Settlements & Billing

Configuration Guide: RC Services Charge Allocation

CC 5705

 Version 5.0

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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 CAISO serves as the reliability coordinator (RC) for entities within its balancing authority area (BAA), and offers to serve as the RC for other balancing authorities (BAs) in the western interconnection, including transmission operators (TOPs) within those BAs. The revenue required to offset the costs that the CAISO incurs to provide RC Services is the “RC Funding Requirement”.

The RC Funding Requirement consists of the annual costs associated with the CAISO’s provision of RC Services, including the annual costs associated with maintaining shared reliability coordinator tools such as the Western Interchange Tool and the Enhanced Curtailment Calculator. The CAISO determines the RC Funding Requirement based on the percentage of its overall revenue requirement attributable to the cost of providing RC Services. This percentage is updated in conjunction with the triennial cost of service study conducted by the CAISO. The RC Funding Requirement is calculated, on an annual basis, as the product of this percentage multiplied by the annual revenue requirement for the same year.

To recover the RC Funding Requirement, the CAISO will calculate an RC Services rate annually, effective January 1 each year. The CAISO will calculate the RC Services rate by taking the annual RC Funding Requirement, less any known minimum RC Services charge for the applicable year, and dividing the RC Funding Requirement by the sum of (1) the annual Net Energy for Load (NEL) MWh for all BAs with load and TOPs and (2) the annual Net Generation (NG) MWh for all generators connected to generation-only BAs and TOPs that the CAISO anticipates will take RC Services for the applicable year.

The CAISO allocates its own RC Services Charge to RC Customers that are located in the CAISO’s BAA and Scheduling Coordinators that serve load in the CAISO BAA based on their share of the total NERC/WECC Metered Demand in MWh for the CAISO Balancing Authority Area.

## Description

The CAISO allocates RC Service Charges to entities within the CAISO’s BAA based on the procedures set forth in the CAISO Tariff Section 11.20.9. The CAISO passes through its share of the RC Charges calculated in CC 5701 – RC Services Charge to Scheduling Coordinators within the CAISO BAA in proportion to their NERC/WECC Metered Demand. For TOPs within the CAISO BAA that have no NERC/WECC Metered Demand, the CAISO RC Services minimum charge will apply.

For the purpose of Settlements implementation, the CAISO RC Services Charge Allocation is reflected in an initial settlement statement, while a recalculation settlement statement shall reflect changes required to correct an invoice for typographical or other ministerial error. The RC Charge settlement statements are separate from other market settlement statement types.

The CAISO RC Services Charge Allocation (either from an initial statement or recalculation statement) shall be invoiced using the RC Services Charge invoice type that is separate from the Market invoice type and NERC/WECC type.

# Charge Code Requirements

## Business Rules

| Bus Req ID | Business Rule |
| --- | --- |
|  | The CC 5705 RC Services Charge Allocation is calculated at an annual frequency**.** |
|  | This charge is invoiced on the RC Services Invoice, separate from CAISO Market Invoices. |
|  | The CAISO will issue RC Services Charge-related statements and invoices separate from other market settlement statement and invoice types. |
|  | The RC Services Charge Allocation shall be reflected in an initial settlement statement, while a recalculation settlement statement shall reflect changes required to correct an invoice for typographical or other ministerial error. |
|  | The RC Services Charge Allocation invoice and statement date will be the first business day of each calendar year for RC Services to be provided during that assessment year. |
|  | The initial period of RC Services will be invoiced from the RC Services Date through the end of that calendar year, and will be invoiced at the same time the CAISO invoices RC Customers for the year following the initial period. |
|  | The initial period settlement amount will be prorated based on the portion of time during the initial calendar year that RC Services were provided. |
|  | The RC Services Charge Allocation (either from an initial statement or recalculation statement) shall be invoiced using the RC invoice type that is separate from the Market invoice type and NERC/WECC type. |
|  | The separate RC Services invoice will reflect a monthly bill period which encompasses the first trade date of the assessment year. |
|  | The CAISO shall invoice Scheduling Coordinators for all of the charges that are invoiced to the CAISO by the CAISO RC. |
|  | Each Scheduling Coordinator shall be obligated to pay the CAISO all of the RC Charges it is invoiced by the CAISO. |
|  | Each Scheduling Coordinator’s responsibility for RC Services Charges shall be allocated based on the Scheduling Coordinator’s NERC/WECC Metered Demand in the CAISO BAA. |
|  | A Scheduling Coordinator without any NERC/WECC Metered Demand shall be assessed the minimum RC Services Charge. |
|  | The NERC/WECC Metered Demand value per Scheduling Coordinator (as identified by its Business Associate ID) that is used to determine the CAISO RC Services Charge Allocation shall be provided on the NERC/WECC Information Statement (as defined for charge code CC 6490 – NERC WECC Charge), and the CAISO RC Services Statement. |
|  | The CAISO shall calculate the RC Services Charge Allocation for each Scheduling Coordinator by using the CAISO RC Charge rate for the assessment year, multiplying such rate by the most recent NERC/WECC Metered Demand for that Scheduling Coordinator. |
|  | Scheduling Coordinators shall be prohibited from disputing any Reliability Coordinator Charges, except on grounds that an error in the invoice is due to a mere typographical or other ministerial error by the CAISO. |
|  | If the CAISO determines that an invoice contains a typographical or other ministerial error, the CAISO may at its discretion issue a corrected invoice within 21 business days of the date the initial invoice was issued. |
|  | In the event a Scheduling Coordinator defaults on the payment of all or any portion of the invoiced RC Services Charge, the CAISO shall have the right under Tariff Section 11.29.13.3 to enforce the financial security provided by the defaulting Scheduling Coordinator, and to take any such other action under Tariff Sections 11.29.12 or 11.29.13, as necessary, to obtain payment for the default amount. |
|  | To the extent all or any portion of the default amount remains unpaid, the CAISO –1. may at its discretion issue an invoice for the unpaid RC Services Charge; and
 |
|  | 1. if such invoice is issued for a payment default, shall allocate responsibility for the unpaid amount to Scheduling Coordinators with NERC/WECC Metered Demand, excluding the CAISO Debtor that has not paid the payment default amount, based on the most recent NERC/WECC Metered Demand for each Scheduling Coordinator.
 |
|  | For Settlements business implementation, the Scheduling Coordinator mentioned in the Tariff shall be identified using the Business Associate (BA) ID. |
|  | In the event CAISO reassigns a Business Associates (BA) meter data quantity to another BA ID, meter data quantity PTBs (also applied in the configuration for CC 6490 – NERC WECC Charge) will facilitate both reversing out and reassigning the original BA ID meter data quantity to another BA ID. |

