associates. |
| 29 | BASettlementIntervalMeasuredDemandMinusRTRightsControlAreaQty **Bmdhcif** | Measured Demand quantity minus Demand served through real-time transmission rights of Business Associates, where the Measured Demand quantity represents the Demand served by a Business Associate over the CAISO Control Area for a settlement interval. |
| 30 | BASettlementIntervalRTRights\_MDControlAreaQty **Bmdhcif** | Real-time transmission rights of a Business Associate. The Business Associate is excluded from Measured Demand for a settlement interval. |
| 31 | CAISOTotalHourlyMeasuredDemandMinusRT\_TORControlAreaQty **mdh** | Hourly total Measured Demand quantity minus Demand served through real-time TOR transmission rights of Business Associates, where the Measured Demand quantity represents the Demand of the CAISO Control Area. |
| 32 | CAISOTotalSettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **mdhcif** | Total Measured Demand quantity minus Demand served through real-time TOR transmission rights of Business Associates, where the Measured Demand quantity represents the Demand of the CAISO Control Area for a settlement interval. |
| 33 | BAHourlyMeasuredDemandMinusRT\_TORControlAreaQty **Bmdh** | Hourly Measured Demand quantity minus Demand served through real-time TOR transmission rights of Business Associates, where the Measured Demand quantity represents the Demand served by Business Associate B over the CAISO Control. |
| 34 | BASettlementIntervalMeasuredDemandMinusRT\_TORControlAreaQty **Bmdhcif** | Measured Demand quantity minus Demand served through real-time TOR transmission rights of Business Associate B, where the Measured Demand quantity represents the Demand served by Business Associate B over the CAISO Control Area for a settlement interval. |
| 35 | BASettlementIntervalRT\_TOR\_MDControlAreaQty **Bmdhcif** | Real-time TOR transmission rights of a Business Associate. Up to the value of the output quantity, the Business Associate is excluded from Measured Demand for a settlement interval. |
| 36 | CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty\_Ex1 **mdh** | Total Measured Demand quantity minus Demand served through transmission rights of Business Associates comprising Exceptions #5, where the Measured Demand quantity represents the Demand of the CAISO Control Area and excludes Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 37 | CAISOTotal10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **mdhi** | Total Measured Demand quantity minus Demand served through transmission rights of Business Associates comprising Exceptions #5, where the Measured Demand quantity represents the Demand of the CAISO Control Area over a 10-minute and excludes Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 38 | BAHourlyMeasuredDemandMinusRightsControlAreaQty\_Ex1 **Bmdh** | Measured Demand quantity minus Demand served through transmission rights of a Business Associate who belongs to Exceptions #5, where the Measured Demand quantity excludes Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 39 | BA10MMeasuredDemandMinusRightsControlAreaQty\_Ex1 **Bmdhi** | Measured Demand quantity minus Demand served through transmission rights of a Business Associate who belongs to Exceptions #5, where the Measured Demand quantity represents the Demand served by Business Associate B over the CAISO Control Area in a 10-minute interva and excludes Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 40 | BASettlementIntervalRightsMDControlAreaQty\_Ex5 **Bmdhcif** | Transmission rights Measured Demand Quantity for a Business Associate who belongs to Exceptions #5. The Business Associate is excluded from Measured Demand for a settlement interval. |
| 41 | CAISOTotalHourlyMeasuredDemandControlAreaQty\_Ex1 **mdh** | Total Measured Demand quantity calculated over the CAISO Control Area with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 42 | CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **mdhcif** | Total Measured Demand quantity calculated over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 43 | BAHourlyMeasuredDemandControlAreaQty\_Ex1 **Bmdh** | Hourly Measured Demand quantity calculated for a Business Associate over the CAISO Control Area with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 44 | BASettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **Bmdhcif** | Measured Demand quantity calculated for a Business Associate over the CAISO Control for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 45 | UDCTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** | UDCTotal Measured Demand quantity calculated over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 46 | BAUDCHourlyMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdh** | UDC Measured Demand quantity calculated for a Business Associate associated with its UDC/MSS over the CAISO Control Area, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 47 | BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** | UDC Measured Demand quantity calculated for a Business Associate and associated UDC/MSS over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 48 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of meter input values for all Loads and other non-export Demand resources where the quantity is calculated for all UDC and gross-settled MSS entities for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. The summed quantity is restricted to Energy from non-MSS entities or from gross-settled MSS entities. |
| 49 | BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand attributable to Business Associate B and UDC/MSS u of Entity Type T’ (in association with MSS subgroup M’ and MSS-related attributes MSS Gross/Net Energy Settlement Type I’, MSS Emissions Pay Flag W’, RUC Participation Flag V and Load-Following Selection Flag L’), where the quantity is calculated over all net-settled MSS entities for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
| 50 | BASettlementIntervalUDCExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of real-time deemed-delivered export quantities, including export losses settled under contractual operating agreements, for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. |
