



**GMC Unbundling Steering Committee
Meeting Agenda
September 15, 2000
10:00 a.m. – 2:00 p.m. in 110GC**

10:00 a.m. – 12:00 p.m. QF Alternatives

12:00 p.m. – 1:00 p.m. Lunch

1:00 p.m. – ? Other items

Open discussions of any additional comments are welcome

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Sign-in Sheet

Mike Epstein	ISO
Charlotte Martin	ISO
Nancy Erlichman	ISO
Bert Hanson	SCE
XXXX Brij Basho	PGE
ROMULO BARRENO	CalPX
W. Shannia Black	SMUD
Julie Peterson	PGE
Nick Henery	SMUD
David Cohen	RMI
Jerry Green	XXXX CDWR
Dan Metz	PGE 973-4732
Allen Jaschke	CAISO
Beth Ann Burns	CAISO
Mike Peterson	CAISO
Glen Wist	PGE
Glen Perry	ISO
Jennette Plumley	ISO
MICHAEL PETERSON	

Callen

Estimating Loads for Accounts that are not separately Metered

The ISO is proposing to collect the Grid Management Charge on an unbundled basis within three categories; Control Area (45%), Congestion Management (7%), and Market Operations (48%).

The GMC for Control Area Services is proposed to be calculated and billed based on Control Area gross load. However, there are metering accounts within the ISO Control Area that presently meter the net amount of energy generated and consumed behind the meter (i.e., generation and load are not separately metered). Absent the installation of separate meters, gross load must be estimated for proper allocation of the GMC.

To follow is a definition of "Control Area Gross Load" and three alternatives for estimating the gross demand for energy for metering accounts that do not separately meter load and generation.

I. Definition of Control Area Gross Load

Control Area Gross Load: For the purpose of calculating and billing the Grid Management Charge, Control Area Gross Load is all Demand for Energy within the ISO Control Area. Control Area Gross Load shall not include Energy consumed by:

- (a) generator auxiliary Load equipment that is dedicated to the production of Energy and is electrically connected at the same point as the Generating Unit (e.g., auxiliary Load equipment that is served via a distribution line that is separate from the switchyard to which the Generating Unit is connected will not be considered to be electrically connected at the same point), and
- (b) Load that is isolated electrically from the ISO Control Area (i.e., Load that is not synchronized with the ISO Control Area).

II. PG&E's proposal

(Note: Condensed from the original PG&E response)

PG&E proposes an alternative in which the ISO relies on QFs available aggregated utility standby load information, which is metered and billed to QFs on standby tariffs. Utilities may not be able to provide this information on an individual basis due to confidentiality or contractual limitations, but may be able to provide estimated maximum QF gross load information on an aggregate basis each year.

PG&E may be willing to provide the ISO with the actual maximum non-coincident QF Standby load. The ISO could verify this data through third party blind audits of utility standby tariff billing data.

PG&E proposes applying a "capacity factor" to the maximum non-coincident standby service to arrive at the basis for allocating GMC charges. Under this formula, the ISO would charge GMC to PG&E, SCE, and SDG&E for QF gross load for a given month (\$/month) according to the following formula:

Estimating Loads for Accounts that are not separately Metered

Aggregate maximum monthly demand under the standby tariff (MW) x Number of hours in month (hrs/month) x GMC rate (\$/MWh) x Capacity factor (%) based on a percentage reflecting annual average standby energy consumed by QFs

PG&E reviewed 175 QF units over a 3-year period. The 175 units account for approximately 95% of the QF capacity. The nameplate capacity is in the range of 4,700 MW. The highest demand for each QF over the period was aggregated. PG&E QFs Standby load/demand (based on non-coincident demand) is approximately 500 mw.

PG&E believes that a Capacity factor of 100 percent of 500 MW accurately represents total gross QF load and is a reasonable proxy for total load within the ISO Control Area.

ISO comments: The ISO agrees with PG&E that the 100 percent factor is a better estimate of the GMC load than the net meter reading of QFs. The 500 MWs at 100 percent capacity factor on an annual basis of 8,760 hrs, would equate to an annual load of 4,380 GWhs.

