



California ISO

**2012 Grid Management Charge
Proposed Modifications to November 11, 2010
Straw Proposal**

January 13, 2011

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Executive Summary

The next step in the process of designing the 2012 Grid Management Charge (GMC) is to respond to stakeholder input from the ISO's November 11, 2010, straw proposal paper ("November Straw Proposal") and offer specific modifications to that proposal where appropriate. Building upon the bill comparison data discussed at the December 13, 2010 stakeholder meeting, the development of billing determinants detailed in the November Straw Proposal, and the cost of service study functionalization and cost allocation steps discussed in the October 8, 2010 Cost of Service discussion paper, the ISO now proposes certain modifications to the November Straw Proposal to meet concerns expressed by stakeholders:

- To phase in allocation of the System Operations charge to supply MW over a three-year period;
- Provide for treatment of Transmission Ownership Rights (TORs);
- Provide for application of Scheduling Coordinator Identification (SCID) fee;
- Eliminate Station Power Fees from GMC
- Exclude MSS Load Following Energy from Market Operations charge

This paper also addresses issues from the last stakeholder meeting for which the ISO is not proposing changes to the GMC design. Lastly, we will discuss the proposal for a five year revenue requirement cap.

Guiding Policy and Ratemaking Principles

The ISO used the following guiding principles to conduct its cost of service study and develop the framework for the new 2012 GMC structure:

- 1) **Cost Causation** – Costs will be properly allocated to the correct GMC buckets and charged to those who benefit from or utilize those services.
- 2) **Focus on use of ISO services, not market behavior** – The new GMC design should reflect its primary purpose as a vehicle for recovering the ISO's revenue requirement based on each user's use of the ISO's services, not as a tool for shaping incentives based on market or operating behavior. Incentives such as these are appropriately addressed through the design of the market structure and market rules. The ISO believes that this principle is fully consistent with SCE's comment on the October 8, 2010 discussion paper that: "there should always be a final check on GMC rates, and a continuous monitoring, to ensure that GMC rates are not unduly negatively affecting market outcomes." The ISO agrees that a properly designed GMC should seek to do no harm, i.e., should not create perverse behavioral incentives or negatively affect market outcomes. The point of this principle is simply that the GMC design should not be used as a substitute for effective market rules to incent appropriate participant behavior and ensure efficient market outcomes, but should more narrowly provide a mechanism to recover ISO revenue

requirements in a manner consistent with the other principles identified here.

- 3) **Transparency** – Costs and billing determinants will be clear, visible, and understandable to all market participants.
- 4) **Predictability** – Market participants will be able to determine in advance what their GMC costs will be depending on their activity.
- 5) **Forecastability** – The rates should utilize billing determinants that can be easily forecasted by both the ISO and market participants. This should result in fewer rate adjustments during the year.
- 6) **Flexibility** – The new GMC structure should easily accommodate future market enhancements without excessive complexity or disruption to the overall structure.
- 7) **Simplicity** – Simplify the current GMC structure to reduce the amount of varying bill determinants and the number of charge codes.

The steps included in conducting a cost of service study are:

- 1) **Functionalization** - The process by which various ISO activities are defined and sorted into service categories (functions and sub-functions) to reflect the different services provided by the ISO.
- 2) **Cost Allocation** - The process by which the costs of providing services are allocated to the service categories (functions and sub-functions).
- 3) **Classification** - The determination of billing determinants based on the customer cost causation factors.
- 4) **Rate Design** - The process for deriving rates that divides the revenue requirement for each service category by the total of the applicable billing determinants.

5) Bill Impact

Evaluating the impacts that the rate design will have on individual customer bills.