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| 51 | UDCTotalSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** | Total UDC Gross Metered Demand quantity calculated as the sum of the UDC Gross Metered Demand quantity over all Business Associates of a UDC/MSS for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1 as well as any Energy associated with TOR transmission rights. |
| 52 | BAUDCHourlyGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdh** | Hourly UDC Gross Metered Demand quantity calculated for a Business Associate associated with its UDC/MSS over the CAISO Control Area, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1 as well as any Energy associated with TOR transmission rights.  |
| 53 | BAUDCSettlementIntervalGrossMeteredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** | UDC Gross Metered Demand quantity calculated for a Business Associate associated with its UDC/MSS over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1 as well as any Energy associated with TOR transmission rights.  |
| 54 | BASettlementIntervalUDCTotalNetMSSGrossLoadQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Total MSS Gross Load attributable to a Business Associate where the quantity is calculated over all net-settled MSS entities for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1.  |
| 55 | BASettlementIntervalMeteredDemandRightsMDControlAreaQty\_UFEBuT’I’M’Vmdhcif | The quantity (in MWh) of gross metered Demand associated with a Business Associate for a settlement interval. |
| 56 | EntityBasicInfo BuT’I’M’Vmd | This CT output provides an entity’s basic attribute information. The output = 0 for all entities. For each UDC/MSS entity, the output presents the the entity type , any associated MSS subgroup values, and for each combination of entity and MSS subgroup, the corresponding values for the Aggregated Pricing Node. Additionally, for cases where T’ = ‘MSS’, u will be associated with the attributes gross/net settlement type I’, MSS Emissions Pay Flag W’, and RUC Participation Flag V that specify MSS operational or settlement selections. For a case where M’ is NULL (i.e., a MSS subgroup either does not exist for a MSS in a case where T’ = ‘MSS’ or does not apply to a UDC in a case where T’ = ‘UDC’), the other attributes of the output apply to u instead of M’, if they exist. The output applies to a Trading Day. |
| 57 | BASettlementIntervalTORMeteredDemand **Bmdhcif** | An output that presents the TOR transmission right-exempted Metered Demand quantity for a Business Associate and settlement interval over all Loads and other non-export Demand resources resources. |
| 58 | UDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1 **uT’I’M’W’VL’mdhcif** | UDC Total Gross Measured Demand quantity calculated over the CAISO Control Area for UDC/MSS for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. The output is similar to output UDCTotalSettlementIntervalMeasuredDemandControlAreaQty\_Ex1uT’I’M’W’VL’mdhcif, except that for a net-settled MSS the UDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1uT’I’M’W’VL’mdhcif output does not net MSS Generation with MSS Demand. |
| 59 | BAUDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1 **BuT’I’M’W’VL’mdhcif** | UDC Total Gross Measured Demand quantity calculated for a Business Associate and its UDC/MSS over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. The output is similar to output BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_Ex1BuT’I’M’W’VL’mdhcif except that for a net-settled MSS the BAUDCTotalSettlementIntervalGrossMeasuredDemandControlAreaQty\_Ex1uT’I’M’W’VL’mdhcif output does not net MSS Generation with MSS Demand. |
| 60 | BASettlementIntervalNetSettledMSSTotalGrossMeasuredDemandQty\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | MSS Measured Demand attributable to a Business Associate where the quantity is calculated over all net-settled MSS for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. This output is similar to the output BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex1\_MDOverCABuT’I’M’W’VL’mdhcif except that the IntervalNetSettledMSSTotalGrossMeasuredDemandQty\_Ex1\_MDOverCABuT’I’M’W’VL’mdhcif output does not net MSS Generation with MSS Demand. |
| 61 | BASettlementIntervalNetSettledMSSTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of meter input values for all Loads and other non-export Demand resources resources that were scheduled by a Business Associate, where the quantity is calculated for all net-settled MSS entities for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. The summed quantity is restricted to Energy from net-settled MSS entities. This output is similar to the output BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex1\_MDOverCABuT’I’M’W’VL’mdhcif for UDC and gross-settled MSS entities. |
| 62 | BASettlementIntervalNetSettledMSSExportQuantity\_Ex1\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of real-time deemed-delivered export quantities, including export losses settled under contractual operating agreements, calculated for a Business Associate where the quantity is calculated over all net-settled MSS entities for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #1. The summed quantity is restricted to Energy from net-settled MSS entities. This output is similar to the output IntervalUDCExportQuantity\_Ex1\_MDOverCABuT’I’M’W’VL’mdhcif for UDC and gross-settled MSS entities. |
| 63 | CAISOTotalDailyMeasuredDemandControlAreaQty\_FERC **md** | Daily total Measured Demand quantity calculated over the CAISO Control Area, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2 and inclusion of generation for Business Associates and generating units that comprise FERC Fee Exceptions #3. |
| 64 | CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_FERC **mdhcif** | Total Measured Demand quantity calculated over the CAISO Control Area for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2 and inclusion of generation for Business Associates and generating units that comprise FERC Fee Exceptions #3. |
| 65 | BADailyMeasuredDemandControlAreaQty\_FERC **Bmd** | Daily Measured Demand quantity calculated for a Business Associate over the CAISO Control Area, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2 and the inclusion of generation for Business Associates and generating units that comprise FERC Fee Exceptions #3. |
