



**GMC Unbundling Steering Committee
Meeting Agenda
May 22, 2000
10:00 a.m. – 2:00 p.m. in 101A-1a & 1b**

- | | |
|-------------------------|-------------------------------------|
| 10:00 a.m. – 12:00 p.m. | Issues & Other Forums – Roger Smith |
| 12:00 p.m. – 12:30 p.m. | Lunch |
| 12:30 p.m. – 1:00 p.m. | 1999 Information |
| 1:00 p.m. – 1:30 p.m. | Board Presentation |
| 1:30 p.m. – 2:00 p.m. | Review of Cost Allocation |

Open discussions of any additional comments are welcome

1

**GMC Unbundling Steering
Committee Meeting
May 22, 2000
10:00 a.m. – 2:00 p.m. in 101A-1a**

Sign-in Sheet

RAY BLIVEN	CAC / EPUC
Bert Hansen	SCE
Lacey Lau	Calpx
Romulo Burreno	Calpx
W. Shannon Black	Smud
Cheryl Beach	Rudd
Barbara Barkovich	- Bond
Carolyn Kehewer	
Phil Jordan	} Swidlon.
Julia Moore	
Tony Brown	CMUA
- Carolyn Kehewer	- Bond
Milce Epstein	CAISO
Roger Smith	CAISO
Laurie Donnell	CAISO
Milce Turner	CAISO
Michael Warner	CDWR
Bob Cowden	PG+E
Cathy Young	CAISO

Call ->

x6

**GMC Unbundling Steering
Committee Meeting
May 22, 2000
10:00 a.m. – 2:00 p.m. in 101A-1a**

②

Sign-in Sheet

	Charlotte Martin	CAISO
	Phil Leiber	CAISO
	Ray Jenner	PG&E
	David Cohen	
call	Michele Wynne	
	Trent Carlson	CAISO
call	Eve Elseson	EAC&E PUC
	Karen Shea	PG&E
	Deanne Nelson	CAISO
	Spence Garber	CAISO
call	Michael Offenham	
	Bill Regan	CAISO
	Michelle Wiedmiker	CAISO
call	Robert Barry	APX

ISSUES & OTHER FORUMS

ROGER SMITH

Summary: The ISO report will not extend TAC exemption to GWC.

QF P&A HISTORY

- Fact findings "Appropriation?"
- QF's sourced - more poolings
- Discusses anything you can specifically identify

PROCESSES DIVERGES

- How QF's protect power purchase
- QF wanted to be "PSP" gives load... negotiations continue

3 ISO-BASED NEEDS

- Scheduling
- Reliability
- Financial load

WGLC = control area requirements?
 used All load upon area responsibility of control area operator.
 ISO is disagreeing with other utilities

Differentiating auxiliary load vs. "behind the generator" load vs. "always been defined that way..."

ISO responsible for all load. Why exemptions?
 looking at reasonable level of cut-off point.

OPERATION PRINCIPLE

- ISO role: assist parties in pre-existing relationships
- TAC: allocating fixed costs
- Exemption: for varying QF's
- GWC & TAC? Location in position TAC & other forums - not GWC

* Exemption distinct from GWC

* ISO report position will be gross load...
 * What happens also ISO have behind the meter?
 what is the ISO service?

question
 * How load is served is distinct from ISO's info needs.
 * QF gen | onsite load instant help = exemption.
 * What services should be paid for?

Will ISO be consistent in the definition of gross load as TAC? How need

Special: don't all gross load in ISO's denominator?

DIVERGENT CONTEXTS

- TAC
- Info needs
- GWC
- Sounds like ISO report wants to highlight?
- HISTORY: GWC forum... others not check defn. of gross load.

Separate from TAC.
 ISO needs → distributed generation
 ISO reports for metered substations
 control area denominations
 flow / full AC load.
 TAC

DISTRIBUTED GEN.

Q: GWC one of allocated costs. Are we talking all gross load? or allocated costs?

Q: Alternating for Dist Gen ISO position? → gross load.