The ISO completed the functionalization and cost allocation steps in accordance with these fundamental ratemaking principles and described the results in the October 8, 2010 discussion paper. In the November Straw Proposal, the ISO proposed a classification methodology (customer billing determinants) for allocating the costs in each service category. The ISO then used historical data to develop estimated rates and bill impacts for individual SCs and for the major classes of SCs. Individual SC specific data was sent to market participants that requested this information for the December 13, 2010 stakeholder meeting. This paper presents modifications to the November Straw Proposal based on stakeholder input from the December 13, 2010 stakeholder meeting. Revised individual SC specific data integrating the proposed modifications detailed below will be made available prior to the January 20, 2011 stakeholder conference call.

Phase-in of the Systems Operations Charge to Supply

The ISO believes that the GMC proposal is equitable and adheres to the stated guiding principles, but does acknowledge that the new design results in significant bill impacts to certain customers. A primary factor behind the large impacts is that the current GMC does not charge for through-put (i.e., energy flow MWh), but does assess charges based on behavior such as uninstructed imbalance energy or deviations. In contrast, under the proposed 2012 design, the billing determinant for system operations will be total energy flow MWh, without

regard to whether the flows were forward scheduled, instructed or uninstructed. Under today's GMC, a supplier that puts through the same volume as a load serving entity pays 60% less. For example, under the existing GMC, a base load generator pays \$0.06 per MWh while an equivalent level of load pays \$0.65 per MWh.

Stakeholders offered comments suggesting that the ISO should consider either grandfather certain generation units or phasing in the charges to supply over a period of time. The ISO reviewed these options and believes that phasing in supply to the System Operations charge over a three year period is the most appropriate mitigation plan. During year 1 (2012), 2/3 of supply MWh will be excluded from the System Operations charge. In year 2 (2013), 1/3 of supply MWh will be excluded from the System Operations charge. In year 3 (2014) and going forward (starting in 2015), no supply MWhs will be excluded from the System Operations charge. This phase- in approach will have the following aggregate impacts to the market participant classes based upon the previously distributed ISO cost data from the period of June 2009 to May 2010:

Increase over existing GMC (in millions)

<u>Class</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
CRR holders	\$4.1	\$4.1	\$4.1
IOUs	\$13.4	\$8.6	\$5.4
Marketers/importers	(\$12.5)	(\$11.2)	(\$10.3)
Munis	(\$1.5)	(\$2.1)	(\$2.5)
Others (renewables)	(\$1.2)	(\$1.0)	(\$0.8)

Suppliers (internal gen)	(\$2.2)	\$1.6	\$4.1
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Proposed Treatment of Transmission Ownership Rights

Under the existing GMC, Transmission Ownership Rights (TORs) are granted a discounted rate due to the limited ISO services they require. The ISO believes that TORs should continue to receive a discounted rate in the new GMC structure because this fundamental premise has not changed. The ISO is proposing to continue to provide a discounted GMC rate to TORs by:

- Exempting 100% of TOR MWhs from the Market Services charge code; and
- Applying the same System Operations charge rate to TOR flow MWhs as to other SCs' energy flows, but applying that rate only to the minimum of a Scheduling Coordinator's TOR Supply MWhs or TOR Demand MWhs (see example below).

In addition, TOR energy flows will not participate in the three-year phase-in and will not be exposed to any impacts from the application of the phase-in to other non-TOR supply MWhs.

Justification of a Discounted TOR rate

The ISO first considered whether TORS should be assessed both the Market Services and System Operations charges from a cost of service standpoint. In the previous cost of service study, the ISO identified three areas in which ISO services were required for TORs:

- 1) Real-Time Operations. The ISO provides support on an emergency basis for flows on TORs, in a manner similar to standby service. A common method to allocate costs for standby service is in proportion to the demands placed on the system. In this case, the non-coincident peak demand of TORs was measured relative to total system demand. The resulting fraction was used to assign a percentage of the costs of Real-Time Operations to this service.
- 2) Scheduling. The ISO provides check-outs with neighboring Balancing Authorities in order to schedule flows across boundaries. For this service, the assignment method was to use the ratio of the total number of inter-tie schedules for TORs relative to the total number of ISO inter-tie schedules.
- 3) Outage Management. The ISO provides for the scheduling and coordination of outages across the Balancing Authority. The assignment method was the number of TOR transmission outages relative to total California ISO transmission outages.

