

California ISO

**GMC Charge Code 4537
Market Usage Forward Energy
Final Proposal**

October 2, 2009

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Introduction

This final proposal sets forth the ISO's recommended treatment of inter-scheduling coordinator energy trades (ISTs) for the purposes of calculating GMC charge code 4537, the Market Usage Forward Energy (MUFE) charge. It is the final step in the stakeholder process that began on August 3, 2009 and will culminate with a presentation to the CAISO Board for approval in October, 2009. The ISO's final proposal is based on consideration of written stakeholder comments and discussions with stakeholders throughout the stakeholder process, as well as other information set forth in the following sections.

Background and Issue Overview

On August 3, 2009, the ISO published a discussion paper addressing issues related to the MUFE GMC charge code 4537 that were raised by stakeholders during the FERC's consideration of the GMC charges that would become effective when the ISO's new market launched on March 31, 2009. Specifically, certain stakeholders questioned: 1) whether including ISTs in the calculation would cause an over collection of revenues assigned to the MUFE charge; and 2) whether it is appropriate to apply the MUFE charge to inter scheduling coordinator trades (ISTs) in the day ahead market [caused by the inclusion of financial and physical ISTs in the settlements calculation for netting purposes].

The ISO forecasted an over collection in the MUFE charge code and made a tariff required adjustment to reduce the rate from \$0.4316 to \$0.30 effective August 1, 2009. The ISO further reduced the rate from \$.30 to \$.2652 effective October 1, 2009. These actions helped to resolve the first stakeholder concern. With respect to the second issue, FERC affirmed that the ISO had complied with its directive to submit revised tariff language that would include both physical and financial ISTs in the MUFE calculation.¹ Nonetheless, in light of stakeholder concern, the ISO advised FERC that the MUFE calculation and billing determinant

¹ *California Independent System Operator* 128 FERC ¶61, 021 (July 14, 2009).

issues would be explored as soon as possible after the new market launch in order to consider possible alternatives to the current approach.

The ISO began this process by posting the discussion paper and soliciting stakeholder comments. Fourteen parties provided input on the two alternative MUFE options proposed in the paper, and these comments, as well as the discussion paper, were discussed at a stakeholder conference held on August 18 at the ISO offices. The ISO also provided (upon request) “what-if” analysis data under the two ISO proposed options outlined in the discussion paper to twenty one scheduling coordinators.

As explained in the discussion paper, the current design of charge code 4537 MUFE charges is, on a per MWh basis, the net purchases and sales of energy in the Day Ahead Market (DAM). The CAISO settlements Business Practice Manual (BPM)² 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. In contrast, the GMC forward scheduling charge (charge code 4512), which is applicable to ISTs, is 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. Accordingly, the forward scheduling charge is assessed on a per-transaction basis.

At the time that the ISO filed the proposed GMC under MRTU rate design changes with FERC, the MUFE settlement calculation provided that *physical* IST energy trades would be offset against a SCs energy schedules in the day ahead market. During the proceeding,

² CAISO Settlements BPM for Charge Code 4537 Market Usage Energy dated 4/1/09
<https://bpm.caiso.com/bpm/bpm/doc/000000000000125>

however, the ISO agreed with NCPA that both physical and financial ISTs should be netted against forward energy because both types of ISTs are, in fact, financial. The ISO reasoned that the purpose of both types of trades was 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, so that it was appropriate to allow both types of ISTs to be netted. Consequently, by netting both financial and physical ISTs against energy in the day ahead market, IST transactions are currently charged both a per-schedule forward services rate and a per MWh MUFE rate for net energy in the day ahead market, even though ISTs do not trigger many of the ISO’s market usage services.

Thus, to better align ISO costs with the services provided to ISTs, the ISO discussion paper proposed two alternative options that would alter the billing determinants for the MUFE. Both options eliminated ISTs from the MUFE rate calculation and, as a result, ISTs would only be subject to the forward scheduling charge (on a per schedule basis), and to the settlements, metering, and client relations charge that applies to all active scheduling coordinators. Option 1 was limited to this modification and would continue the current practice of netting energy in the DAM (without ISTs). Option 2 proposed an additional step that would also eliminate the netting option and would apply the MUFE to gross energy in the day ahead market. The discussion paper also considered options that ultimately were not recommended because they did not reflect cost causation principles or did not adequately address the concerns raised by the stakeholders.

Thus, the issues put out for stakeholder consideration were: (1) whether ISTs should continue to be included in the calculation of the charge; and, (2) whether net energy or gross energy should be the basis for the charge.

