

California ISO

**GMC Charge Code 4537
Market Usage Forward Energy
Discussion Paper**

August 3, 2009

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Introduction

Since the CAISO's new markets were launched on March 31, stakeholders have raised concerns regarding GMC charge code 4537, Market Usage Forward Energy (MUFE). These concerns focus primarily on two issues; 1) the current rate might result in over collections; and, 2) whether inter scheduling coordinator (ISTs) trades of energy should be netted against energy in the day ahead market (DAM) to which the charge then would be applied. With respect to the first issue, the CAISO notified stakeholders, via market notice sent on July 15, 2009, that charge code 45837 would be reduced from \$.4316 to \$.30 effective August 1, 2009.

On the second issue, the ISO currently nets ISTs of energy and treats ISTs at PNodes and ISTs at aggregated PNodes (APNs) the same way. This issue was first addressed in the Federal Energy Regulatory Commission (FERC) proceeding in which the proposed GMC under MRTU rate design was considered. In that proceeding, the ISO advised FERC that the MUFE calculation and billing determinant issues would be explored with stakeholders to consider possible alternatives to the current approach as soon as practical after the implementation of the new market. At the July 22, 2009 GMC stakeholder meeting, market participants agreed that they wanted this charge code to go through a stakeholder process, and the ISO provided a tentative stakeholder schedule for this initiative.

The purpose of this paper is to provide the background of the charge code, including the current structure and formula, discuss the issue, show the functionalization of activity groupings, and present options for discussion.

Background

On February 20, 2008, the ISO filed with FERC the modified GMC rate design that would take effect upon implementation of the ISO's new markets on March 31, 2009. A number of parties filed interventions in March, 2008, including one by Northern California Power Authority (NCPA).

In December, 2008, FERC issued an order that accepted all of the proposed tariff revisions with the exception of the two issues raised by NCPA. One of these items involved an inadvertent omission of language regarding Load-Following Metered Subsystems from tariff section 11.22.5.7. The other raised a question as to whether the calculation of energy in the DAM subject to the MUFE would be offset:

(1) solely by “physical” ISTs (*i.e.* trades at PNodes, which are subject to physical validations based on energy bids or self-schedules from a resource at the location of the PNode), which seemed to be the intent of the algorithm set forth in the Settlements BPM for Charge Code 4537; or,

(2) by both physical and financial ISTs (*i.e.* trades at APNs such as the Default Load Aggregation Points or Trading Hubs, which are not subject to physical validation).

In its January 21, 2009 compliance filing, the ISO corrected the section 11.22.5.7 tariff language omission, and submitted revised tariff language clarifying that the MUFE offset was intended to include only physical ISTs. In comments filed on February 11, 2009, in response to the compliance filing, NCPA again raised concerns about the exclusion of financial ISTs in the MUFE calculation. Upon further consideration of these comments, the ISO, in its February 26, 2009 answer to the NCPA comments, agreed that both “financial” and “physical” trades should be used in the allocation formula to offset energy charges in the DAM.

The ISO reasoned that both types of ISTs are, in fact, financial. The purpose of both types of trades is to allow for contractual delivery of bilateral energy contracts at agreed-upon locations and to “reverse” the ISO charges from one party to its counter party. ISTs are, thus, a purely financial service. The only purpose for the physical validation requirement for ISTs at PNodes was to address problems associated with “seller’s choice” contracts. Accordingly, the ISO, in its February 26, 2009 answer, agreed with NCPA that the choice of location for an IST should not dictate whether the trade should be used as an offset to an energy or demand schedule. In other words, the ISO agreed that both types of trades should be treated the same

way and, since the filed rated design netted ISTs at PNodes, that ISTs at APNs should also be netted.

On March 30, 2009, FERC directed the ISO to submit a compliance filing with revised tariff language reflecting the position set forth in its February 26, 2009 answer, and the ISO submitted that compliance filing on March 31, 2009. The GMC under MRTU rate structure became effective on April 1, 2009.

Following the GMC effective date, the Western Power Trading Forum (WPTF), the Financial Institutions Energy Group (FIEG) and SMUD submitted late-filed requests for intervention, protests and comments regarding the application of the MUFE to ISTS. On July 14, 2009 FERC accepted the ISO's March 31, 2009 compliance filing, granted intervention to WPTF, FIEG and SMUD but ruled that the WPTF protest and FIEG comments were outside the scope of issues raised by the ISO's compliance filing. FIEG has since filed an application for rehearing of the July 14 FERC Order.