* ISO doesn't expect to measure even time bit - want info to enhance negotiation.

Q: Will GWC overlap? / Gross load for TAC / Gross load for GWC
 expect two different definitions.

* If QF P&A determines info needs specifies ~ won't have denominator?
 * ISO AC firm load?
 Q: Should GWC use QF in determination?
 #2 proposals: reliability / not.

more for sharing w/ not depending on outcome

REQUIREMENTS: 2 OPTIONS

Q: Gross load
 Q: QF P&A
 Gross load
 Gross minus QF load
 Gross minus QF load
 Gross minus QF load
 Gross minus QF load

* Now QF's will be incentivized as opposed to historical scale costs
 * Some costs not paid yet.
 * QF issue - TAC Allocation based on customer, at some issue arising here.
 ISSUES # 1

* Rate methodology based on COST CAUSATION... not just gross load.

* ISO position: everyone on the grid benefits.

☐ If everything gross load were added for litigation.

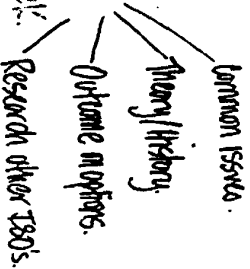
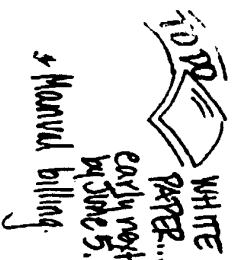
* ISO feels more consistent
→ review in light of EXPENSE!

CASE THEME?

* Unbundling on FERC bid hook?

* Expect protests w/ hearings w/ market contest

* Unresolved issues may go



ISSUES #2

☐ #2 page 2 last sentences
Universe just GMC or allocating other costs?
→ pg 8

* ISO can make a GMC filing on anything.

GMC UNBUNDLING

AGENDA

10⁰⁰ Issues & Other Forums

Roger Smith
Perez + Q & A.

12⁰⁰ L U N C H

12³⁰ "Build your own GMC"

1999 Information

1⁰⁰ Board Presentation

1³⁰ Cost Allocation Review
Perez + Q & A.

1⁵⁰ What goes to M.I.F.

STEERING COMMITTEE
MAY 22, 2000

OUTCOMES

Share information & enhance understanding on issues raised last meeting.

Review Board Presentation
Any verbal additions?

Determine what goes to M.I.F.

COST ALLOCATION

REVENUE FLOW

Can you anticipate short fall? Averaging?

* Solutions under consideration:
bank line of credit

ADJUSTMENTS

* Keep adjustments bucket by bucket.

* Currently can adjust quarterly.

* Seasonality not increased by buckets.

VOLUMES on CURRENT GMC?

last 3-4 mos 1% on budget.

FORECASTING

PTM adjusting quarterly.

MCT

* Consider laying off bandwidth unused?

* Responding - two specific options under active consideration..

* Potential at this time confidential.

* Potential private use conflicts

* Revenue - debt - credit allocated
→ "cost recovery"

* Discomfort exists due to backing into \$

* \$ Now at 31M

REFINANCED

\$ 293 M in DEBT

* New debt \$35M

lap expenditures for 2000/2001

* Land, facilities & software

OP. RESERVE

* Not quite funded yet At 9M, need 14M

NEXT VERSION

Infrastructure contracts struggling!

2001 BUDGETING

* Begins in June Prez to board in Sept/Oct

* Actual results available. some lag

What to make?

④

"BUILD YOUR OWN GMC"

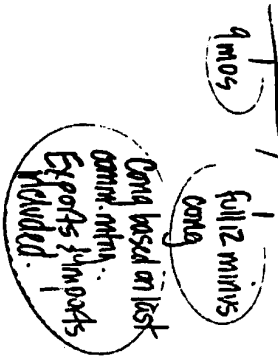
1999 INFORMATION

MEGAWATT HR QF LOAD ESTIMATES

* How can you get that?
=> It's an estimate!
Source CPU report.