| 66 | BASettlementIntervalMeasuredDemandControlAreaQty\_FERC **Bmdhcif** | Measured Demand quantity calculated for a Business Associate over the CAISO Control for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2 and inclusion of generation for Business Associates and generating units that comprise FERC Fee Exceptions #3. |
| 67 | BASettlementIntervalTotalMeteredCAISODemandQuantity\_FERC **Bmdhcif** | Sum of meter input values for all Loads and other non-export Demand resources resources r that were scheduled by Business Associate for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2. The summed quantity is restricted to Energy from non-MSS entities or from gross-settled MSS entities. |
| 68 | BASettlementIntervalTotalNetMSSMeasuredDemandQty\_FERC **Bmdhcif** | Sum of net MSS Measured Demand attributable to a Business Associate for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #2. |
| 69 | BASettlementIntervalExportQuantity\_FERC **Bmdhcif** | Sum of Real-Time Deemed-Delivered export quantities plus export losses settled under contractual operating agreements, calculated for a Business Associated and settlement interval, with exclusion of input values for Business Associates and resources comprising Exceptions #2. The calculated quantity contains only export Energy from non-MSS entities and from gross-settled MSS entities. |
| 70 | BASettlementIntervalGenerationQuantity\_FERC **Bmdhcif** | Sum of meter input values for all generating unit resources that were scheduled by a Business Associate for a settlement interval, with inclusion of generation for Business Associates and generating units that comprise FERC Fee Exceptions #3. The summed quantity is restricted to Energy from non-MSS entities or from gross-settled MSS entities. |
| 71 | CAISOHourlyDAGrossMeasuredDemand mdh | Hourly Measured Demand over the CAISO Control Area, independent of the MSS Gross/Net settlement option, where Gross Load is used for the metered CAISO Demand of a net-settled MSS entity. |
| 72 | BAResIntervalUDCMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | CAISO metered Demand that is attributable to Load or other non-export Demand resource for a settlement interval, where T’ = ‘UDC’ (indicating a UDC entity). |
| 73 | BAResIntervalGrossMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | CAISO metered Demand that is attributable to Load or other non-export Demand resource for a settlement interval, where T’ = ‘MSS’ and I’ = ‘GROSS’ (indicating a gross-settled MSS entity). |
| 74 | BAResIntervalNetMSSMeteredCAISODemandQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | CAISO metered Demand that is attributable to Load or other non-export Demand resource for a settlement interval, where S’ = ‘GL’ (indicating a MSS gross Load resource) and both T’ = ‘MSS’ and I’ = ‘NET’ (indicating a net-settled MSS entity). |
| 75 | BAHourlyResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdh** | Hourly Gross Metered Demand quantity calculated for a Business Associate over the CAISO Control Area.  |
| 76 | BAHourlyResMeteredDemandMinusTORControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdh** | Hourly total Metered Demand quantity minus Demand served through TOR transmission rights of a Business Associate.This output excludes Energy provided by Business Associates and resources that comprise Exceptions #6 (BCR Exceptions). |
| 77 | BASettlementIntervalResMeteredDemandMinusTORControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif** | Total Metered Demand quantity minus Demand served through TOR transmission rights of a Business Associate. , This output applies to a settlement interval and excludes Energy provided by Business Associates and resources that comprise Exceptions #6 (BCR Exceptions). |
| 78 | BASettlementIntervalResTOR\_MDControlAreaQty\_BCR **BrtF’S’mdhcif** | Total TOR transmission rights quantity that is exempt from inclusion in the Metered Demand outputs for a Business Associate. This output applies to a settlement interval. |
| 79 | BASettlementIntervalResMeteredDemandControlAreaQty\_BCR **BrtuT’I’M’F’W’S’VL’mdhcif** | Gross Metered Demand quantity calculated for a Business Associate over the CAISO Control Area for a settlement interval.  |
| 80 | BAResSettlementIntervalUDCMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif | Metered Demand quantity calculated for a Business Associate over the CAISO Control Area for a settlement interval, where T’ = ‘UDC’ (indicating a UDC entity).  |
| 81 | BAResSettlementIntervalGrossMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif | Metered Demand quantity calculated for a Business Associate over the CAISO Control Area for a settlement interval, where T’ = ‘MSS’ and I’ = ‘GROSS’ (indicating a gross-settled MSS entity).  |
| 82 | BAResSettlementIntervalNetMSSMeteredCAISODemandQuantity BrtuT’I’Q’M’AA’F’R’pPW’QS’d’Nz’VvHn’L’mdhcif | Gross Metered Demand quantity calculated for a Business Associate over the CAISO Control Area for a settlement interval, where S’ = ‘GL’ (indicating a MSS gross Load resource) and both T’ = ‘MSS’ and I’ = ‘NET’ (indicating a net-settled MSS entity). |
| 83 | BAHourlyResRealTimeTORLoadQty\_Ex6\_BCR Brmdh | Hourly total Real-Time TOR transmission rights quantity (utilized by CC 6806 RUC Tier1 Allocation) for a Load Resource and Business Associate. This output excludes Energy provided by Business Associates and resources that comprise Exceptions #6 (BCR Exceptions). |
| 84 | BAHourlyResDayAheadTORLoadQty\_Ex6\_BCR **Brmdh** | Hourly total Day-Ahead TOR transmission rights quantity (utilized by CC 6806 RUC Tier1 Allocation) for a Load Resource and Business Associate. This output excludes Energy provided by Business Associates and resources that comprise Exceptions #6 (BCR Exceptions). |
| 85 | CAISOTotalHourlyMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **mdh** | Hourly total Measured Demand quantity minus Demand served through transmission rights of a Business Associates comprising Exceptions #5, where the Measured Demand quantity represents the Demand of the CAISO Control Area and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 86 | CAISOTotalSettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **mdhcif** | Total Measured Demand quantity minus Demand served through transmission rights of Business Associates comprising Exceptions #5, where the Measured Demand quantity represents the Demand of the CAISO Control Area for a settlement interval and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 87 | BAHourlyMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdh** | Measured Demand quantity minus Demand served through transmission rights of a Business Associate who belongs to Exceptions #5, where the Measured Demand quantity represents the Demand served by the Business Associate over the CAISO Control Area and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 88 | BASettlementIntervalMeasuredDemandMinusRightsControlAreaQty\_LFEx6 **Bmdhcif** | Measured Demand quantity minus Demand served through transmission rights of a Business Associate who belongs to Exceptions #5, where the Measured Demand quantity represents the Demand served by the Business Associate over the CAISO Control Area for a settlement interval and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 89 | BASettlementIntervalTOR\_MDControlAreaQty\_BCR **Bmdhcif** | Total TOR transmission rights quantity that is exempt from inclusion in the Metered Demand outputs for a Business Associate. This output applies to a settlement interval. |
| 90 | CAISOTotalHourlyMeasuredDemandControlAreaQty\_LFEx6 **mdh** | Hourly total Measured Demand quantity calculated over the CAISO Control Area, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 91 | CAISOTotalSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **mdhcif** | Total Measured Demand quantity calculated over the CAISO Control Area for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 92 | BAHourlyMeasuredDemandControlAreaQty\_LFEx6 **Bmdh** | Hourly Measured Demand quantity calculated for a Business Associate over the CAISO Control Area with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 93 | BASettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **Bmdhcif** | Measured Demand quantity calculated for a Business Associate over the CAISO Control Area for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 94 | UDCTotalSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **uT’I’M’W’VL’mdhcif** | UDCTotal Measured Demand quantity calculated over the CAISO Control Area for a UDC/MSS for a settlement interval, with the exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 95 | BAUDCHourlyMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdh** | Hourly UDC Measured Demand quantity calculated for a Business Associateand its UDC/MSS over the CAISO Control Area, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 96 | BAUDCSettlementIntervalMeasuredDemandControlAreaQty\_LFEx6 **BuT’I’M’W’VL’mdhcif** | UDC Measured Demand quantity calculated for a Business Associate and its and UDC/MSS over the CAISO Control Area for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 97 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of meter input values for all Load and other non-export Demand resources that were scheduled by a Business Associate, where the quantity is calculated for all UDC and gross-settled MSS entities for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The summed quantity is restricted to Energy from non-MSS entities or from gross-settled MSS entities. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 98 | BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_LFEx6\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand attributable to a Business Associate where the quantity is calculated in association with a net-settled MSS entity for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS regardless of whether or not the MSS has selected the MSS Load-Following option. |
| 99 | BASettlementIntervalUDCExportQuantity\_Ex6\_MDOverCA **BuT’I’M’W’VL’mdhcif** | Sum of real-time deemed-delivered export quantities, including export losses settled under contractual operating agreements, calculated for a Business Associate for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. |
| 100 | BAHourlyMeasuredDemandMinusRightsQuantity\_NON\_LF\_EX\_RTM\_BCR **Bmdh** | Hourly BCR Tier 1 Measured Demand quantity minus Demand served through transmission rights of a Business Associate who belongs to Exceptions #5, where the Measured Demand quantity represents the Demand served by the Business Associate over the CAISO Control Area and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS has not selected the MSS Load-Following option (where L’ = ‘NO’). For a Load-Following MSS (where L’ = ‘YES’), the Measured Demand quantity = 0. |
| 101 | BAHourlyTORContractDemandQuantity\_EX\_BCR **Bmdh** | Hourly Total TOR transmission rights quantity that is exempt from inclusion in the Metered Demand outputs for a Business Associate. |
| 102 | BAHourlyUDCOrMSSMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **Bmdh** | Hourly BCR Tier 1 Measured Demand quantity, where the Measured Demand quantity represents the Demand served by a Business Associate over the CAISO Control Area and excludes Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS has not selected the MSS Load-Following option (where L’ = ‘NO’). For a Load-Following MSS (where L’ = ‘YES’), the Measured Demand quantity = 0. |
| 103 | BASettlementIntervalMSSNetMeasuredDemandQuantity\_NON\_LF\_EX\_RTM\_BCR **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand attributable to a Business Associate, where the quantity is calculated in association with a net-settled MSS entity for a settlement interval, with exclusion of Energy provided by Business Associates and resources that comprise Exceptions #6. The output reflects the net settlement of a Load-Following MSS has not selected the MSS Load-Following option (where L’ = ‘NO’). For a Load-Following MSS (where L’ = ‘YES’), the net Measured Demand quantity = 0. |