Issue Overview

The current design of charge code 4537 MUFE is to charge, on a per MWh basis, the net purchases and sales in the DAM. The CAISO settlements Business Practice Manual (BPM)¹ describes the charge, and the activities included in the charge, as follows:

Market Usage Forward Energy contains the activities associated with determining the market prices, maintaining and controlling the OASIS, monitoring market performance, ensuring generator compliance with market protocols, and calculating the results of the Integrated Forward Market (IFM).

The purpose of the charge is to reflect a market participant's impact on the maintenance, monitoring, operation, and performance of the Forward Energy and Real-Time markets. Currently, the MUFE charge is based on the **net** energy for each SC by trading hour, according to the following calculation:

¹ CAISO Settlements BPM for Charge Code 4537 Market Usage Energy dated 4/1/09
<https://bpm.caiso.com/bpm/bpm/doc/000000000000125>

MarketUsageForwardEnergyQuantity_{Bmdh} = ABS(TotalDAForwardNetEnergyQuantity_{Bmdh} - TotalDAInterSCTradeNetEnergyQuantity_{Bmdh})

Where

IF

GMCMarketUsageForwardEnergyException_{Brt} = 1

THEN

TotalDAForwardNetEnergyQuantity_{Bmdh} = 0

ELSE

TotalDAForwardNetEnergyQuantity_{Bmdh} = $\sum_r \sum_t (\text{BAHourlyResourceDAGenSchdQty}_{\text{Brtmdh}} + \text{BAHourlyResourceDAImportandExportScheduleQty}_{\text{Brtmdh}} + \text{BAHourlyResourceDALoadSchdQty}_{\text{Brtmdh}} + \text{BAHourlyResourceIFMPumpLoadSchdQty}_{\text{Brtmdh}})$

The issue for consideration is whether ISTs should continue to be netted and further, whether any netting should occur.

Functionalization of Activity Groupings for ISO Rate Structure

The following information was provided to FERC, in the testimony of Ben Arikawa, submitted in support of the GMC under MRTU rate design proposals set forth in the February, 2008 GMC application:²

² February 20, 2008 Revisions to GMC filing to the FERC, Ben Arikawa direct testimony and exhibits www.caiso.com/1f73/1f73c21917a40.pdf

Function	Sub-Function	Activities within proposed Grouping
Market Services	Forward Scheduling	Manage transmission and generation schedules: <ul style="list-style-type: none"> • Day and HASP schedules (including Participating Intermittent Resources) • Determine schedule feasibility
Market Services	Market Usage	Manage congestion Day Ahead
Market Services	Market Usage	Monitoring and reporting on congestion management market performance Investigating and reporting on potential gaming and market power abuses (congestion)
Market Services	Market Usage	Perform weekly, daily and hourly load forecasting Operate A/S and Real-Time markets Determine market clearing prices (A/S and Energy) Mitigate bids (real time and forward) Maintenance of market information postings (transmission/market OASIS) Operate unit commitment service under SMD Mitigate market power in Day-Ahead Market, HASP and Real Time Market Develop and manage demand response participation Administer Congestion Revenue Rights: <ul style="list-style-type: none"> • Perform CRR allocation (Primary) • Coordinate CRR bilateral trading (Secondary) • Calculate and determine feasibility of CRR capacity
Market Services	Market Usage	Monitor and report on market performance Investigate and report on potential gaming and market abuses Perform special studies on market efficiency, bidding behavior Develop new market rules or changes to market rules in response to market behavior Prepare and provide reports to regulatory authorities Implement and calculate penalties and sanctions for noncompliance

The filing also contained testimony describing the development of the market usage charge relating to the definitions and contents of the Market Services function. Mr. Arikawa, who conducted the cost of service study underlying the current MUFÉ application, explained:

Q. What is the Forward Scheduling sub-function of Market Services?

A. The CAISO Forward Scheduling service provides Scheduling Coordinators (“SCs”) with the ability to submit schedules for Energy, inter-SC trades, awarded Residual Unit Commitment and awarded Ancillary Services bids. In this context, a schedule is represented by a scheduling template (load, import, generation, export, inter-SC trade and awarded Ancillary Services and Residual Unit Commitment bids, including self-provided Ancillary Services submitted through the CAISO scheduling infrastructure and business rules system).

