



California ISO

**Grid Management Charge
Proposed 2015 Updates**

April 2, 2014

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Executive Summary

The Grid Management Charge (GMC) is the vehicle through which the California Independent System Operator Corporation (ISO) recovers its annual revenue requirement from the entities that use ISO services. Funding the annual revenue requirement ensures that the ISO recovers its administrative, operating and capital costs. The current GMC rate design was vetted through a stakeholder process, approved by the ISO Board of Governors (ISO Board) and the Federal Energy Regulatory Commission (FERC) in 2011, and became effective January 1, 2012 (“the 2012 GMC structure”).¹ As part of that order, the annual maximum revenue requirement was capped at \$197 million for 2012 and \$199 million for 2013 and 2014. To exceed the maximum limit, the FERC would have to approve an ISO filing seeking a revenue requirement increase under Section 205 of the Federal Power Act (FPA); however, the ISO is committed to operate within its budget and did not seek such an increase during this three year period. The current revenue requirement expires at the end of 2014; accordingly the ISO must seek a revised revenue requirement beginning in 2015.

The GMC is made up of three service buckets and seven fees. The revenue requirement is allocated into the three service buckets: market services, system operations and congestion revenue rights (CRR) services based on percentages developed in the 2012 cost of service study. The seven fees are fixed amounts and the energy imbalance market (EIM) fee and transmission ownership rights (TOR) fee were derived from the 2012 cost of service study.

In 2013 the ISO and PacifiCorp agreed to form a new EIM. The EIM provides entities with the opportunity to leverage the ISO’s existing real-time market platform to facilitate five minute economic dispatch. The EIM relies on the real time portion of the

¹ *California Independent System Operator Corporation* 136 FERC ¶61,236 (September 30, 2011).

market services activities and system operations activities. The EIM fee, derived from the 2010 GMC cost of service study, was developed in collaboration with stakeholders, approved by the ISO Board and will be filed with FERC in 2014. It is fixed for 2014. In a separate discussion paper, the ISO has calculated the EIM fee that will be proposed as part of the GMC structure to take effect in 2015.

Last, in addition to adjusting the service category cost percentages and updating the EIM fee based on the 2015 cost of service study, the ISO has updated the TOR rate using updated costs and the current Activity Based Costing (ABC) methodology.

Summary of the existing charges

	Charge Code	%	Rate
Service Categories			
Market Services	4560	27%	\$ 0.0867
System Operations	4561	69%	\$ 0.2890
CRR Services	4562	4%	\$ 0.0112
Fees			
Bid Segment Fee	4515	fixed	\$ 0.005
Inter-SC Trade Fee	4512	fixed	\$ 1.00
EIM Fee	TBD	fixed	\$ 0.19
TOR Fee	4563	fixed	\$ 0.27
CRR Auction Bid Fee	4516	fixed	\$ 1.00
Participating Intermittent Resource Fee	701	fixed	\$ 0.10
SCID Fee - billed monthly	4575	fixed	\$ 1,000

The ISO proposal for the 2015 GMC cost category percentages, updated EIM and TOR fees and revenue requirement updates are based on the following methodology and analysis:

- 1) Updating the percentage allocation for the three service categories using the 2015 cost of service study. The cost of service study is based on actual time incurred by ISO employees during 2013 applied to the 2013 budget.
- 2) Updating the EIM fee
 - a) starting with the 2015 cost of service update
 - b) then applying the percentage share of real time costs for market

- services to the 2013 rate for market services and
 - c) applying the percentage share of real time costs for system operations to the 2013 rate for system operations and
 - d) combining the two rates to determine the EIM rate.
- 3) Updating the TOR using the 2015 cost of service update.
 - 4) Proposing a revenue requirement maximum and time period

In light of this analysis the ISO proposes the following revisions to the GMC to be effective January 1, 2015.

Summary of the proposed changes for 2015

	Charge Code	Old %	New %	Current rate	New Rate if different
Service Categories					
Market Services	4560	27%	27%	Annual calculation	
System Operations	4561	69%	70%		
CRR Services	4562	4%	3%		
Fees					
Bid Segment Fee	4515	fixed		\$ 0.005	
Inter-SC Trade Fee	4512			\$ 1.00	
EIM Fee	TBD			\$ 0.19	
TOR Fee	4563			\$ 0.27	\$ 0.24
CRR Auction Bid Fee	4516			\$ 1.00	
PIRP Forecasting Fee	701			\$ 0.10	
SCID Fee – billed monthly	4575			\$ 1,000	

As further discussed below, the ISO proposes to set the annual revenue requirement maximum at \$202 million. If the ISO desires a further increase in the maximum, it will seek stakeholder input and make a filing under Section 205 of the FPA requesting FERC approval.

However, the ISO will recalculate the cost categories percentages, EIM and TOR fees every three years and will address the updated information with stakeholders. If those percentages change, a filing will be made with FERC to modify the rates or percentages.

