Settlements & Billing

Configuration Guide: GMC Transmission Ownership Rights Charge

CC 4563

Version 5.3

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# 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

The Grid Management Charge Codes (GMC) are comprised of daily and monthly charges which are assessed to participating Scheduling Coordinators (SC) for the purpose of recovering all of the CAISO’s direct and indirect operating costs. The costs are comprised of CAISO Operating Costs, CAISO Other Costs and Revenues, CAISO Financial Costs, CAISO Operating Reserve Credit, and CAISO Out-of-Pocket Capital and Project Costs.

Through the GMC stakeholder process, the CAISO has identified three cost service based Charge Codes, a fixed Transmission Ownership Rights Charge Code, as well as four transactional and administrative Charge Codes. The cost service Charge Codes consist of (1) Market Services Charge; (2) System Operations Charge; and (3) CRR Services Charge. The four transactional fee consist of (1) Bid Segment Fee; (2) CRR Transaction Fee; (3) Inter-Scheduling Coordinator Trade Transaction Fee; and (4) Scheduling Coordinator ID Charge.

## Description

The Transmission Ownership Rights (TOR) Charge is designed to recover costs the ISO incurs for implementing and running the markets as well as the grid in real time on behalf of Transmission Owners. TORs are the ownership rights to facilities within the ISO balancing authority area of entities that have not executed the transmission control agreement, such that their facilities are not a part of the ISO controlled grid. The ISO has in the past recognized that it provides only limited services to the possessors of TORs, and thus has historically charged a discounted rate to such entities for GMC. This charge code will be assessed TOR Charge GMC Fee on the minimum of a Scheduling Coordinator’s TOR supply MWhs or TOR demand MWhs per Settlement Interval using the prevailing GMC rate as listed in the CAISO website.

# Charge Code Requirements

## Business Rules

| Bus Req ID | Business Rule |
| --- | --- |
|  | The TOR Services Charge shall apply to the minimum of a Scheduling Coordinator’s TOR supply or TOR demand per Settlement Interval. |
|  | Scheduling Coordinator’s TOR supply shall be calculated as the absolute value of supply energy, generation or import, associated with TOR contracts. |
|  | Scheduling Coordinator’s TOR demand shall be calculated as the absolute value of demand energy, load or export, associated with TOR contracts. |
|  | The prevailing rate for the GMC TOR Charge per minimum of supply or demand TOR MWh can be found at the CAISO website under Settlements section, and Grid management Charge (GMC) subsection. |
|  | This Charge Code shall provide an output on a daily basis. |
|  | This Charge Code shall be billed in accordance to CAISO Payments Calendar. |
|  | A settlement details file shall provide details for each daily settlement amount. |
| 4.0 | For adjustments to the Charge Code that cannot be accomplished by correction of upstream data inputs, recalculation or operator override, Pass Through Bill Charge adjustment shall be applied. |

## Predecessor Charge Codes

| Charge Code/ Pre-Calc Name |
| --- |
| CC 4560 – GMC Market Services Charge |

## Successor Charge Codes

| Charge Code/ Pre-calc Name |
| --- |
| None |

## Inputs - External Systems

| Row # | Variable Name | Description |
| --- | --- | --- |
| 1 | CAISOGMCTORChargeRate md | FERC-approved Transmission Ownership Rights GMC rate. The input data is available from the SaMC standing data based on applicable start and end dates. |
| 2 | PTBChargeAdjustmentGMCTORSettlementAmount BJmd | PTB adjustment variable for this Charge Code, with amount per SC (in $). The input applies to Business Associate B, Trading Month m and Trading Day d. |
| 3 | GMCTORChargeExclusionFlag B | Flag indicating TOR exception from Charge Code, where exception is represented by “1”. |
| 4 | GMCRSRCTORChargeExclusionFlag Br | Flag indicating Resource Specific TOR exception from Charge Code, where exception is represented by “1”. |
| 5 | BAEDAMEntityFlag BQ’md | Flag indicating an EIM entity that specifically participates in EDAM. |

## Inputs - Predecessor Charge Codes or Pre-calculations

| Row # | Variable Name | Predecessor Charge Code/ Pre-calc Configuration / Description |
| --- | --- | --- |
| 1 | BAResSettlementIntervalTORFinalBalancedQuantity BrtQ’mdhcif | Settlement Interval TOR Final Balanced Quantity for Business Associate B, Resource r. (MWh)  CC 4560 – GMC Market Services Charge |

## CAISO Formula

The daily settlement System Operations Grid Management Charge by each Business Associate is derived according to the formulation below.