## Predecessor Charge Codes

| Charge Code/ Pre-calc Name |
| --- |
| CC 5701 – RC Services Charge |

## Successor Charge Codes

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

## Inputs - External Systems

| Row # | Variable Name | Description |
| --- | --- | --- |
|  | PTBCAISOBARCServicesChargeDefaultAmt BU’UJmd | The default (late and unpaid) amount (in $) on the payment owed by a Business Associate (BA) as payment for the CAISO RC Services Charge allocated to the BA over the specified assessment period. |
|  | RCServicesAnnualMinChargeAmt | The annual minimum charge for RC Services. |
|  | RCServicesCAISONoLoadTOPFlag Bmd | Flag identifying TOPs in the CAISO BA that have no load. |
|  | CAISOBAReportingID BrQ’md | Flag containing the CAISO BA ID (B) for Net Energy Zone Owner (r) and Balancing Authority Area (Q’) used to map to the total of the CAISO BA’s NERC/WECC metered demand. |
|  | PTBRCServicesAllocationAmt BU’UQ’Jmd | RC Services PTB Allocation Amount (in $) for RC Customer (B) and Balancing Authority Area (Q’) for RC Services year with Bill Period Start (U’) and Bill Period End (U) and PTB ID (J). This amount represents the RC Services ISO allocation amount for RC Services calendar year 2019. |

## Inputs - Predecessor Charge Codes or Pre-calculations

|  |  |  |
| --- | --- | --- |
| Row # | Variable Name | Predecessor Charge Code/ Pre-calc Configuration |
| 1 | RCServicesPTBTotalAmount Bmd | RC Services Charge (CC 5701) |
| 2 | TotalCAISORCServicesMeteredDemandQuantity md  | RC Services Charge (CC 5701) |
| 3 | BAYearlyRCServicesMeteredDemandQuantity Bmd | RC Services Charge (CC 5701) |

## CAISO Formula

The CAISO formula for RC Services Charge Allocation Amount by BA ID (B) and RC Assessment Year (designated by a single combination of m and d, 1-1) is as follows:

### BAYearlyCAISORCServicesChargeAllocationSettlementAmount Bmd =

BAYearlyCAISORCServicesChargeTotalAllocationAmount Bmd + BAYearlyCAISORCServicesMinChargeAmount Bmd + PTBRCIDServicesAllocationAmount Bmd

### BAYearlyCAISORCServicesChargeTotalAllocationAmount Bmd =

BAYearlyRCServicesDefaultAllocationAmount Bmd + BAYearlyCAISORCServicesChargeAllocationAmount Bmd

### BAYearlyRCServicesDefaultAllocationAmount Bmd =

BACAISORCServicesChargeDefaultAmount Bmd \* (BARCServicesEligDefaultAdjAllocQuantity Bmd / CAISOYearlyRCServicesChargeDefaultAllocQuantity md)