III. SDG&E proposal

SDG&E's approach would be to use the standby transmission billing determinant and then apply a capacity factor of 100% to the contract demand. If a QF installed a meter then SDG&E would convert that facility from the formula to the metered load

IV. ISO proposal

The ISO's conceptual approach would be to use the demand component of the IOU Standby rate tariffs. Standby contract demand is the lower of generation capacity or on-site load. Then apply to the contract demand the capacity factor by class of standby customer. The capacity factor is in the work-papers supporting the standby rate. The ISO believes this to be a reasonable approach as it results in the allocation of GMC for Control Area Services on a basis consistent with the IOUs' calculation of demand under CPUC jurisdictional Standby tariffs. If a QF installed a meter then the ISO would recommend converting that facility from the formula to the actual metered load. The ISO would require verification of the aggregate demands used by the IOUs as proposed by PG&E.

SCE comments: Generally concurs with the ISO proposal.



GMC Unbundling Implementation Questions/Answers

8.3.1 Control Area Services Charge.

The Control Area Services Charge for a Scheduling Coordinator or other appropriate party is calculated as the product of the rate for the Control Area Services Charge and the Control Area Gross Load and exports of the Scheduling Coordinator or other appropriate party. The rate for the Control Area Services Charge is determined by dividing the GMC costs allocated to this service category by the total Control Area Gross Load and exports according to the formula in Schedule 1 of this Tariff.

Does Gross Control Area Load and Export include behind the meter load?
Yes, QFs and Munis are currently negotiating a solution for reporting.

If yes, then how is ISO planning to provide information to the SC on behind the meter load schedule used for calculating the SC's billable quantity?

Ideally data will come to us from the Munis and QFs. This data will be passed on to the SC for the applicable load. If this data isn't provided to the ISO, then ISO will have to use a proxy. Details of this are under discussion in the GMC Unbundling Committee Meetings.

The SC will require information in settlement statements, which the SC will need to identify specifics on behind the meter load in order to appropriately pass on the cost and provide sufficient detail on the cause of the cost for behind the meter loads. Please describe in what form and in what level of detail will this information be provided by the ISO to the SC.

Please provide the ISO with your minimum detail requirements, and they will be considered.

Does the allocation of this charge exclude inter-SC trade volumes?
Inter-SC trades are not considered in this charge.

How will ISO charge for gross load and export? By hour or by month?

The charge calculation will be performed hourly. We plan to aggregate the hourly charges into a monthly total and post it in the statement for the last day of the month. We'll continue to issue a daily GMC detail file that shows the hourly details.

Will the ISO send the SC the 'behind the meter' detailed information for load?

It has not been determined in GMC Unbundling Committee meetings whether ISO will be receiving 'behind the meter' load information, or will be using a proxy. ISO will endeavor to meet your data detail needs.

8.3.2 Inter-Zonal Scheduling Charge.

The Inter-Zonal Scheduling Charge for each Scheduling Coordinator is calculated as the product of the rate for the Inter-Zonal Scheduling Charge and the absolute value of the net scheduled inter-zonal flow (excluding ETCs) per path for that Scheduling Coordinator. The rate for the Inter-Zonal Scheduling Charge is determined by dividing the GMC costs allocated to this service category by the total Scheduling Coordinators' inter-zonal scheduled flow (excluding ETCs) per path, according to the formula in Schedule 1 of this Tariff.

Is this charge also going to be at control area level?

The charge will be calculated for the SC's net flow for each interzonal path in each hour. Once again, the hourly charges will be aggregated at the end of the month and posted as a single charge.

Is the billable net scheduled inter-zonal flow computed based on the hour-ahead final schedule, or day-ahead final schedule, or both, or something more? If day-ahead net scheduled inter-zonal flow is billable, what happens if there is an inter-zonal interface derate after the day-ahead market and TO Debit kicks-in?

This is based on Hour-Ahead final schedule.

Will this charge be allocated to ALL schedules on all inter-zonal paths whether there is congestion or not?
Please provide a detailed explanation of the proposed methodology.

Yes, this charge will be allocated on the hourly net final schedule for each path for each SC over all inter-zonal paths whether there is congestion or not. Section 8.3.2 described the calculation of this charge. The rationale is that congestion analysis needs to be performed regardless of the congestion condition

Will this charge be separated into intertie and inter-state charges?

No. Charges are calculated for each interzonal path whether it is an intertie or not.