* looks like QF generation
WANT = consistent way to understand = footnote source of data.

• WHATS the DIFFERENCE?
MARCH / MAY



• GROSS LOAD info SOURCE
SC Voluntary info

MUNIS

* in data from IOU.
yes - have data from all munis.
* behind the meter?

BUCKETS NOT COMBINED.

* Combining them doesn't change results.

NEXT MTNG

▶ BOARD & MIF
meeting coming up.

▶ MIF JUNE 7

Propose Thurs after
DATE June 8. 10a-2p.

AGENDA

- Review Rogers' write paper
- Follow-up on: board comments. MIF
- what goes to the Board.
- Int Memorandum schedule for July/Aug

⑤

⑥



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System Operator

GMC Cost Allocation Methodology

Presentation to Unbundling Committee
May 22, 2000

Phil Leiber

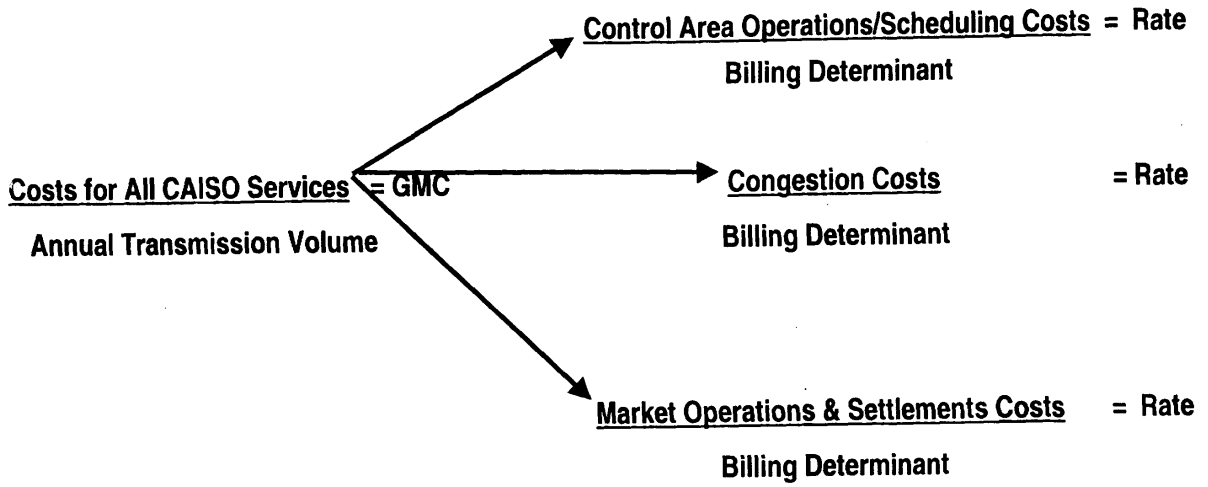


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Single Rate

3 Buckets





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Cost Allocation Methodology: Operating Costs

Directly chargeable departments:

Individual ISO Managers & Directors to analyze their activities and assign their costs to the 3 categories.

Overhead & Indirect departments:

Assign to 3 categories based on various results of direct assignments.

Example: OSAT Group--Operations Support and Training. Assigned to 3 categories based on headcount allocations of directly chargeable operations groups.

Example: Finance. Assigned based on overall results of allocations of Operations, Client Services, and IT groups.



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Cost Allocation Methodology: Operating Costs

Significant Item: MCI Telecommunications Costs

Contract charges for:

Bandwidth & WAN Infrastructure

Usage Charges

Data Premises

Voice Premises

Shared Network Services

A Portion (6%) of these costs are directly assigned to Market Operations, based on bandwidth set aside for "Connected Entities".