### BADailyTORGMCChargeAmount Bmd = BADailyTORGMCQuantity Bmd \* CAISOGMCTORChargeRate md

### BADailyTORGMCQuantity Bmd = BAHourlyTORGMCQuantity Bmdh

### IF

### GMCTORChargeExclusionFlag B = 1

### THEN

### BAHourlyTORGMCQuantity Bmdh = 0

### ELSE

### BAHourlyTORGMCQuantity Bmdh = BASettlementIntervalTORGMCQuantity Bmdhcif

### BASettlementIntervalTORGMCQuantity Bmdhcif = Min (BASettlementIntervalTORDemandQuantity Bmdhcif, BASettlementIntervalTORSupplyQuantity Bmdhcif)

### BASettlementIntervalTORDemandQuantity Bmdhcif= Sum over (r, t, Q’) BAResSettlementIntervalTORDemandQuantity BrtQ’mdhcif

### If

### Resource type (t) = “LOAD” or “ETIE”

THEN

### BAResSettlementIntervalTORDemandQuantity BrtQ’mdhcif= BAResSettlementIntervalTORQuantity BrtQ’mdhcif

ELSE

BAResSettlementIntervalTORDemandQuantity BrtQ’mdhcif= 0

### BASettlementIntervalTORSupplyQuantity Bmdhcif= Sum over (r, t, Q’) BAResSettlementIntervalTORSupplyQuantity BrtQ’mdhcif

### IF

### Resource type (t) = “GEN” or “ITIE”

THEN

### BAResSettlementIntervalTORSupplyQuantity BrtQ’mdhcif= BAResSettlementIntervalTORQuantity BrtQ’mdhcif

ELSE

BAResSettlementIntervalTORSupplyQuantity BrtQ’mdhcif= 0

### IF

### GMCRSRCTORChargeExclusionFlag Br = 1

OR

BAEDAMEntityFlag BQ’md = 1

### THEN

### BAResSettlementIntervalTORQuantity BrtQ’mdhcif= 0

### ELSE

### BAResSettlementIntervalTORQuantity BrtQ’mdhcif= ABS (BAResSettlementIntervalTORFinalBalancedQuantity BrtQ’mdhcif)

## Outputs

| Output Req ID | Name | Description |
| --- | --- | --- |
| 1 | In addition to any outputs listed below, all inputs shall be included as outputs. | All inputs |
| 2 | BAResSettlementIntervalTORQuantity BrtQ’mdhcif | Settlement Interval TOR Quantity for Business Associate B, resource id r . |
| 3 | BASettlementIntervalTORSupplyQuantity Bmdhcif | Settlement Interval TOR Supply Quantity for Business Associate B. |
| 4 | BASettlementIntervalTORDemandQuantity Bmdhcif | Settlement Interval TOR Demand Quantity for Business Associate B. |
| 5 | BASettlementIntervalTORGMCQuantity Bmdhcif | Settlement Interval TOR GMC Quantity for Business Associate B, resource id r. |
| 6 | BAHourlyTORGMCQuantity Bmdh | Hourly TOR GMC Quantity for Business Associate B of Trading Month m, Trading Day d, and Trading Hour h. |
| 7 | BADailyTORGMCQuantity Bmd | Daily TOR GMC Quantity for Business Associate B of Trading Month m, and Trading Day d. |
| 8 | BADailyTORGMCChargeAmount Bmd | Daily TOR GMC Amount for Business Associate B of Trading Month m, and Trading Day d. |
| 9 | BAResSettlementIntervalTORDemandQuantity BrtQ’mdhcif | Settlement Interval TOR Demand Quantity by Business Associate B Resource r. |
| 10 | BAResSettlementIntervalTORSupplyQuantity BrtQ’mdhcif | Settlement Interval TOR Supply Quantity by Business Associate B Resource r. |

# Charge Code Effective Date

| Charge Code/  Pre-calc Name | Document Version | Effective Start Date | Effective End Date | Version Update Type |
| --- | --- | --- | --- | --- |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.0 | 01/01/12 | 4/30/14 | Configuration Impacted |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.1 | 5/1/14 | 4/30/14 | Configuration Impacted |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.1a | 5/1/14 | 4/30/15 | Configuration Impacted |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.2 | 5/1/15 | 4/30/15 | Configuration Impacted |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.2a | 5/1/15 | 12/31/25 | Documentation Edits Only |
| CC 4563 GMC Transmission Ownership Rights Charge | 5.3 | 1/1/26 | Open | Configuration Impacted |