Settlements & Billing

Configuration Guide:
Regulation Down Mileage Cost Allocation
(CC 7266)

 Version 5.1

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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

FERC 755 requires RTOs and ISOs to compensate frequency regulation resources based on the actual service provided, including a capacity payment that includes the marginal unit’s opportunity costs and a payment for performance that reflects the quantity of frequency regulation service provided by a resource when the resource accurately follows a control signal. The CAISO has developed a mileage payment to compensate resources providing Regulation Down for their performance in response to control signal.

## Description

This charge code allocates the system-wide costs associated with Regulation Down mileage payments based on Ancillary Services Obligation of each Scheduling Coordinator for each Trading Hour.

# Charge Code Requirements

## Business Rules

| Bus Req ID | Business Rule |
| --- | --- |
| 1.0 | Scheduling Coordinator must pay for Regulation Down Mileage in any Settlement Period of the Trading Day based on the Scheduling Coordinator’s Ancillary Services Obligation percentage in that Settlement Period and the user rate for Regulation Down Mileage ($/MW) in that Settlement Period.  |
| 1.1 | The Settlement Period for this Charge Code shall be each Trading Hour. |
| 1.2 | This Charge Code shall provide an output on a daily basis. |
| 2.0 | The user rate for Regulation Down Mileage is the total cost for Regulation Down Mileage ($) for each Settlement Period divided by the total Regulation Down Ancillary Service Obligation (MW) for each Settlement Period. |

## Predecessor Charge Codes

| Charge Code/ Pre-Calc Name |
| --- |
| CC 7261 – Regulation Down Mileage Settlement |
| CC 6694 – Regulation Down Obligation Settlement |

## Successor Charge Codes

| Charge Code/ Pre-calc Name |
| --- |
| CC 4989 – Daily Rounding Allocation |

## Inputs - External Systems

| Row # | Variable Name | Description |
| --- | --- | --- |
|  | <None> |  |

## Inputs - Predecessor Charge Codes or Pre-calculations

| Row # | Variable Name | Predecessor Charge Code/ Pre-calc Configuration / Description |
| --- | --- | --- |
| 1 | CAISOHourlyTotalRegDownMileagePayment mdh | CC 7261 - Regulation Down Mileage Settlement |
| 2 | RegDownObligQuantityBQ’dh | CC 6694 - Regulation Down Obligation Settlement |

## CAISO Formula

BAHourlyRegDownMileageCostAllocation Bmdh = Sum(Q’)

RegDownObligQuantity BQ’dh \* CAISOHourlyRegDownMileageUserRate mdh

CAISOHourlyRegDownMileageUserRate mdh =

(-1)\*CAISOHourlyTotalRegDownMileagePayment mdh / CAISOHourlyTotalRegDownNetObligQuantity mdh

CAISOHourlyTotalRegDownNetObligQuantity mdh = Sum(B,Q’)

RegDownObligQuantityBQ’dh

## Outputs

| Output Req ID | Name | Description |
| --- | --- | --- |
| 1.0 | In addition to any outputs listed below, all inputs shall be included as outputs. | All inputs |
| 2.0 | BAHourlyRegDownMileageCostAllocation Bmdh | Cost allocation for Regulation Down Mileage for Business Associate ID B, Trade Month m, Trading Day d, Trading Hour h. |
| 3.0 | CAISOHourlyRegDownMileageUserRate mdh | The user rate for Regulation Down Mileage for Trade Month m, Trading Day d, Trading Hour h. |
| 4.0 | CAISOHourlyTotalRegDownNetObligQuantity mdh | The system-wide Regulation Down net obligation quantity for Trade Month m, Trading Day d, Trading Hour h. |

# Charge Code References and Internal Comments

## Charge Code Effective Date

| Charge Code/Pre-calc Name | Document Version | Effective Start Date | Effective End Date | Version Update Type |
| --- | --- | --- | --- | --- |
| CC 7266 - Regulation Down Mileage Cost Allocation | 5.0 | 06/01/13 | 4/30/2024 | Documentation Edits and Configuration Impacted |
| CC 7266 - Regulation Down Mileage Cost Allocation | 5.1 | 5/1/2026 | Open | Documentation Edits and Configuration Impacted |