### CAISOYearlyRCServicesChargeDefaultAllocQuantity md =

$\sum\_{}^{}B $BARCServicesEligDefaultAdjAllocQuantity Bmd

### BARCServicesEligDefaultAdjAllocQuantity Bmd =

IF

BACAISORCServicesChargeDefaultAmount Bmd <> 0

THEN

BARCServicesEligDefaultAdjAllocQuantity Bmd = BAYearlyRCServicesMeteredDemandQuantity Bmd

ELSE

BARCServicesEligDefaultAdjAllocQuantity Bmd = 0

### BAYearlyCAISORCServicesChargeAllocationAmount Bmd =

 (-1) \* BAYearlyRCServicesMeteredDemandQuantity Bmd \* CAISORCServicesChargeRate md

### CAISORCServicesChargeRate md = (-1) \* (CAISOTotalRCServicesChargeAmount md –TotalYearlyCAISORCServicesMinChargeAmount md) /

TotalCAISORCServicesMeteredDemandQuantity md

### TotalYearlyCAISORCServicesMinChargeAmount md =

$\sum\_{}^{}B $BAYearlyCAISORCServicesMinChargeAmount Bmd

### BAYearlyCAISORCServicesMinChargeAmount Bmd =

RCServicesCAISONoLoadTOPFlag Bmd \* RCServicesAnnualMinChargeAmt

### CAISOTotalRCServicesChargeAmount md =

$\sum\_{}^{}B \sum\_{}^{}r \sum\_{}^{}Q' $RCServicesPTBTotalAmount Bmd

Where CAISOBAReportingID BrQ’md exists

### BACAISORCServicesChargeDefaultAmount Bmd =

$\sum\_{}^{}U \sum\_{}^{}U'\sum\_{}^{}J $PTBCAISOBARCServicesChargeDefaultAmt BU’UJmd

### PTBRCIDServicesAllocationAmount Bmd =

$\sum\_{}^{}U' \sum\_{}^{}U \sum\_{}^{}Q'\sum\_{}^{}J $PTBRCServicesAllocationAmt BU’UQ’Jmd

## Outputs

| Row #  | Name | Description |
| --- | --- | --- |
| In addition to any outputs listed below, all inputs shall be included as outputs. |
|  | BAYearlyCAISORCServicesChargeAllocationSettlementAmount Bmd | CAISO RC Services Charge amount (in $), including both non-default and default-related portions, by Business Associate (B). |
|  | BAYearlyCAISORCServicesMinChargeAmount Bmd | Minimum CAISO RC Services Charge amount allocated to Scheduling Coordinator (B). |
|  | TotalYearlyCAISORCServicesMinChargeAmount md | Total minimum CAISO RC Services Charge amount. |
|  | BAYearlyCAISORCServicesChargeTotalAllocationAmount Bmd | CAISO RC Services Charge amount including default and non-default, allocated to Scheduling Coordinator (B). |
|  | BAYearlyRCServicesDefaultAllocationAmount Bmd | Amount (in $) of the CAISO RC Charge that went unpaid by RC Customer (B) who received an allocated amount of the charge. |
|  | CAISOYearlyRCServicesChargeDefaultAllocQuantity md | CAISO RC Services quantity for the Charge Default allocation. |
|  | BAYearlyCAISORCServicesChargeAllocationAmount Bmd | CAISO RC Services Charge Amount (in $), prior to allocation of any default amounts, by Business Associate (B). |
|  | CAISORCServicesChargeRatemd | CAISO RC Services Charge Rate (in $/MWh) by Trading Year. If the CAISO RC Services Charge Amount = 0 or is missing for a given assessment year, the output CAISORCServicesChargeRatemd will reflect the CAISO RC Services Charge Rate value that was used for the prior assessment year. |
|  | CAISOTotalRCServicesChargeAmount md | The total CAISO RC Services Charge Amount. |
|  | BACAISORCServicesChargeDefaultAmount Bmd | Amount ($) of an allocated CAISO RC Services Charge that is allocated to a Business Associate (B) and is unpaid due to payment default. |
|  | BARCServicesEligDefaultAdjAllocQuantity Bmd | Eligible RC Services quantity for RC Services Default Adjustment allocation to RC Customer (B). |
|  | PTBRCIDServicesAllocationAmount Bmd | PTB RC Services allocation amount for RC Customer (B). |

# Charge Code Effective Dates

| Charge Code/Pre-calc Name | Document Version | Effective Start Date | Effective End Date | Version Update Type |
| --- | --- | --- | --- | --- |
| CC 5705 RC Services Charge Allocation | 5.0 | 7/1/19 | Open | Configuration Impacted |