Settlements & Billing

Configuration Guide:

Hosted Advanced Network Applications (HANA) Charges

**CC 5801**

 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.

To help entities meet applicable standards requirements, the CAISO RC will offer web-based Hosted Advanced Network Applications (HANA) services to its RC Customers. Customers who select these HANA services will be able to view ratings, contingencies, remedial action schemes (RAS), one-line diagrams, along with real-time state estimation and real-time security assessments. HANA services will be further enhanced by the ability to filter contingency areas, define alarming options, and save study cases retained on-line for a period of 3 years. Accessing HANA services will be facilitated by the use of a CAISO RC-issued digital security certificate. HANA will be available to transmission operators and Balancing Authorities that take RC services from CAISO.

## Description

Charge Code 5801 calculates the annual HANA service charge to RC Customers. Accounting for the HANA costs is separate and independent from the RC Services Charge (CC 5701 RC Services Charge).

The CAISO requires a three-year initial commitment for HANA services. The initial three-year cost will be billed annually in equal installments, and will include a one-time Set Up Fee and an Annual Administrative Fee for the software licenses and CAISO support. The enrollment in and billing for HANA services will continue yearly on the anniversary date of the start of services, unless the RC Customer terminates services. After the initial 3-years of HANA services, the annual cost to the RC Customer will be the Annual Administrative Fee. If the RC Customer terminates the agreement before the expiration date, an early termination fee will be assessed for the remaining initial set-up charge and balance of the committed period for the HANA services.

The CAISO will invoice the RC Customer for HANA services 21 Business Days prior to the start date of the services. Each subsequent year, the CAISO will invoice 21 Business Days prior to the anniversary date of when the RC Customer first began to receive HANA services. Payment for HANA services will be due within 21 Business Days of the invoice date.

# Charge Code Requirements

## Business Rules

| Bus Req ID | Business Rule |
| --- | --- |
| 1.0 | The HANA Charges (CC 5801) are billed for a full year (twelve month period) regardless of the month that the HANA service begins. |
| 2.0 | An RC Customer that elects to obtain HANA services will be required to make a three-year initial commitment for the services. |
| 2.1 | After the initial three-year term, the RC Customer may take HANA services for additional one-year terms. |
| 3.0 | The RC Customer must notify the CAISO in writing 90 calendar days prior to the start date of services as to which HANA services it elects to take. |
| 4.0 | The HANA service start date will establish the anniversary date. |
| 5.0 | The initial three-year cost will be billed annually in equal installments, and will include a one-time Set Up Fee and an Annual Administrative Fee for the software licenses and CAISO support. |
| 6.0 | Variables AnnualHANAVisualizationAmount BU'Um and AnnualHANAStudyUserAmount BU'Um represent costs calculated based on a certain type of license and license rate. |
| 7.0 | The CAISO will invoice the RC Customer for HANA Services 21 Business Days prior to when the services commence, and each year thereafter, 21 Business Days prior to the service anniversary date. |
| 7.1 | Payment for HANA services invoice is due within 21 business days from the invoice date. |
| 8.0 | The RC Customer may terminate HANA services in accordance with the Reliability Coordinator Service Agreement. |
| 8.1 | If the RC Customer terminates the agreement before the expiration date, an early termination fee will be assessed for the remaining initial set-up charge and balance of the committed period for the HANA services. |

## Predecessor Charge Codes

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

##

## Successor Charge Codes

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

## Inputs – External Systems

| Row # | Variable Name | Description |
| --- | --- | --- |
| 1 | PTBAnnualHANAVisualizationQty BU’UJmd | PTB for the number of read-only licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 2 | PTBAnnualHANAStudyUserQty BU'UJmd | PTB for the number of full-access licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 3 | PTBAnnualHANAVisualizationPrc BJm | PTB for the price of read-only licenses for HANA Customer **B** for HANA services.  |
| 4 | PTBAnnualHANAStudyUserPrc BJm | PTB for the price of full-access licenses for HANA Customer **B** for HANA services. |
| 5 | PTBOneTimeSetupFeeAmt BU'UJm | PTB for the one-time set up fee charged to HANA Customer **B** for subscribing to HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 6 | PTBAnnualAdminFeeAmt BU'UJm | PTB for the annual administrative support fee charged to HANA Customer **B** in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 7 | PTBEarlyTerminationFeeAmt BU'UJm | PTB for the early termination fee charged to HANA Customer **B** in a given year with Bill Period Start **U’** and Bill Period End **U**. |