Remainder allocated based on ISO headcount :

- 1) proportion of department to total ISO staffing, or
- 2) proportion of department to total ISO departments deemed to significantly use the system



Cost Allocation Methodology: Debt Service

Approximately 25% of GMC (31% including Operating Reserve funding) consists of debt service related to CAISO's bond offerings (1998 Series ABCD Bond issuance of \$301.4 million, refinanced in May 2000)

Bond issuance provided funds for:

- Infrastructure

- Startup costs

- Capital Expenditures

- Working Capital



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Cost Allocation Methodology: Debt Service

	<u>% of Total*</u>	<u>Allocation Method Used</u>
Infrastructure/Other.	53%	Analysis of contracts for systems built
Startup costs	16%	Results of operating cost allocation
Capital Expenditures	23%	Analysis of contracts for systems built/planned
Working Capital	8%	Results of operating cost allocation

** 1999 allocation. To be updated to reflect actual capital expenditures through 2000, and to reflect May 2000 bond issuance.*



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Cost Allocation Methodology: Debt Service: Infrastructure

- | | |
|---------------------------|---|
| EMS: | Direct Assignment to Control Area Operations |
| MCI/IBM Contracts: | Same as Ongoing MCI/IBM Costs |
| MDAS: | Same as Metering operating costs |
| ISO Alliance (SA/SI/BBS): | Analysis of contract milestones and assignment to the 3 buckets:

Two steps:

1. Milestones to Systems (SA/SI/BBS)

2. Systems (SA/SI/BBS) to Buckets |

Work performed by CAISO Operations personnel.





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Cost Allocation Methodology: Debt Service: Infrastructure

Some direct assignments:

Settlement module testing complete(55) \$911,195
-->SETTLEMENTS AREA OF ALLIANCE CONTRACT-->**MARKET OPS/
SETTLEMENTS BUCKET**

Some allocations to multiple buckets:

Individual Energy Imports Build Complete - 71a \$148,213

1. 50% Settlements, 25% SA, 25% SI OF ALLIANCE CONTRACT-->

2. 50% Directly assigned to: **MARKET OPS/SETTLEMENTS BUCKET**

 25% SA/25% SI assigned to: **36% CONTROL AREA/SCHEDULING,
18% CONGESTION, 46% MARKET
OPS/SETTLEMENTS**



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Cost Allocation Methodology: Debt Service: Infrastructure

<u>Total</u>	<u>Accounting</u>	<u>Billing</u>	<u>Settlement</u>	<u>SI</u>	<u>SA</u>
54,984,033	2,928,315	6,757,528	13,283,231	16,331,324	15,683,635
TOTAL COSTS TO ALLOCATE					

ALLOCATED TO:

CONTROL AREA/SCHEDULING
28.1%

CONGESTION
9.8%

MARKET OPS/SETTLEMENTS
62.1%





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Cost Allocation Methodology: Debt Service: Phase II and Capital Expenditures

Phase II: 17% of debt service

Method: Similar process as for ISO Alliance (SA/SI/BBS):

Analysis of contract milestones and assignment to 3 categories by
CAISO Operations personnel/Phase II team.

Capital Expenditures: 6% of debt service

Definition: Systems of overall benefit to CAISO. Example: EDMS, facilities,
Information Security, Data Warehousing, Computing system upgrades

Method: Based on results of allocations of Operating Costs.



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Cost Allocation Methodology: Debt Service: Phase II Costs

System	Projected Cost	Grid Ops & Reliability (Control Area Operations)	Scheduling	Congestion	Market Function	Settlement & Billing
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Dollars

BBS	\$ 4,452,831	\$ 50,000	\$ 50,000	\$ 164,048	\$ 547,446	\$ 3,641,337
EMS	\$ 8,458,814	\$ 8,458,814	\$ -	\$ -	\$ -	\$ -
IT General	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ 70,000
MDAS	\$ 213,000	\$ -	\$ -	\$ -	\$ -	\$ 213,000
Multiple	\$ 13,092,516	\$ 785,094	\$ 515,042	\$ 2,805,072	\$ 4,369,677	\$ 4,617,632
SA	\$ 13,875,601	\$ 3,817,734	\$ 765,958	\$ 3,287,761	\$ 5,752,161	\$ 251,988
SA/SI	\$ 9,820,376	\$ 2,470,000	\$ 812,259	\$ 513,400	\$ 6,024,718	\$ -
SI	\$ 5,246,935	\$ 983,446	\$ 1,215,847	\$ 388,742	\$ 2,577,022	\$ 81,879
Total	\$ 55,230,073	\$ 16,565,087	\$ 3,359,105	\$ 7,159,022	\$ 19,271,024	\$ 8,875,837