Q. What is the Market Usage sub-function of Market Services?

A. The Market Usage sub-function consists of the services the CAISO performs in processing Energy and Ancillary Services bids, maintaining and operating the Open-Access Same-Time Information System, monitoring market performance, ensuring compliance with market protocols and determining market clearing prices. Market

Usage consists of subcategories for each market segment: Ancillary Services and Real-Time Energy and the Forward (Day-Ahead) Market.

Q. What is the appropriate classification of Forward Scheduling costs?

A. Forward Scheduling costs are driven by the number of schedules processed rather than the MW included on each schedule because the systems that process schedules do not distinguish between schedules with large or small MW quantities. Each schedule requires approximately the same time and effort to process and verify regardless of the MW quantity. Therefore, Forward Scheduling costs vary with the number of schedules and not with the energy scheduled. Accordingly, the Forward Scheduling charge is assessed on a per-transaction basis.

Q. What is the appropriate classification of Market Usage costs?

A. Market Usage costs are classified as energy-related, meaning that they are a function of the volume of energy transacted. Accordingly, using MWhs as the billing determinant allows for recovery of prices on the basis of energy transacted from participants whose bids clear these markets.

Based on the above testimony and supporting data, the ISO proposes the two options set forth below for stakeholder consideration. The ISO has also identified two options that have been ruled out as inconsistent with the above testimony.

CAISO Recommended Options

The following two options are recommended by the CAISO:

1) Exclude all ISTs from the calculation for MUFE. The end result would be that the charge would be based on the net energy in the DAM for Load, Generation, Imports, and Exports. The formula would be the absolute value of $[(\text{Gen} + \text{Imports}) - (\text{Load} + \text{Exports})]$.

The CAISO expects that this would significantly decrease the number of MWh used in the equation for calculating MUFE.

2) Apply the charge to all MWh of energy in the DAM without netting Load, Generation, Import and Exports as would be done in the calculation set forth in option 1. This option would also exclude ISTs. The CAISO expects that this would produce a significantly larger number of MWh than in option 1.

CAISO Non-Recommended Options

The following two options are not recommended by the CAISO.

- 1) Eliminate this charge code altogether. The dollar amount to be collected would be spread across the other three market usage charge codes. This is not recommended because this approach does not adequately address the cost causation for running the forward market.
- 2) Do nothing and leave the design as it is. This is not recommended because there are many SCs that do not agree with the current structure of the charge code and have expressed concern that the calculation does not accurately reflect cost causation.

Next Steps

The stakeholder process for GMC charge code market usage forward energy will continue with the following timeline:

- August 10, 2009 - Comments due on whitepaper (use template below)
- August 18, 2009 – Stakeholder meeting to discuss comments on whitepaper
- August 28, 2009 – Straw proposal published
- September 4, 2009 – Comments due on straw proposal
- September 15, 2009 – Meeting to discuss comments on straw proposal
- October 2, 2009 – Draft final proposal published
- October 12, 2009 – Comments due on final proposal
- October 29-30, 2009 – Present to CAISO Board for approval
- November 1, 2009 – FERC filing

Template for comments

Please use the template on the next page to submit comments to the CAISO.

Comments are due by close of business Monday, August 10, 2009 to csnay@caiso.com.

Stakeholder Comments Template

Subject: GMC Charge Code 4537 – Market Usage Forward Energy Discussion Paper

Submitted by (Name and phone number)	Company or Entity	Date Submitted

CAISO seeks written stakeholder comments on its GMC Charge Code 4537 – Market Usage Forward Energy Discussion Paper, which was posted on August 3, 2009 at <http://www.caiso.com/docs/2002/08/02/2002080216283419989.html>.

Stakeholders should use this Template to submit written comments and or suggestions. Written comments should be submitted no later than Close of Business on Monday, August 10, 2009 to: csnay@caiso.com. Comments will be posted on the CAISO website.

The subject areas upon which CAISO seeks stakeholder input are:

1. Which of the options listed in the whitepaper as a potential change to the structure of the Market Usage Forward Energy GMC Charge Code do you support?
2. If none of the options presented in the whitepaper are supported, do you have an alternative proposal?