Summary of 8/3/09 ISO Recommended Options

To reiterate from the whitepaper, the ISO proposed two recommended options for the MUFE charge code:

- 1) Exclude all ISTs from the calculation for MUFE and retain the net energy basis for allocating the charge. 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 $[(\text{Gen} + \text{Imports}) - (\text{Load} + \text{Exports})]$.
- 2) Exclude all ISTs from the calculation of MUFE and apply the charge to each SCs gross MWh of energy in the DAM, i.e., without netting Load, Generation, Import and Exports as would be done in the calculation set forth in option 1. The CAISO's analysis shows that this would produce a significantly larger number of MWh than in option 1.

There are pros and cons for either of the above listed options which we will briefly summarize.

Option 1 Netting Calculation

Pros:

- 1) It eliminates ISTs from the calculation, which almost all stakeholders support.
- 2) It maintains the existing FERC approved netting methodology.
- 3) It requires little change to shadow settlements systems.

Cons:

- 1) It is not the best option from a cost causation standpoint.
- 2) It encourages SCs with both supply and demand to increase their use of self scheduling.

Option 2 Gross Calculation

Pros:

- 1) It eliminates ISTs from the calculation, which almost all stakeholders support.
- 2) It is the best option from a cost causation standpoint.

Cons:

- 1) It is a shift from the existing FERC approved calculation.
- 2) It has a significant bill impact to a few scheduling coordinators.

Summary of 8/10/09 Stakeholder Comments

Several scheduling coordinators submitted written comments to the MUFE discussion paper that was posted on August 3, 2009. Below is a summary of those comments:

Calpine:

- Supports option 2 (gross calculation)
- Believes option 1 is inconsistent with cost causation
- Believes option 1 inappropriately shifts costs to generators
- Believes option 1 inappropriately encourages submission of balanced schedules
- Believes option 1 inappropriately encourages self scheduling
- Believes option 1 frustrates the ability to forecast costs
- Believes option 2 meets cost causation principles and avoids unintended consequences

CDWR State Water Project:

- Supports either option
- Believes that MUFE should be applied to ISTs
- Believes Existing Transmission Contract (ETC) energy should not be assessed MUFE

- Believes functional association of the Settlements, Metering, and Client Relations (SMCR) should be revisited
- Believes the ISO should review and update the cost allocation
- Believes the ISO should update its review of the administrative charges of other ISO's/ RTO's

Modesto Irrigation District:

- Supports neither option at this point. Requested quantitative analysis

Morgan Stanley Capital Group

- Supports option 2 (Gross calculation)
- Believes it best aligns with cost causation

Northern California Power Agency

- Supports current methodology
- Favors option 2 (Gross calculation)
- Believes option 1 does not support cost causation
- Believes modification to option 2 should include ISTs and AS schedules

Pacific Gas & Electric

- Supports option 1 (Net calculation)
- Believes it more accurately reflects a SCs impact on the day ahead market

Powerex

- Supports option 2 (gross calculation)
- Believes it follows cost causation principles

RBS Sempra Commodities

- Supports either option, but prefers option 2 (gross calculation)

Southern California Edison

- Don't rush to make a change
- Supports option 1 (net calculation)
- Believes net calculation supports a fundamental design principle under MRTU
- Requests data to analyze options
- Believes option 2 would unjustly shift costs to participants with both supply and demand

San Diego Gas & Electric

- Supports option 1 (Net calculation)
- Believes it would be easy to implement
- Believes it retains the concept of net energy cost causation

Shell Energy

- Supports option 2 (Gross calculation)
- Believes option 1 does not produce an accurate charge based on a SCs true impact on GMC costs

Sacramento Municipal Utility District

- Supports option 1 (Net calculation)
- Believes it aligns with cost causation principles

Believes ISTs should not be included in this charge code and supports either option over existing design

Western Area Power Administrator

- Supports the current design
- Western is forced to use ISTs to settle usage of the PACi imports to their loads

Western Power Trading Forum

- Supports either option over current design

Summary of 8/28/09 ISO Straw Proposal

Both options proposed by the ISO in the discussion paper eliminated ISTs from the MUF rate calculation, and there was broad stakeholder support for this rate treatment. Thus, in the August 28, 2009 straw proposal the ISO concluded that the implementation of either ISO recommended option will address the stakeholder concerns raised before FERC during the GMC under MRTU proceeding.