Total Carried Forward to Cost Allocation Matrix-See Note

\$ 52,243,000	\$ 15,669,178	\$ 3,177,431	\$ 6,771,832	\$ 18,228,766	\$ 8,395,794
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Percentage

BBS	100%	1%	1%	4%	12%	82%
EMS	100%	100%	0%	0%	0%	0%
IT General	100%	0%	0%	0%	0%	100%
MDAS	100%	0%	0%	0%	0%	100%
Multiple	100%	6%	4%	21%	33%	35%
SA	100%	28%	6%	24%	41%	2%
SA/SI	100%	25%	8%	5%	61%	0%
SI	100%	19%	23%	7%	49%	2%
Total	100%	30%	6%	13%	35%	16%

“Build Your Own GMC”

All underlying data gathered from Jan.99-Dec.99

TAB 1	
Unbundling Options Matrix	Provides a thorough breakdown of the different buckets and billing determinants proposed by the GMC Unbundling Committee.

TAB 2	
Build your own GMC	Shows all of the possible combinations of billing determinants and allows you to custom build your own bundle.

TAB 3	
Customized Solutions	Displays the GMC charges for all SCs based on your choices for each billing determinant.

TAB 4	
Bucket Graph	Displays a graph which compares each billing determinant within each bucket for each SC for each month.

TAB 5	
Per Unit Info	Displays a cost per unit for each billing determinant.

There are INSTRUCTION Buttons provided on TABS 2, 3, 4 & 5.

	Billing Determinant 1		Billing Determinant 2	
	Definition	Used in Analysis	Definition	Used in Analysis
CONTROL AREA 35%	Gross Load		Gross Load - QF	
	Control Area Metered Load & Exports in Mwh including loads served by internal generation (behind the meter) for Munis and QFs	Total load and export volumes reported prior to any discounts. The internal load #s for TID, MID and QFs were not provided. Thus any additional load not reported will only reduce the GMC shown.	Control Area Metered Load & Exports in MWh including loads served by internal generation (behind the meter) for Munis but excluding QFs	Total load and export volumes reported prior to any discounts. The internal load #s for QFs were not provided. Thus any additional load not reported will only reduce the GMC shown.
SCHEDULING 11%	Net Load		Gross Load	
	Control Area Metered Load & Exports in Mwh excluding loads served by internal generation (behind the meter) for Munis and QFs	Total load and export volumes reported after 100% ETC discounts but prior to any 50% discounts. This is closer to controlled grid rather than control area but any additional loads not reported will only reduce the GMC shown.	Control Area Metered Load & Exports in Mwh including loads served by internal generation (behind the meter) for Munis and QFs	Total load and export volumes reported prior to any discounts. The internal load #s for TID, MID and QFs were not provided. Thus any additional load not reported will only reduce the GMC shown.
CONGESTION 7%	Cong. Charges		Net Sch. Load	
	Volumes under Congestion Charges in MWh	N/A	Net scheduled load by a SC on an inter-zonal basis	Absolute value of net scheduled load, generation, exports and imports by zone.
MARKET OPS + BILLING/SETTLEMENTS 23% + 24%	Purch. & Sales		Purch. Only	
	A/S & Real Time traded volumes (purchases and sales) in MWh	same	A/S & Real Time traded volumes (purchases only) in MWh	same