| 104 | CAISOHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **mdh** | Hourly total Measured Demand quantity (in MWh) calculated over the CAISO Control Area, with the exclusion of Energy provided by Business Associates and resources belonging to Exception Set #7 and the exclusion of Measured Demand associated with contract rights. The output reflects the net settlement of a MSS entity regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 105 | BAHourlyMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdh** | Hourly Measured Demand quantity (in MWh) associated with a Business Associate , with the exclusion of Energy provided by Business Associates and resources belonging to Exception Set #7, and the exclusion of Measured Demand associated with contract rights. The output reflects the net settlement of a MSS entity regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 106 | BASettlementIntervalMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **Bmdhcif** | Measured Demand quantity (in MWh) associated with Business Associate for a settlement interval, with the exclusion of Energy provided by Business Associates and resources belonging to Exception Set #7, and the exclusion of Measured Demand associated with contract rights. The output reflects the net settlement of a MSS entity regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 107 | BASettlementIntervalEntityMeasuredDemandMinusBalancedRightsQuantity\_EX\_RTM\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Measured Demand quantity (in MWh) for a Business Associate, for a settlement interval with the exclusion of Energy provided by resources belonging to Exception Set #7, and the exclusion of Measured Demand associated with contract rights.  |
| 108 | BASettlementIntervalMSSNetMeasuredDemandMinusBalancedRightsQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #7, and the exclusion of Measured Demand associated with contract rights. The quantity is intended to be used for MSS cases where T’ = ‘MSS’. |
| 109 | BASettlementIntervalNetMSSDemandMinusBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Demand quantity (in MWh) for a Business Associate, for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #7, and the exclusion of Measured Demand associated with contract rights. The quantity is intended to be used for MSS cases where T’ = ‘MSS’. |
| 110 | BASettlementIntervalNetMSSDemandTotalQuantity BuT’I’M’W’VL’mdhcif | Net MSS Demand quantity (in MWh) for a Business Associate for a settlement interval. The quantity is intended to be used for MSS cases where T’ = ‘MSS’. |
| 111 | BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Non-Export resource exceptions Energy quantity (in MWh) for a Business Associate, for a settlement interval, where the Energy represents metered CAISO Demand that is attributable to resources that belong to Exception Set #7. |
| 112 | BASettlementIntervalEntityExceptionsQuantity\_EX\_CONGOFF **BtuT’I’M’AA’W’VL’mdhcif** | Exceptions Energy quantity (in MWh) from Demand resources of a Business Associate for a settlement interval, where the Energy is attributable to resources that belong to Exception Set #7. |
| 113 | SettlementIntervalDeemedDeliveredInterchangeEnergyExportTotalQuantity **BrtuT’I’Q’M’AA’R’pPW’Qd’Nz’VvHn’L’mdhcif** | Deemed-delivered Real-Time Interchange export schedule Energy quantity (in MWh) for a Business Associate, for a settlement interval, where the Energy is attributable to Real-Time Interchance export schedules. |
| 114 | BASettlementIntervalEntityBalancedRightsNonExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Balanced contract rights quantity (in MWh) for Non-Export Resource Demand of a Business Associate for a settlement interval, where the Energy excludes metered CAISO Demand that is attributable to resources that belong to Exception Set #7. |
| 115 | BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_CONGOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract rights quantity (in MWh) for a Business Associate for a settlement interval, where the Energy excludes TOR-covered Demand Energy that is attributable to resources that belong to Exception Set #7. |
| 116 | BASettlementIntervalEntityBalancedContractTypeDemandQuantity **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract rights quantity (in MWh) for a Business Associate for a settlement interval. |
| 117 | BASettlementIntervalResourceContractTypeMDZero **BrtuT’I’Q’M’AA’R’pPW’Qd’z’VvHn’L’mdhcif** | Zero-valued charge type used to convey MSS-related attribute information. The zero-value output applies to a settlement interval.  |
| 118 | BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_CONGOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract rights exceptions quantity (in MWh) for a Business Associate for a settlement interval, where the Energy excludes TOR-covered Demand Energy that is attributable to resources that belong to Exception Set #7. |
| 119 | BASettlementIntervalExportsMinusBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Energy exports minus balanced contract rights quantity (in MWh) for a Business Associate, for a settlement interval, where the calculated Energy quantity excludes Real-Time Interchange export schedules that are attributable to resources that belong to Exception Set #7. |
| 120 | BASettlementIntervalEntityExportQuantity **BuT’I’M’AA’W’VL’mdhcif** | Energy exports quantity (in MWh) for a Business Associate for a settlement interval. |
| 121 | BASettlementIntervalEntityQuantity **BtuT’I’M’AA’W’VL’mdhcif** | Metered CAISO Demand plus Real-Time Interchange export schedule Energy quantity (in MWh) for a Business Associate for a settlement interval. |
| 122 | BASettlementIntervalEntityExceptionsExportQuantity\_EX\_CONGOFF **BuT’I’M’AA’W’VL’mdhcif** | Exceptions Energy quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity consists of only those Real-Time Interchange export schedules that are attributable to resources that belong to Exception Set #7. |
| 123 | BASettlementIntervalEntityBalancedRightsExportQuantity\_EX\_CONGOFF **BuT’I’M’AA’W’VL’mdhcif** | Balanced contract rights quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy excludes contract rights of Real-Time Interchange export schedules of system resources that belong to Exception Set #7. |
| 124 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | UDC Metered CAISO Demand quantity (in MWh) for a Business Associate for a settlement interval, where the Entity Type T’ = ‘UDC’ and the Energy excludes resources that belong to Exception Set #7. |