The question then became whether the current practice of netting, approved by FERC for the purpose of calculating GMC rates both prior to the new market launch and subsequent to its implementation, should also be eliminated (Option 2). While there was general agreement among stakeholders that assessing the MUF charge to gross energy in the day ahead market better reflects cost causation principles, Option 2 also would substantially increase GMC charges for certain stakeholders. The straw proposal noted that, from the standpoint of well-settled rate design principles, both cost causation and bill impacts should be taken into account when rate changes are being considered.

After extensive internal discussions that considered the input from stakeholders as well as the bill impact information, the ISO proposed, in the straw proposal, to postpone consideration of the elimination of netting (Option 2). Thus, the ISO believed at that point that the best option was to remove ISTs from the MUFE calculation, leave the remainder of the calculation as is, and allocate the charge to scheduling coordinators based on net physical energy (Option 1). The equation would have been changed from the existing calculation:

$$\text{MarketUsageForwardEnergyQuantity}_{\text{Bmdh}} = \text{ABS} (\text{TotalDAForwardNetEnergyQuantity}_{\text{Bmdh}} - \text{TotalDAInterSCTradeNetEnergyQuantity}_{\text{Bmdh}})$$

To the proposed calculation:

$$\text{MarketUsageForwardEnergyQuantity}_{\text{Bmdh}} = \text{ABS} (\text{TotalDAForwardNetEnergyQuantity}_{\text{Bmdh}})$$

Although the straw proposal suggested eliminating Option 2 as an alternative to address the IST issues, it was also stated that further modifications to the MUFE billing determinants might be considered in the future. In particular, the ISO explained its intention to address, with its stakeholders, an updated cost of service study that will reflect cost center changes associated with the new building and the elimination of capitalized expenses associated with MRTU implementation. The ISO concluded that these upcoming GMC related stakeholder process and associated studies provide a better forum for consideration of the netting versus gross option.

Summary of 9/4/09 Stakeholder Comments

Several scheduling coordinators submitted written comments to the MUFE straw proposal that was posted on August 28, 2009. Below is a summary of those comments:

Calpine:

- Only supports the removal of ISTs if the resulting calculation is gross
- Does not support netting
- Believes netting violates cost causation principles, shifts costs to generators, encourages balanced scheduling, and supports self scheduling

- Supports gross calculation and believes that bill impacts should not outweigh cost causation principles

Citigroup Energy:

- Supports the removal of ISTs
- Does not support netting
- Believes gross calculation is better cost causation
- Believes this charge should apply to any physical transaction at any node

Cities of Anaheim, Azusa, Banning, Colton, Pasadena, Riverside (six cities):

- Has no position on the removal of ISTs
- Supports netting
- Netting has been previously accepted by FERC
- Believes that charging to gross schedules would impose excessive, unjust, and unreasonable charges on SCs that are scheduling their own resources to serve their own loads
- Believes that applying MUFE to both sides of a single transaction would be inconsistent with cost causation

Constellation Energy:

- Fully supports the comments submitted by the Western Power Trading Forum (WPTF)

City of Santa Clara:

- Does not support the removal of ISTs
- Supports the current design of netting and ISTs because FERC has already approved this design
-
- Believes netting is a measurement of market usage

- States that because ISTs are used to deliver power under long term contracts, discounting ISTs would have a negative impact for those SCs who have contracted forward to serve their load
- Urges consideration of other proposals such as NCPA's

Direct Energy:

- Supports the removal of ISTs
- Does not support netting
- Believes netting is inconsistent with cost causation
- Believes netting discriminates against load serving entities that own no generation such as electric service providers
- Supports gross calculation

Dynegy:

- Supports the removal of ISTs
- Does not support netting
- Believes that a SC that submits balanced schedules and does not benefit from any of the ISO's market usage functions is incorrect
- Many SCs cannot avoid this charge because they cannot net generation and load
- Believes it is inequitable to allow certain stakeholders to avoid costs incurred because of the existence of a market
- Supports gross calculation

JP Morgan:

- Supports the removal of ISTs
- Does not support netting
- Supports gross calculation
- Believes gross is better cost causation

- Believes netting results in an inappropriate and unfair cost shift to those entities without both load and generation in their portfolio

Northern California Power Agency (NCPA):

- Does not support the removal of ISTs
- Supports the current MUFE design
- FERC has approved the current design
- Utilize ISTs to deliver power under long term contracts, discounting of such ISTs would have a negative impact for those SCs who have contracted forward to serve their load
- Provided alternative option to keep current equation, but treat ISTs as a true offset rather than an absolute value