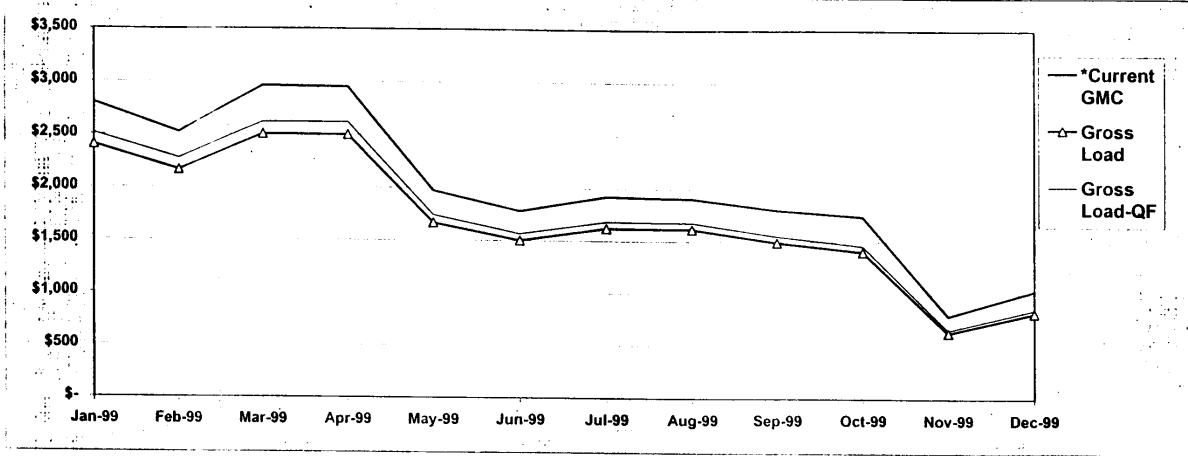
BUILD A CUSTOM GMC BUNDLE	
Control Area	*Current GMC \$ 56,231,307.01
Scheduling	*Current GMC \$ 17,672,696.49
Congestion	*Current GMC \$ 11,246,261.40
Market Ops	*Current GMC \$ 36,952,001.75
Billing/Settlements	*Current GMC \$ 38,558,610.52
Total	\$ 160,660,877.18
*Current GMC	\$ 160,660,877.18
Difference	\$ -

(All)		
BILLING DETERMINANT MATRIX		
Control Area	*Current GMC	\$ 56,231,307.01
	Gross Load	\$ 56,231,307.01
	Gross Load-QF	\$ 56,231,307.01
Scheduling	*Current GMC	\$ 17,672,696.49
	Gross Load	\$ 17,672,696.49
	Net Load	\$ 17,672,696.49
Congestion	*Current GMC	\$ 11,246,261.40
	Net Sch. Load	\$ 9,528,583.83
Market Ops	*Current GMC	\$ 36,952,001.75
	Purch & Sales	\$ 36,952,001.75
	Purch.	\$ 36,952,001.75
Billing/Settlements	*Current GMC	\$ 38,558,610.52
	Purch & Sales	\$ 38,558,610.52
	Purch.	\$ 38,558,610.52