| 125 | BASettlementIntervalEntityNonExportTotalDemandQuantity **BuT’I’M’W’VL’mdhcif** | Metered CAISO Demand Energy quantity (in MWh) for a Business Associate for a settlement interval. The output includes only the Demand associated with non-Export resources. |
| 126 | BASettlementIntervalUDCExportQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | UDC Real-Time Interchange export schedule Energy quantity (in MWh) for a Business Associate for a settlement interval, where the Entity Type T’ = ‘UDC’, and the output quantity excludes Energy from resources that belong to Exception Set #7. |
| 127 | BASettlementIntervalNonNetBalancedRightsDemandQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | UDC (non-netted) Balanced contract rights quantity (in MWh) for a Business Associate for a settlement interval, where the Entity Type T’ = ‘UDC’ and the calculated output quantity is attributable to the Energy of resources that belong to Exception Set #7. |
| 128 | BASettlementIntervalEntityBalancedRightsExportTotalQuantity\_EX\_CONGOFF **BuT’I’M’W’VL’mdhcif** | Balanced contract rights quantity (in MWh) for a Business for a settlement interval, where the calculated Energy quantity excludes contract rights of Real-Time Interchange export schedules of system resources that belong to Exception Set #7. |
| 129 | CAISOSettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **mdhcif** | Total Measured Demand quantity (in MWh) calculated over the CAISO Control Area for a settlement interval, with the exclusion of Energy provided by Business Associates and resources belonging to Exception Set #8 and the exclusion of TOR Loss Energy associated with contract rights. The output reflects net settlement for a Load-Following MSS regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 130 | BASettlementIntervalMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **Bmdhcif** | Measured Demand quantity (in MWh) associated with a Business Associate for a settlement interval, with exclusion of Energy provided by a Business Associates and resources belonging to Exception Set #8, and the exclusion of of TOR Loss Energy associated with contract rights. The output reflects the net settlement of a MSS entity regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 131 | BASettlementIntervalEntityMeasuredDemandMinusBalancedTORLossQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Measured Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #8, and the exclusion of of TOR Loss Energy associated with contract rights. |
| 132 | BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #8, and the exclusion of TOR Loss Energy associated with contract rights. The quantity is needed for the Measured Demand calculations in MSS cases where T’ = ‘MSS’ And (I’ = ‘NET’ Or L’ = ‘YES’). |
| 133 | BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Demand quantity (in MWh) for a Business Associate for a settlement interval, with exclusion of Energy provided by resources belonging to Exception Set #8, and the exclusion of Energy for which there are balanced TOR contract rights that protect against transmission loss charges. The quantity is needed for the Measured Demand calculations in MSS cases where T’ = ‘MSS’ And (I’ = ‘NET’ Or L’ = ‘YES’). |
| 134 | BASettlementIntervalEntityExceptionsNonExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Non-Export exceptions Energy quantity (in MWh) for a Business Associate for a settlement interval, where the Energy represents metered CAISO Demand that is attributable to resources that belong to Exception Set #8. |
| 135 | BASettlementIntervalEntityExceptionsQuantity\_EX\_IMBOFF **BtuT’I’M’AA’W’VL’mdhcif** | Exceptions Energy quantity (in MWh) from Demand resources scheduled by a Business Associate for a settlement interval, where the Energy is attributable to resources that belong to Exception Set #8. |
| 136 | BASettlementIntervalEntityBalancedTORNonExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Balanced TOR-covered Loss Energy quantity (in MWh) for Load and other non-Export resources of a Business Associate for a settlement interval, where the Energy has balanced TOR contract rights that protect against transmission loss charges. |
| 137 | BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity\_EX\_IMBOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract-covered Loss Energy quantity (in MWh) for a Business Associate for a settlement interval, where the Energy is protected from transmission congestion by contracts of contract type z’ and excludes the Demand of resources that belong to Exception Set #8. |
| 138 | BASettlementIntervalEntityBalancedContractTypeDemandLossQuantity **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract-protected Loss Energy quantity (in MWh) for a Business Associate for a settlement interval, where the Energy is protected from transmission congestion by contracts of contract type z’. |
| 139 | BASettlementIntervalEntityBalancedContractTypeExceptionsDemandLossQuantity\_EX\_IMBOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract-protected Loss Energy exceptions quantity (in MWh) for a Business Associate for a settlement interval, where the Energy is protected from transmission congestion by contracts of contract type z’ and relates to Demand-type resources that belong to Exception Set #8. |
| 140 | BASettlementIntervalExportsMinusBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Energy exports minus balanced TOR-covered Energy Export loss quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity excludes the Demand and associated contract rights of resources that belong to Exception Set #8. |
| 141 | BASettlementIntervalEntityExceptionsExportQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif** | Export exceptions Energy quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity is associated with only those Real-Time Interchange export schedules that are attributable to resources that belong to Exception Set #8. |
| 142 | BASettlementIntervalEntityBalancedTORExportLossQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif** | Balanced TOR-covered Energy Export Loss quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity consists exclusively of Energy of TOR-covered Real-Time Interchange export schedules that are not associated with resources belonging to Exception Set #8. |