Updating the Percentages Applied to Service Categories

The process to update the percentages applied to the service categories is presented in the 2015 cost of service study posted at the same time as this summary paper and summarized in Exhibit 2. The cost of service analysis was used to determine the percentages for the three cost categories as reflected in the table below.

Summary of Cost Category Percentages

Cost Category Percentages from Cost of Service Studies	2012 Study using 2010 data	2015 Study using 2013 data	Change
Market Services	27%	27%	-
System Operations	69%	70%	1%
CRR Services	4%	3%	(1%)

Updating the EIM Fee

The cost of service analysis for the EIM fee that will go into effect in 2015 is set forth in a separate discussion paper posted at the same time as this summary paper and summarized in Exhibit 2. The results are reflected in the following table:

Summary of EIM Rate for 2015

Category	Net costs (\$ in thousands)	Cost of real time activities	Percentage share of costs	Pro forma 2013 rate	EIM rate
Market services	\$ 47,625	\$ 28,911	61%	\$ 0.09	\$ 0.06
System Operations	136,731	60,932	45%	\$ 0.29	\$ 0.13
CRR services	5,430	n/a		\$ 0.01	
Total	\$ 189,786	\$ 89,843	47%		\$ 0.19

Updating the TOR Rate

In the 2012 cost of service study, three areas were identified 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.

- 2) **Scheduling** – The ISO provides check-outs with neighboring balancing authorities (BA) in order to schedule flows across boundaries. .
- 3) **Outage Management** – The ISO provides for the scheduling and coordination of outages across the BA.

It was determined that TORs utilize the ABC level 2 activities identified in the table below. These activities are all related to system operations because there is no TOR participation in the market and thus market services costs are not applicable. The costs for the specific level 2 activities from the 2013 cost of service update were identified and the indirect dollars were then allocated based on the direct percentage, using the process described below, to derive a total of \$44.1 million in direct and indirect costs that would be allocated to TORs. A table summarizing the cost of TORs is as follows (the level 1 and level 2 codes and costs are from the separate 2015 cost of service study set forth in a separate paper).

Cost of TOR-related Activities

ABC level 2 activities (\$ in thousands)	Factor	ABC level 1 code	ABC level 2 code	System Operations direct allocation
Manage full network model	100%	80004	301	\$ 862
Outage and model management	100%	80005	355	2,921
Manage DA market	100%	80005	358	1,282
Manage operations engineering studies	100%	80005	362	918
Real time (RT) market – shift supervisor – post DA and pre RT and manage emergency operations	100%	80005	363	1,010
RTO – transmission desk – transmission and electric system	100%	80005	365	4,956
RTO – scheduling desk – manage RT interchange scheduling	100%	80005	366	3,754
TOR related direct costs				\$ 15,703

Indirect system operations indirect costs were allocated based on the percentage of direct costs as shown in the following table.

Calculation of TOR-related costs (\$ in thousands)

TOR related direct costs	\$ 15,703
Total system operations direct costs	\$ 48,915
Percentage of TORs to system operations direct costs	32%
System operations indirect costs	\$ 88,809
TOR related indirect costs	\$ 28,419
Total TOR related direct and indirect costs	\$ 44,122

Then the ratio of TOR MWh to the total system operations (flow) MWh was calculated to determine the usage percentage.

TORs as a Percentage of Total Volumes

	Volumes in MWh
2013 system operations volume	465,286,577
Add back grandfathered contracts	7,179,000
Total gross TOR volume (supply and demand)	8,097,490
Total adjusted system operations volume	480,563,067
Total gross TOR volume	8,097,490
TOR as a percentage of gross volume	1.69%

The amount to collect is then derived by multiplying the TOR related costs by the TOR percentage results. The TOR rate is then determined by dividing the amount to collect by the 2013 forecasted TOR volume. The revised TOR rate of \$0.24 cents is as follows.

Calculation of TOR Rate for 2015

Total direct and indirect TOR costs	\$ 44,122,000
TOR percentage of total volumes	1.69%
TOR costs to collect	\$ 745,660
TOR MWh for 2013	3,162,319
TOR updated rate per MWh	\$ 0.24