Line	Current GMC	Current GMC	Current GMC	Current GMC	Current GMC	TOTAL
1	\$ 24,165.90	\$ 7,001.28	\$ 4,857.18	\$ 15,893.59	\$ 16,584.62	\$ 69,101.33
2	\$ 1,045,697.40	\$ 328,647.75	\$ 209,139.48	\$ 687,172.58	\$ 717,049.65	\$ 2,987,706.86
3	\$ 67,849.44	\$ 21,324.11	\$ 13,569.89	\$ 44,586.77	\$ 46,525.33	\$ 193,855.54
4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	\$ 165,634.82	\$ 52,056.66	\$ 33,126.96	\$ 108,845.74	\$ 113,578.16	\$ 473,242.34
6	\$ 1,867,062.61	\$ 586,791.11	\$ 373,412.52	\$ 1,226,926.86	\$ 1,280,271.50	\$ 5,334,464.60
7	\$ 106,471.09	\$ 33,462.34	\$ 21,294.22	\$ 69,966.72	\$ 73,008.75	\$ 304,203.12
8	\$ 348,956.05	\$ 109,671.90	\$ 69,791.21	\$ 229,313.98	\$ 239,284.15	\$ 997,017.30
9	\$ 1,139,545.56	\$ 358,142.89	\$ 227,909.11	\$ 748,844.22	\$ 781,402.67	\$ 3,255,844.45
10	\$ 430,013.31	\$ 135,147.04	\$ 86,002.66	\$ 282,580.17	\$ 294,866.27	\$ 1,228,609.45
11	\$ 1,259,583.25	\$ 395,869.02	\$ 251,916.65	\$ 827,726.12	\$ 853,714.23	\$ 3,589,809.27
12	\$ 721.97	\$ 226.90	\$ 144.39	\$ 474.44	\$ 495.06	\$ 2,062.77
13	\$ 1,246,944.10	\$ 391,896.72	\$ 249,388.82	\$ 819,420.41	\$ 855,047.38	\$ 3,562,697.42
14	\$ 8,136.10	\$ 2,557.06	\$ 1,627.22	\$ 5,346.58	\$ 5,579.04	\$ 23,246.01
15	\$ 232,829.60	\$ 73,175.02	\$ 46,565.92	\$ 153,002.31	\$ 159,654.59	\$ 665,227.44
16	\$ 23,733.88	\$ 7,459.22	\$ 4,746.78	\$ 15,596.55	\$ 16,274.66	\$ 67,811.10
17	\$ 85,883.89	\$ 26,992.08	\$ 17,176.78	\$ 56,437.98	\$ 58,891.81	\$ 245,382.53
18	\$ 42,773.54	\$ 13,443.11	\$ 8,554.71	\$ 28,108.33	\$ 29,330.43	\$ 122,210.12
19	\$ 1,775.40	\$ 557.98	\$ 355.08	\$ 1,166.69	\$ 1,217.41	\$ 5,072.56
20	\$ 25,653.74	\$ 8,062.60	\$ 5,130.75	\$ 16,858.17	\$ 17,591.14	\$ 73,296.40
21	\$ 153,034.38	\$ 48,096.52	\$ 30,606.88	\$ 100,565.45	\$ 104,937.86	\$ 437,241.07
22	\$ 495,339.98	\$ 155,678.28	\$ 99,068.00	\$ 325,509.13	\$ 339,661.70	\$ 1,415,257.07
23	\$ 255,209.43	\$ 80,208.68	\$ 51,041.89	\$ 167,709.05	\$ 175,000.75	\$ 729,169.79
24	\$ 77,277.20	\$ 24,287.12	\$ 15,455.44	\$ 50,782.16	\$ 52,990.08	\$ 220,792.00
25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	\$ 196,735.43	\$ 61,831.13	\$ 39,347.09	\$ 129,283.28	\$ 134,904.29	\$ 562,101.22
27	\$ 272.34	\$ 85.59	\$ 54.47	\$ 178.96	\$ 186.74	\$ 778.10
28	\$ 1,714.08	\$ 538.71	\$ 342.82	\$ 1,126.39	\$ 1,175.37	\$ 4,897.36
29	\$ 12,841.57	\$ 4,035.92	\$ 2,568.31	\$ 8,438.74	\$ 8,805.65	\$ 36,690.19
30	\$ 46,034,728.19	\$ 14,468,057.43	\$ 9,206,945.64	\$ 30,251,392.81	\$ 31,566,670.76	\$ 131,527,794.83
31	\$ 434,917.19	\$ 136,688.26	\$ 86,983.44	\$ 285,802.73	\$ 298,228.93	\$ 1,242,620.55
32	\$ 5,119.43	\$ 1,608.96	\$ 1,023.89	\$ 3,364.19	\$ 3,510.46	\$ 14,626.93
33	\$ 21,866.22	\$ 6,872.24	\$ 4,373.24	\$ 14,369.23	\$ 14,993.98	\$ 62,474.91
34	\$ 51.73	\$ 16.26	\$ 10.35	\$ 33.99	\$ 35.47	\$ 147.79
35	\$ 12,649.34	\$ 3,975.51	\$ 2,529.87	\$ 8,312.42	\$ 8,673.83	\$ 36,140.97
36	\$ 33,990.75	\$ 10,682.81	\$ 6,798.15	\$ 22,336.78	\$ 23,307.94	\$ 97,116.44
37	\$ 311,836.88	\$ 98,005.88	\$ 62,367.38	\$ 204,921.38	\$ 213,831.01	\$ 890,962.53
38	\$ 32,987.38	\$ 10,367.46	\$ 6,597.48	\$ 21,677.42	\$ 22,619.91	\$ 94,249.64
39	\$ 17,961.07	\$ 5,644.91	\$ 3,592.21	\$ 11,802.99	\$ 12,316.16	\$ 51,317.33
40	\$ 2,832.28	\$ 890.15	\$ 566.46	\$ 1,861.22	\$ 1,942.14	\$ 8,092.24
41	\$ 115.74	\$ 36.38	\$ 23.15	\$ 76.06	\$ 79.37	\$ 330.69
42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	\$ 255.84	\$ 80.41	\$ 51.17	\$ 168.12	\$ 175.43	\$ 730.96
44	\$ 3,422.71	\$ 1,075.71	\$ 684.54	\$ 2,249.21	\$ 2,347.00	\$ 9,779.17
45	\$ 2,601.24	\$ 817.53	\$ 520.25	\$ 1,709.39	\$ 1,783.71	\$ 7,432.13
46	\$ 94.99	\$ 29.85	\$ 19.00	\$ 62.42	\$ 65.13	\$ 271.39
47	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
52	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
55	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total	\$ 56,231,307.01	\$ 17,672,696.49	\$ 11,246,261.40	\$ 36,952,001.75	\$ 38,558,810.52	\$ 160,660,877.18