Will the ISO identify all the intertie resource IDs subject to this charge?

No. The interzonal paths are known. All SCs should have already known about them.

How will the ISO charge for scheduling fees? By hour or month?

Charges are calculated hourly, but will be aggregated as a monthly charge when it is posted.

Will the ISO send a lump sum GMC charge for this service, as is done at the end of the month file today, or will the ISO send the resource-level supporting data that breaks down the GMC charge?

Yes, this is our current plan.

Will the charge be per SC's net or absolute value of supply and demand by zone?

The charge will be calculated by netting each SC's path flow for the hour. The SC's total charge is the sum of the hourly charges over all the interzonal paths

Will the charge be allocated to the zone that supply is generated in and load is received in? Or will the charge be assessed to each path that the energy flows across (i.e., will an import in NW1 that serves load in SP15 be assessed a charge for just NW1 or each of the paths that are crossed in order to serve the SP15 load)?

GMC will be charged for each path, so in the example above, the SC will be charged separately for each path that is crossed.

If the answer to the question above is 'yes', will the ISO provide the paths that each resource's schedule crosses?

The information will be available to the SCs, but we have not determined the exact presentation format.

8.3.3 Market Operations Charge.

The Market Operations Charge for each Scheduling Coordinator is calculated as the product of the rate for the Market Operations Charge and the Scheduling Coordinator's total purchases and sales of Ancillary Services, Supplemental Energy, and Imbalance Energy (both instructed and uninstructed). The rate for the Market Operations Charge is determined by dividing the GMC costs allocated to this service category by the total purchases and sales of Ancillary Services, Supplemental Energy and Imbalance Energy (both instructed and uninstructed) according to the formula in Schedule 1 of this Tariff.

Is this charge going to be at control area level, or zonal level, or region level?

The billing determinant is the sum of the absolute values of the billable quantities in the A/S, Supplemental Energy and Imbalance Energy charge types. In this sense, you may consider this as a global (or control area level) charge.

Is this charge going to be calculated and reported at 10 min or hourly level?

This has not yet been determined. To manage the amount of data, it is likely that we'll only keep hourly details, but the hourly amount may consist of 10-minute components (from CT 401 and 407).

Does this charge apply to ancillary service self-provision quantities?

No. The self-provision lowers your A/S obligation and results in a smaller billing determinant.

Does this charge apply to inter-SC ancillary service trade quantities?

No. But the trade affects your A/S obligation and indirectly changes your billing determinant.

Does an hour-ahead ancillary service buy back count as a separate ancillary service purchase in the hour-ahead ancillary services market, or does it count as a reduction in the net day-ahead and hour-ahead ancillary service sale?

This has not yet been decided.

Is this charge billed on metered quantities, or separately on (a) scheduled quantities and (b) supplemental energy and imbalance energy.

They are all based on whatever charges the SC receives for the different products. Imbalance is based on metered quantities so indirectly this portion of the GMC is based on meters. A/S sales are based on schedules and meter data, A/S purchases are based on meter data, and Supplemental Energy sales are based on schedules.

How will the ISO charge for AS/SE? By hour or month?

The charge is calculated hourly and then aggregated for the entire month.

Which ISO charge types will be included in the GMC charge for AS/SE?

For A/S, CTs 1-6 and CTs 51-56 and CTs 111-116 will be considered. For Instructed Deviation a new CT 401 (replaces CT 301) and for Uninstructed Deviation CT 407 (replaces CT 402-405) will be considered. These new charge types are created due to 10 minute settlements and not due to GMC unbundling.

Over All questions:

Provide details on new ISO charge types such as CT No., Time Resolution, etc.
This has not yet been decided.

What are the expected changes to GMC file and overall ISO file specifications
This has not yet been decided.

Are there any resources, which will receive exclusions from the Market Operations charge?
There are no exclusions, other than self provided A/S.

Are there any resources, which will receive exclusions from the Control Area category of the GMC charge?
There are presently no exclusions. However, fundamental issues of this portion of the GMC are still under discussion in the GMC Unbundling Committee.

Are there any resources, which will receive exclusions from the Interzonal Scheduling GMC charge?
The only exemptions that apply are those due to Existing Transmission Contracts (ETC). ETCs will not be charged under the Inter-zonal Scheduling category if the schedule is submitted properly.