Revenue Requirement Maximum Proposal

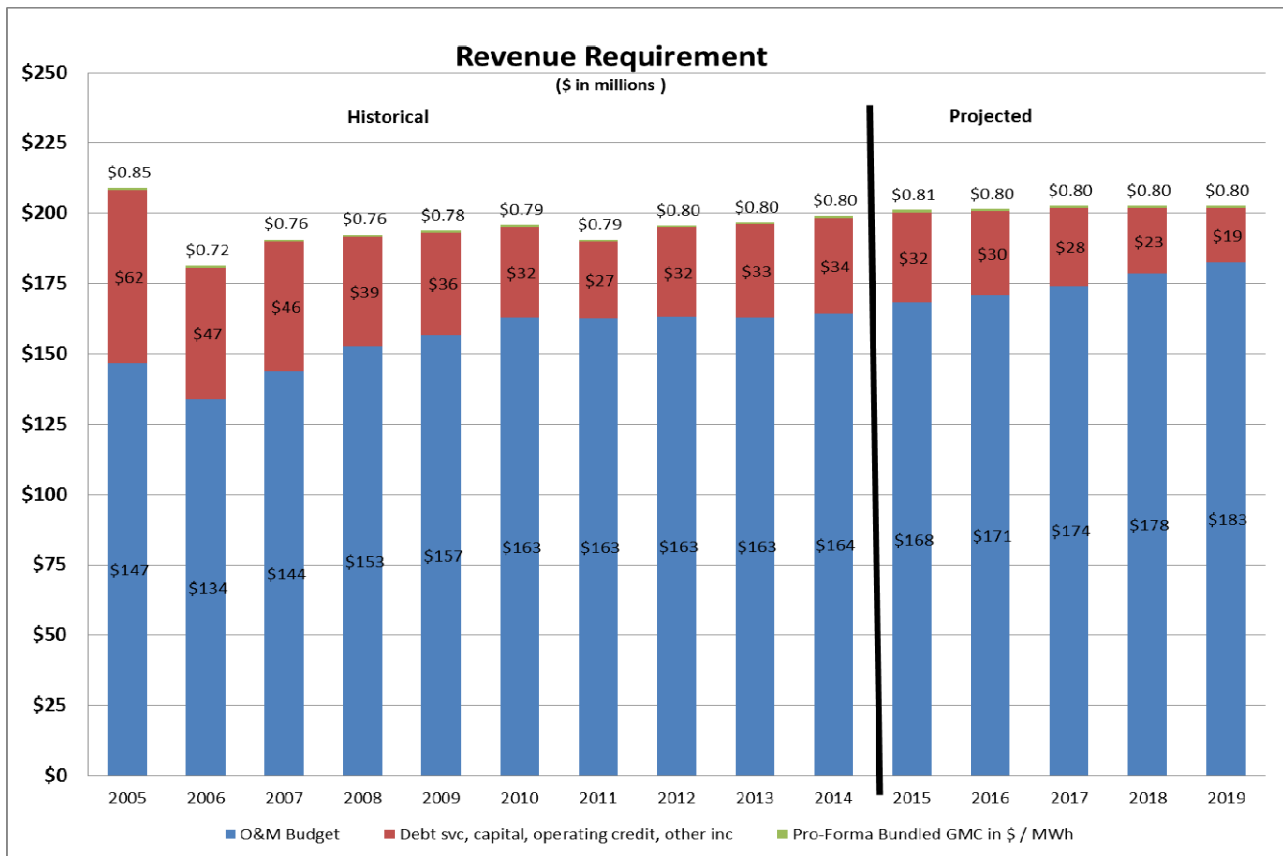
The last 2015 GMC update component is establishing a new revenue requirement maximum. The current maximum is \$199 million. The following is a table of past revenue requirement maximums.

Historical Revenue Requirement Maximums

Year	Revenue Requirement Maximum (in millions)
1998 - 2004	Filed budget
2005	\$ 218
2006	\$ 222
2007 - 2009	\$ 195
2010 - 2012	\$ 197
2013 - 2014	\$ 199

The ISO's long term forecast indicates the revenue requirement in the range of \$200 million to \$205 million over the next five to seven years. The ISO is proposing a long term revenue requirement maximum of \$202 million. Although the proposal is less than the forecast in the out years, the ISO believes it can extract sufficient savings to maintain its proposed revenue requirement maximum.

Chart of Historical and Projected Revenue Requirements



The ISO proposes to retain the same process currently included in the tariff with respect to the revenue requirement maximum except that there will be no sunset date. As long as the ISO's annual budget for each year does not exceed that year's revenue requirement maximum, and no GMC rate design or billing determinant modifications are proposed for the next year, the ISO will not seek changes to the revenue requirement cap or the GMC rate structure through a Section 205 filing.

The ISO will update its cost of service analysis every three years to determine the cost category percentages and EIM and TOR rates. If any percentages or rates change, the ISO will review them with stakeholders and seek FERC approval.

The current budget approval stakeholder process will remain in the tariff and culminates with each annual budget being presented to the ISO Board for approval at its December meeting and posted on the ISO website afterward.

Next Steps

The stakeholder process for the 2015 GMC update will continue with the following timeline:

- April 17, 2014 – Stakeholder discussion of proposal
- May 20, 2014 – Additional Stakeholder meeting if necessary
- July 17-18, 2014 – Seek Board approval of 2015 GMC update
- August 14, 2014 – Stakeholder meeting to review tariff amendments
- September 2014 – File 2015 GMC update with FERC.