| 143 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | UDC metered CAISO Demand quantity (in MWh) over all Load or other non-export Demand resources for a Business Associate for a settlement interval, where T’ = ‘UDC’ Or (T’ = ‘MSS’ and I’ = ‘GROSS’ And L’ = ‘NO’) and the output excludes Energy from resources that belong to Exception Set #8. |
| 144 | BASettlementIntervalUDCExportQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | UDC Real-Time Interchange export schedule Energy quantity (in MWh) for a Business Associate for a settlement interval, where T’ = ‘UDC’ Or (T’ = ‘MSS’ and I’ = ‘GROSS’ and L’ = ‘NO’)’, and the output excludes Energy from resources that belong to Exception Set #8. |
| 145 | BASettlementIntervalNonNetBalancedTORDemandLossQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | UDC (non-netted) balanced TOR-covered Loss Energy quantity (in MWh) for a Business Associate for a settlement interval, where T’ = ‘UDC’ Or T’ = ‘MSS’ And I’ = ‘GROSS’ And L’ = ‘NO’, and where the calculated output quantity is comprised of a Load/non-export Demand component and an Energy Export Demand component, the calculated output is attributable to Energy of resources that do not belong to Exception Set #8.  |
| 146 | BASettlementIntervalEntityBalancedTORExportLossTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Balanced TOR-covered Energy Export quantity (in MWh) that is associated with TOR contracts that provide protection for loss quantities. The output applies to a Business Associate for a settlement interval, where the Energy Export resources do not belong to Exception Set #8. |
| 147 | CAISOSettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **mdhcif** | Total Measured Demand quantity (in MWh) calculated over the CAISO Control Area for a settlement interval, with the exclusion of Energy provided by Business Associates and resources belonging to Exception Set #8 and the exclusion of TOR Demand Energy associated with contract rights. The output reflects net settlement for a Load-Following MSS regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 148 | BASettlementIntervalMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **Bmdhcif** | Measured Demand quantity (in MWh) associated with a Business Associate for a settlement interval, with the exclusion of Energy provided by a Business Associate or resources belonging to Exception Set #8, and the exclusion of of TOR Demand Energy associated with contract rights. The output reflects the net settlement of a MSS entity regardless of whether or not the MSS has selected the MSS net-settlement option. |
| 149 | BASettlementIntervalEntityMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_RTM\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Measured Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by a BA’s resources belonging to Exception Set #8, and the exclusion of of TOR Demand Energy associated with contract rights. |
| 150 | BASettlementIntervalMSSNetMeasuredDemandMinusBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Measured Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #8, and the exclusion of TOR Demand Energy associated with contract rights. The quantity is needed for the Measured Demand calculations in MSS cases where T’ = ‘MSS’ And (I’ = ‘NET’ Or L’ = ‘YES’). |
| 151 | BASettlementIntervalNetMSSDemandMinusBalancedTORNonExportDemandTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Net MSS Demand quantity (in MWh) for a Business Associate for a settlement interval, with the exclusion of Energy provided by resources belonging to Exception Set #8, and the exclusion of TOR Demand Energy associated with contract rights for Load and other non-export Demand resources. The quantity is needed for the Measured Demand calculations in MSS cases where T’ = ‘MSS’ And (I’ = ‘NET’ Or L’ = ‘YES’). |
| 152 | BASettlementIntervalEntityBalancedTORNonExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Balanced TOR-covered Demand Energy quantity (in MWh) not associated with Export resources for a Business Associate for a settlement interval, where the Energy is protected from transmission congestion by contracts and excludes Demand from resources that belong to Exception Set #8. |
| 153 | BASettlementIntervalEntityBalancedContractTypeDemandQuantity\_EX\_IMBOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced, contract-protected Demand Energy quantity (in MWh) for contracts that are associated with a Business Associate, where the Energy is aggregated over Demand-type resources for a settlement interval, and where the Energy excludes Demand from resources that belong to Exception Set #8. |
| 154 | BASettlementIntervalEntityBalancedContractTypeExceptionsDemandQuantity\_EX\_IMBOFF **BtuT’I’M’AA’W’z’VL’mdhcif** | Balanced contract-protected Demand Energy exceptions quantity (in MWh) for a Business Associate for a settlement interval, where the Energy is protected from transmission congestion by contracts and excludes Demand from resources that belong to Exception Set #8. |
| 155 | BASettlementIntervalExportsMinusBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Energy exports minus balanced TOR-covered Energy Export quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity excludes TOR-covered Demand for Real-Time Interchange export schedules that are attributable to resources belonging to Exception Set #8. |
| 156 | BASettlementIntervalEntityBalancedTORExportQuantity\_EX\_IMBOFF **BuT’I’M’AA’W’VL’mdhcif** | Balanced TOR-covered Energy Export quantity (in MWh) for a Business Associateor a settlement interval, where the calculated Energy quantity and consists exclusively of TOR-covered transmission losses for Real-Time Interchange export schedules that are attributable to resources that do not belong to Exception Set #8. |
| 157 | BASettlementIntervalNonNetBalancedTORDemandQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | UDC (non-netted) balanced TOR-covered Demand Energy quantity (in MWh) for a Business Associate for a settlement interval, where T’ = ‘UDC’ Or T’ = ‘MSS’ And I’ = ‘GROSS’ And L’ = ‘NO’, and where the calculated output quantity is attributable to the Energy of Demand-type resources that do not belong to Exception Set #8, and the Energy Export component of the output quantity is summed over Energy Types ‘FIRM’, ‘NFRM’, ‘WHEEL’, ‘DYN’ and ‘UCTG’.  |
