



CALIFORNIA ISO

Charge Type 4576
Modesto Irrigation District

Updated
June 23, 2005

1.1.1. Version 0.2: CT 4576 GMC Modesto Irrigation District Charge

1.1.2. Description:

As a result of the 2004 GMC negotiated settlement, the Modesto Irrigation District will be assessed the Grid Management Charge at a static rate per month with a potential true up between PGE and the ISO on a quarterly basis.

1.1.3. Configuration History

The following table sets out changes in the configuration of this charge type from when it was first created until it is retired.

Version number is expressed as a sequentially increasing number for each configuration change. A new version is established for each production release after successful testing and is shown as an integer increase (0.1, 0.2, 0.3). Changes under development will be indicated by an incremental version number (that is, 1.1, 1.2, 1.3) until the production release.

The Effective Start and End dates reflect the actual trades for which the configuration applies. Update Date is the actual calendar date of configuration guide edits.

Version #	Effective Start	Effective End	Author	Update Date	Description of Changes
0.1	Stage 1	Stage 2	M. McGuffin & E. Siegel	5/30/04	Original version
0.2	Stage 1	Stage 2	E. Siegel	1/30/04	Assigned a Charge Type number. MID4 received a BAID in 01/2005 and needed to be added to exemption table. Changed the SCID to MID4 because MID2 was taken.

Result Of Meeting With Finance:

Monthly Process:

MID4 (BAID – 5819) will be charged \$75,000 (75,000MW * \$1) under CT 4576

MID Trustee (BAID – XXXX) will be credited \$75,000 (75,000MW * \$1) under Same CT

Quarterly Process:

PGE (BAID – XXXX) will be credited for a dollar amount provided by finance under Same CT

MID Trustee (BAID – 5819) will be Charged under Same CT for entire quarterly Accrued amount

ISO (BAID – XXXX) will be credited with the difference between the PGE Credit and MID Trustee Debit under same CT

1.1.4. ISO Charge Type Formula

The ISO formula for **CT 4576 – Modesto Irrigation District Charge** is as follows:

Where

BAID = XXXX

Then

Monthly Modesto Irrigation District Charge Amount_{sm} = MID Monthly Fee Amount_m

Where

MID Monthly Fee Amount_m is the current FERC approved rate for the CAISO Control Area

AND

(s) = Business Associate ID

(m) = Month

Equation Name	Description
Monthly Modesto Irrigation District Charge Amount	Monthly Modesto Irrigation District Charge Amount

1.1.5. Calculation Exceptions

There are no Exceptions for the MID charge

BA ID #	Scheduling Coordinator Name (Short Name)	Location ID	Interchange ID (if applicable)	Exception / Treatment	Quantity	Variable Name	Effective Start Date	Effective End Date	Comments

1.1.6. Charge Type Bill Determinants

The following table sets out the bill determinants used by a sample charge type including details of source system, and required attributes.

Input Name	Type	Interval	Sign	Description	Source	Variable Name	Alias	Round	Actual Attributes	Derived Attributes
Settlement Amounts	I	Varied	COUNT	Any calculated or PTB Settlement Amount calculated for a charge type at any interval level (monthly, hourly, 10-min)	TBD by Areva			NA		
Billable Quantities	I	Varied	COUNT	Any calculated or PTB Billable Quantity calculated for a charge type at any interval level (monthly, hourly, 10-min)	TBD by Areva			NA		

In reviewing this table:

- Type indicates whether the Bill determinant is provided by an external system (S) or calculated as an intermediate value by another process (I).
- Interval is the interval of the incoming record
- Source for the moment is the expected supplying system. This will be replaced with actual system names in the “as built” version of the configuration guide.
- Actual attributes are parameters used in the calculation that are expected to be supplied with the source data.

Specific Master File data used by this charge type is as follows:

Master file Data	Description	Type	Variable Name	Detail	Actual Attributes	Derived Attributes
BA_ID	Valid Business Associate	Primary record			BUS_ASSOC_ID,	Exceptions as listed

In reviewing this table:

- Type indicates whether the Master file is one of the following:
 - A primary record (such as SC, or resource)
 - An association (which is a connection between any two primary records, such as ownership)
 - An attribute (such as a flag or equivalent specific to a primary record that can be used for billing, for example resource type)
 - A roll up group where a primary record is within a further hierarchy (such as region, zone etc, noting that locations, etc are primary records in their own right)
- Details are the actual flag or association.