ISO staff reviewed the above conclusions from the previous cost of service study, updated the current cost of service study, and determined that TORs utilize a portion of the following ABC level 2 activities. These activities are all related to System Operations because there is no TOR participation in the Market Services costs. The indirect dollars were then also allocated based on the direct percentage, using the process described below, to derive a total of \$45.2 million in direct and indirect costs that would be allocated to TORs.

ABC Level 2 Activities	System Operations Direct Allocation (in thousands)
High level manage FNM maintenance	\$ 566
Manage network applications	\$ 1,249
Manage operations engineering studies	\$ 1,047
Manage D+2 analysis	\$ 357
Manage DA market	\$ 497
Manage transmission outages	\$ 1,727
Manage emergency operations	\$ 327
Manage RT market - after close of market	\$ 127
Manage RT operations - transmission dispatch	\$ 5,264
Manage RT interchange scheduling	\$ 5,247
Subtotal: TOR related direct costs	\$ 19,908
Total Direct Costs	\$ 45,923
Percentage of TORs to ABC level 2 Direct Costs	43.35%
Total Indirect Dollars	\$ 58,335
Percentage of TORs indirect dollars	\$ 25,289
Total Direct and Indirect TOR level 2 TOR costs	\$ 45,197

Staff then allocated the ratio of TOR MWh to the total flow MWh to determine the usage percentage:

Total Flow MWh	475,167,832
TOR MWh	9,320,918
TOR as % of total flow	2.0%

The total costs related to TORs is then based on 2.0% * \$45.2 million, or \$0.9 million.

Collection of a Discounted TOR Rate

The cost causation detail for TORs shows that the ISO needs to collect roughly \$0.9 million from TORs. The ISO evaluated different methodologies to adjust the number of TOR MWh that would be included in the System Operations charge

code. The proposal to use the minimum of supply or demand is logical because it would reduce the number of billable TOR MWh to 3.3 million MWh and at the rate of \$0.2867 would collect revenue of \$0.9 million.

Examples of the Minimum Approach for TOR Energy Flows

The ISO's proposal to charge TOR flow MWh the System Operations GMC based on the minimum of TOR supply or TOR demand is illustrated in these examples:

- 1) SC1: TOR supply (generation or imports) = 100 MWh, TOR demand (load or exports) = 100 MWh, System Operations GMC is charged for 100 MWh.
- 2) SC2: TOR supply = 100 MWh, TOR demand = 60 MWh, System Operations GMC is charged for 60 MWh.
- 3) SC3: TOR supply = 100 MWh, TOR demand = 0, System Operations GMC is charged for 0 MWh.

In the case of SC2 and SC3 where there was more TOR supply than TOR demand, the excess supply would have been used to serve non-TOR demand and that demand would be charged the regular System Operations GMC rate.

Special TOR Rate

As mentioned above, the ISO is proposing that TOR energy flows be unaffected by the phase-in of supply and instead be charged GMC in 2012 and 2013 based on the year 3 approach. This will require a special TOR rate for 2012-13. The phase-in approach reduces the number of MWh for the System Operations

charge code in years one and two, therefore creating a per-MWh rate that is higher than what it is in year three. If there is not a special charge code created for TORs during years one and two, then TORs (regardless of the discounted volume) will be charged the higher rate in years 1 and 2, which is too much based on the cost causation analysis shown above. The ISO therefore proposes to create a special charge code specific to TORs that would be set at the estimated year 3 System Operations rate of \$0.2867. The following chart illustrates year 1-3 System Operations rates for TOR MWh and all other flow MWh:

Year 1 (2012)		Year 2 (2013)		Year 3 (2014)
System Ops Rate	TOR Rate	System Ops Rate	TOR Rate	System Ops Rate
\$0.4329	\$0.2867	\$0.3449	\$0.2867	\$0.2867

In year 3 both TOR and all flow MWh will be charged the same System Operations rate.