## Inputs - Predecessor Charge Codes or Pre-calculations

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|  |  |  |
| --- | --- | --- |
| Row # | Variable Name | Predecessor Charge Code/ Pre-calc Configuration |
|  | None |  |

## CAISO Formula

HANASettlementAmount BU’Um = AnnualHANAVisualizationAmount BU'Um + AnnualHANAStudyUserAmount BU'Um + HANAOneTimeSetupFeeAmount BU'Um + AnnualHANAAdminFeeAmount BU'Um + HANAEarlyTerminationFeeAmount BU'Um

AnnualHANAVisualizationAmount BU’Um =

AnnualHANAVisualizationQuantity BU’Um

\* AnnualHANAVisualizationPrice Bm

AnnualHANAVisualizationQuantity BU’Um =

$\sum\_{}^{}J\sum\_{}^{}d$ PTBAnnualHANAVisualizationQty BU'UJmd

AnnualHANAVisualizationPrice Bm =

$\sum\_{}^{}J$ PTBAnnualHANAVisualizationPrc BJm

AnnualHANAStudyUserAmount BU’Um =

AnnualHANAStudyUserQuantity BU’Um

\* AnnualHANAStudyUserPrice Bm

AnnualHANAStudyUserQuantity BU’Um =

$\sum\_{}^{}J\sum\_{}^{}d$ PTBAnnualHANAStudyUserQty BU'UJmd

AnnualHANAStudyUserPrice Bm =

$\sum\_{}^{}J$ PTBAnnualHANAStudyUserPrc BJm

HANAOneTimeSetupFeeAmount BU’Um =

$\sum\_{}^{}J$ PTBOneTimeSetupFeeAmt BU'Ujm

AnnualHANAAdminFeeAmount BU’Um =

$\sum\_{}^{}J$ PTBAnnualAdminFeeAmt BU'UJm

HANAEarlyTerminationFeeAmount BU’Um =

$\sum\_{}^{}J$ PTBEarlyTerminationFeeAmt BU'UJm

##

##

## Outputs

| Row # | Name | Description |
| --- | --- | --- |
| 1 | HANASettlementAmount BU'Um | Annual HANA Services Charge Amount to RC Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**.  |
| 2 | AnnualHANAVisualizationAmount BU'Um | Annual dollar amount for read-only licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 3 | AnnualHANAVisualizationQuantity BU’Um | The number of read-only licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 4 | AnnualHANAVisualizationPrice Bm | The price of read-only licenses for HANA Customer **B** for HANA services. |
| 5 | AnnualHANAStudyUserAmount BU'Um | Annual dollar amount for full-access licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 6 | AnnualHANAStudyUserQuantity BU’Um | The number of full-access licenses elected by HANA Customer **B** for HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 7 | AnnualHANAStudyUserPrice Bm | The price of full-access licenses for HANA Customer **B** for HANA services. |
| 8 | HANAOneTimeSetupFeeAmount BU'Um | One-time set up fee charged to HANA Customer **B** for subscribing to HANA services in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 9 | AnnualHANAAdminFeeAmount BU’Um | Annual dollar amount for the administrative support fee charged to HANA Customer **B** in a given year with Bill Period Start **U’** and Bill Period End **U**.  |
| 10 | HANAEarlyTerminationFeeAmount BU’Um | Early termination fee charged to HANA Customer **B** in a given year with Bill Period Start **U’** and Bill Period End **U**. |
| 11 | In addition to any outputs listed above, all inputs shall be included as outputs. |  |

# Charge Code Effective Date

| Charge Code/Pre-calc Name | Document Version | Effective Start Date | Effective End Date | Version Update Type |
| --- | --- | --- | --- | --- |
| HANA Charges (CC 5801) | 5.0 | 7/1/2019 | Open | Configuration Impacted |