| 158 | BASettlementIntervalEntityBalancedTORExportTotalQuantity\_EX\_IMBOFF **BuT’I’M’W’VL’mdhcif** | Balanced TOR-covered Energy Export quantity (in MWh) for a Business Associate for a settlement interval, where the calculated Energy quantity consists exclusively of Energy of TOR-covered Real-Time Interchange export schedules that are not associated with resources belonging to Exception Set #8. |
| 159 | BAResource10MMeteredTACAreaDemandQuantity **Brtvmdhi** | Metered Demand quantity (in MWh) calculated over a TAC Area for a Business Associate and 10-minute interval i. |
| 160 | BAResource10MTORContractMD**Brtmdhi** | Metered Demand protected by TOR contract rights (that remain after the balancing of source and sink schedules having contract rights) for Business Associate B, Resource ID r, Resource Type t, for a 10-minute interval. |
| 161 | CAISOTotalHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **mdh** | Hourly total Measured Demand without TOR protection (in MWh) for all Business Associates, where the quantity is calculated over the CAISO Control Area The output excludes Energy associated with Business Associates and Resources for which Exception Set #9 applies. |
| 162 | BAHourlyMeasuredDemandMinusBalancedTOR\_DeclinedHASPBidsQty **Bmdh** | Hourly BA-specific Measured Demand without TOR protection (in MWh), where the quantity is calculated over the CAISO Control Area for a Business Associate The output excludes Energy associated with BAs and Resources for which Exception Set #9 applies. |
| 163 | BAHourlyMeasuredDemand\_DeclinedHASPBidsQty **Bmdh** | The BA-specific Measured Demand before the subtraction of balanced TOR contract rights (in MWh), where the quantity is calculated over the CAISO Control Area for a Business Associate. The output excludes Energy associated with BAs and Resources for which Exception Set #9 applies. |
| 164 | BAUDCSettlementIntervalMeasuredDemandControlAreaDeclinedHASPBidsQty **BuT’I’M’W’VL’mdhcif** | The Measured Demand (in MWh) for a specific Business Associate and UDC combination, where the quantity is calculated over the CAISO Control Area for a settlement interval. The output excludes Energy associated with Business Associates and Resources for which Exception Set #9 applies. |
| 165 | BASettlementIntervalUDCTotalMeteredCAISODemandQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** | The Metered CAISO Demand (in MWh) for a specific Business Associate and UDC combination for a settlement interval, , where T’ = ‘UDC’ or T’ = ‘MSS’ and I’ = ‘GROSS’. The output excludes Energy associated with BAs and Resources for which Exception Set #9 applies. |
| 166 | BASettlementIntervalUDCTotalNetMSSMeasuredDemandQty\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** | The net Measured Demand (in MWh) for a specific Business Associate and MSS combination for a settlement interval , where T’ = ‘MSS’ and I’ = ‘NET’. The output excludes Energy associated with BAs for which Exception Set #9 applies independently of Resource ID. |
| 167 | BASettlementIntervalUDCExportQuantity\_Ex9\_MDOverCA **BuT’I’M’W’VL’mdhcif** | The Real-Time Interchange Export Schedules (in MWh) for a specific Business Associate and UDC combination, where the quantity is calculated over the CAISO Control Area for a settlement interval, where T’ = ‘UDC’ or T’ = ‘MSS’ and I’ = ‘GROSS’. The output excludes Energy associated with Business Associates and Resources for which Exception Set #9 applies. |
| 168 | BAHourlyBalancedTOR\_DeclinedHASPBidsQty **Bmdh** | Hourly TOR transmission rights (in MWh) of a Business Associate. Up to the value of the output quantity, the Business Associate is excluded from Measured Demand. |
| 169 | CAISOTotal10MMeasuredDemandControlAreaQty **mdhi** | Total Measured Demand quantity calculated over the CAISO Control Area for a 10-minute interval. |
| 170 | BA10MMeasuredDemandControlAreaQty **Bmdhi** | Measured Demand quantity calculated over the CAISO Control Area in for a 10-minute interval. |
| 171 | BATotalDispatchIntervalEBTMPQuantity Bmdhcif | Total Excess Behind the Meter Production quantity calculated for BA. |
| 172 | TotalDispatchIntervalEBTMPQuantity mdhcif | Total Excess Behind the Meter Production quantity.Note: This variable will not be reportable in the bill determinant xml statements.  |

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# Charge Code Effective Date

| Charge Code/Pre-calc Name | Document Version | Effective Start Date | Effective End Date | Version Update Type |
| --- | --- | --- | --- | --- |
| Measured Demand Over Control Area | 5.0 | 04/01/09 | 03/31/09 | Documentation Edits Only |
| Measured Demand Over Control Area | 5.1 | 04/01/09 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.2 | 04/01/09 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.3 | 04/01/09 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.4 | 04/01/09 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.5 | 08/27/09 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.6 | 03/05/10 | 03/31/09 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.7 | 04/01/09 | 01/31/11 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.8 | 02/01/11 | 12/12/11 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.8a | 12/13/11 | 11/30/12 | Documentation Edits Only |
| Measured Demand Over Control Area | 5.9 | 12/01/12 | 04/30/13 | Documentation Edits and Configuration Impacted |
| Documentation Edits and Configuration Impacted | 5.10 | 05/01/13 |  4/30/14 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.11 | 05/01/14 | 9/30/14 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.12 | 10/01/14 | 10/31/14 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.13 | 11/1/14 | 8/1/18 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.13.5 | 8/1/18 | 12/31/20 | Configuration Impacted |
| Measured Demand Over Control Area | 5.14 | 1/1/21 | 12/31/20 | Documentation Edits and Configuration Impacted |
| Measured Demand Over Control Area | 5.14.1 | 1/1/21 | 4/30/26 | Configuration Impacted |
| Measured Demand Over Control Area | 5.15 | 5/1/26 | Open | Configuration Impacted |