These are summarized in total for settlements in Volume 3, Interface Configuration

Specific Standing data used by this calculation are as follows:

Input Name	Type	Interval	Unit of Measure	Description	Source	Variable Name	Alias	Rounding	Actual Attributes	Derived Attributes
GMC MID Fee	T	Annual	\$/MWh	FERC Approved Rate	STLMTS			9		

In reviewing this table:

- Type indicates whether the Bill determinant is standing data for a Tariff Rate (T) or a rate calculated as an intermediate value by another process (CR).
- Interval indicates the frequency with which the input is updated.
- Source for the moment is the expected supplying system. This will be replaced with actual system names in the “as built” version of the configuration guide.
- Actual attributes are parameters used in the calculation that are expected to be supplied with the source data, for example AS region, Resource type, and AS Type must be provided in the capacity awarded data. SC ID is optional and could be derived if it was not provided.

1.1.7. Calculation Attributes

Billable quantity and charge type indices and summary levels must be indicated as attributes. All quantity and pricing inputs must satisfy these attributes for charges to be calculated. Attributes must be common to the Charge Group that the Charge type belongs to. An attribute table must be completed for each calculation.

Attribute Name	Order	USE	Sum	Key Value	Notes
Market Type		Y			Standard attribute, use TBD
Major group		Y			Standard attribute, use TBD
Charge Group		Y			Standard attribute, use TBD
BA_ID		Y	Y		Used to sum by customer

Attribute Name	Value	Notes
Calculation Frequency	Monthly	Daily for estimate purposes on statement
Number of Intervals	1	For settlement statement.
Prerequisite CT / BQ	N/A	
Successor CT / BQ	None	

1.1.8. Calculation Flowcharts

The high-level MID GMC is set out below. There is 1 level:

- Level 1 – Determine GMC MID Amount by SC by Month

1.1.9. Output Requirements and Definitions

Output requirements include details of which charge type outputs are to be reported to participants in the detailed Quantity, Price, and Charge detail format. The specific participant outputs are defined, together with any intermediate outputs needed to validate charges prior to publishing results, or used as inputs in other charge calculations.

Output type	Level	Expected quantities	Unique Output	Rounding	Output	Variable Name
Detailed BQ output	GMC MID Rate	1 (same price for all BAs)	Yes	9		
Detailed BQ output	GMC MID Quantity	# of SCs	Yes	9		
Monthly settlement statement	GMC MID Settlement Amount	# of SCs	Yes	9		
Invoice	SC by bill period	# of SCs	Yes	9		

1.1.10. Adjustments and Rounding

1.1.10.1. Adjustments

Automatic recalculation adjustments to this charge type will occur in the event of revised GMC MID Charge amount, by performing a recalculation against the prior run.

1.1.10.2. Rounding Adjustments

As this product type is a charge calculation only, no rounding adjustment is required.

1.1.11. Validation and Testing

1.1.11.1. Validation

The table below sets out the validation checks that must occur:

Validation	Timing	Description	Applicable to
Only MID BAID should accrue this charge	After	Only MID BAID should accrue this charge	Initial and recalculation
GMC Market Usage Settlement Amount ≥ 0	After	Calculation error if this condition is not met. Initial settlement of GMC Market Usage Uninstructed Energy must be a positive value (that is, a charge to Scheduling Coordinators).	Initial run types
Sign convention for GMC Market Usage Uninstructed Energy Settlement Amount	After	Calculation error. Incremental runs of GMC Market Usage Uninstructed Energy must maintain the proper sign convention for the Settlement amount ETSD or Market Usage Uninstructed Energy rate updates impact the direction of the charge. Payments to SCs must be negative settlement amounts, and additional charges to SCs must be positive settlement amounts	Recalculation run types

1.1.11.2. Testing

The following conditions must be tested prior to release of any configuration to production:

Standard Testing

Test Condition	Description	Applicable to

Charge Type Specific Testing

Test Condition	Description	Applicable to

Successor Charge Type Specific Tests

Test Condition	Description	Applicable to