Application of the SCID fee

ISO staff has reviewed the comments related to the SCID fee and agree with stakeholders that the monthly SCID fee should apply only to SCs that have settlements activity in a trade month, not merely for having an active SCID. The fee will remain at the current level of \$1000 per month per SCID fee.

Elimination of the Station Power fee

ISO staff has reviewed the station power fee and concluded that it should not be a separate GMC charge. The amount is insignificant and the full costs are included in the System Operations charge code.

Metered Sub System Load Following Energy

The ISO has determined that it is appropriate to exclude the MSS Load Following instructed imbalance energy from the Market Services GMC charge. This energy reflects the MSS's performance of its real-time load following function, and the cost causation impacts of this function are appropriately recovered through the System Operations charge.

Other Issues

ISO staff reviewed other issues raised by stakeholders and has decided not to make changes to the proposal.

Unscheduled Energy

There was discussion to extend the Market Services charge to apply to energy delivered in real time that is not scheduled or in response to ISO dispatch instructions. ISO staff has determined that RT delivered energy does get an appropriate share of costs through the System Operations GMC charge (which includes a significant share of the cost of the ISO's settlement process) and therefore satisfies the principle of cost causation. In accordance with guiding principle 2 stated earlier in this paper, the GMC should focus on recovering the costs associated with using ISO services and should not try to address concerns

about market participant behavior. In the case of unscheduled or undispached energy flows, there are market rules that already address these uninstructed deviations such as exposure to real time prices and ineligibility for bid cost recovery. In addition, the ability to bypass the ISO market processes is limited by must offer obligations for RA resources. The ISO has therefore decided not to apply a Market Services GMC charge to these real-time deviations.

PIRP Forecast Fee

There has been discussion whether to include a separate charge for PIRP forecast fees. This question is being addressed in the ISO's Renewable Integration Market and Product Review initiative and will be resolved in that stakeholder process. If the PIRP forecast fee is retained, it would be treated for GMC purposes like the other special fees in this proposal, as an offset to the total costs to be recovered through one or more of the other buckets.

Revenue Requirement Cap Proposal

The last component of the GMC redesign for 2012 is to establish a new revenue requirement cap. The previous cap was set at \$195 million in 2004 and increased to \$197 million in 2006. One year extensions have been approved for each year after that. The ISO is proposing a five year revenue requirement cap in which the \$197 will be the baseline cap in 2012. The cap will be then be incrementally increased by 1% per year through 2016. The annual revenue requirement cap based on this structure over the five year period would be:

Year	Revenue Requirement Cap
2012	\$197,000,000
2013	\$198,970,000

2014	\$200,959,700
2015	\$202,969,297
2016	\$204,998,990

The ISO proposes to retain the same process currently included in the tariff with respect to the revenue requirement cap so that as long as the ISO's annual budget for each year does not exceed that year's revenue requirement cap, and there are no GMC rate design or billing determinant modifications proposed for the next year, the ISO will not be required to make a section 205 with FERC seeking approval for the next year's revenue requirement.

The current budget approval stakeholder process will remain in the tariff, and that process culminates with each annual budget being presented to the ISO Board for approval at the December Board meeting and posted on the ISO website after approval. The ISO's proposed revenue requirement cap, plus annual 1% adjustments, would "sunset" on December 31, 2016 and the ISO would be required to make a 205 filing for the GMC that would become effective on January 1, 2017.

Next Steps

The stakeholder process for the 2012 GMC Cost of Service Study will continue with the following timeline:

- February 2011 – Update Board on Rate Structure
- March 2011 – Seek Board approval of Rate Structure
- May 2011 – File rate structure with FERC