Pacific Gas and Electric:

- Supports the removal of ISTs
- Supports netting
- Refers to ISO testimony (Exhibit 1, pgs. 42-43) that a billing determinant based on the netting of purchases and sales in the DAM recovers the costs related to the DAM
- Agrees that as gross may be better from a cost causation standpoint, it should be done as part of a broader effort that examined components such as SMCR

Powerex:

- Supports the removal of ISTs
- Does not support netting
- Believes gross is better from a cost causation standpoint
- Believes netting will unjustly shift costs to generators, importers, and load without generation assets, while unduly benefiting SCs with both load and generation
- Suggested mitigating rate impact

RBS Sempra Commodities:

- Supports the removal of ISTs
- Does not support netting
- Believes that gross is better cost causation
- Believes netting implies that balanced schedules impose no costs on the market
- Believes netting encourages self scheduling which hampers the ISO markets
- Believes netting discriminates against LSE's that own no generation

Sacramento Municipal Utility District (SMUD):

- Generally supports the removal of ISTs
- Expressed concerns about the costs of ISTs

Southern California Edison:

- Supports the removal of ISTs
- Supports netting calculation
- Believes that netting does not provide any incentive to self schedule
- Believes that a SC with matching supply and demand positions does not receive the benefit of selling the energy at market price and should not pay for that service

Western Power Trading Forum (WPTF):

- Supports the removal of ISTs
- Does not support netting
- Believes that gross is better cost causation
- Would be willing to consider interim mitigation strategies on a transitional basis
- Believes netting is a significant design flaw

Supplemental Stakeholder Conference Call on 9/30/09

The responses to the straw proposal that the ISO received from stakeholders confirmed that although stakeholders agreed that ISTs should be removed from the calculation, there was no consensus for either netting or gross. The majority of stakeholders agreed that gross was the best solution from a cost causation standpoint, but there was a significant bill impact to a few SCs. At the September 15, 2009 meeting to discuss the straw proposal, stakeholders indicated that a bill impact mitigation solution to address bill impacts might be generally acceptable. One proposal suggested at the meeting that would mitigate the impact to those SCs with both load and generation in their portfolio would be to alter the market usage forward energy formula to:

Max [abs(Generation+Imports),abs(Load+Exports)]

This modification to the formula would act as a gross calculation to the large majority of SCs while mitigating the impact to those SCs with both load and generation in their portfolio by using only the larger of their generation and imports or load and exports.

The ISO was not able to discuss this option in detail at the stakeholder meeting because it was first necessary to verify with ISO settlements that it was feasible to calculate the charge using this “max of” methodology. Once it was confirmed that the formula change was possible, the ISO took immediate steps to provide “what-if” data to market participants (upon request). In addition, a stakeholder conference call was held on September 30 to discuss the “max of” proposal and answer questions.

ISO Final Proposal

The CAISO’s final proposal is to change the calculation of the market usage forward energy charge to:

Max [abs(Generation+Imports),abs(Load+Exports)]

This will accomplish the following objectives:

- 1) Remove inter SC trades from the equation;
- 2) Follow cost causation principles because the formula revision will act as a “gross” calculation for most SCs;
- 3) Mitigate bill impact to those SCs with both generation and load in their portfolios.

Implementation of this proposal will require changes to ISO tariff, Appendix F, Schedule 1, Parts A and E, and the Business Practice Manual for Settlements. Proposed tariff language is being posted concurrently with this final proposal. The “greater of” mitigation methodology will be considered an interim change until a full cost of service study will be completed. The ISO currently estimates that to occur in 2011 for 2012. Details of this cost of service study will be addressed with stakeholders in early 2010.

Next Steps

The stakeholder process for GMC charge code 4537 (MUFE) will continue with the following timeline:

- 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, October 12, 2009 to csnay@caiso.com.

Stakeholder Comments Template

Subject: GMC Charge Code 4537 – Market Usage Forward Energy Final Proposal

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 Final Proposal, which was posted on October 2, 2009 at <http://www.caiso.com/2417/2417891c4ad50.html>

Stakeholders should use this Template to submit written comments. Written comments should be submitted no later than Close of Business on Monday, October 12, 2009 to: csnay@caiso.com. Comments will be posted on the CAISO website.

The CAISO seeks stakeholder input on the following:

1. Do you support the ISO's final proposal to change the market usage forward energy charge calculation to:

Max [abs(Generation+Imports),abs(Load+Exports)]