1
Control Area

Alternative	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99
*Current GMC	\$ 2,412.20	\$ 2,523.01	\$ 2,963.51	\$ 2,950.79	\$ 1,973.98	\$ 1,782.27	\$ 1,923.87	\$ 1,905.50	\$ 1,799.10	\$ 1,738.72	\$ 793.38	\$ 1,029.58
Gross Load	\$ 2,403.54	\$ 2,165.26	\$ 2,503.90	\$ 2,499.97	\$ 1,667.14	\$ 1,503.25	\$ 1,623.47	\$ 1,615.32	\$ 1,491.97	\$ 1,402.04	\$ 629.44	\$ 816.00
Gross Load-QF	\$ 2,513.31	\$ 2,277.37	\$ 2,617.81	\$ 2,617.79	\$ 1,743.29	\$ 1,567.01	\$ 1,684.26	\$ 1,676.76	\$ 1,552.41	\$ 1,459.00	\$ 656.71	\$ 849.92



BUNDLED GMC

NA	Current GMC	\$	0.7781	206,546,605	\$	160,713,913
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UNBUNDLED GMC

Control Area	*Current GMC	\$	0.2722	206,546,605	\$	56,231,307
	Gross Load	\$	0.2269	247,805,786	\$	56,231,307
	Gross Load-QF	\$	0.2367	237,597,786	\$	56,231,307
Scheduling	*Current GMC.	\$	0.0856	206,546,605	\$	17,672,696
	Gross Load	\$	0.0713	247,805,786	\$	17,672,696
	Net Load	\$	0.0806	219,370,450	\$	17,672,696
Congestion	*Current GMC .	\$	0.0544	206,546,605	\$	11,246,261
	Net Sch. Load	\$	0.1610	59,174,876	\$	9,528,584
Market Ops	*Current GMC .	\$	0.1789	206,546,605	\$	36,952,002
	Purch & Sales	\$	0.3510	105,281,249	\$	36,952,002
	Purch.	\$	0.7259	50,906,928	\$	36,952,002
Billing/Settlements	*Current GMC .	\$	0.1867	206,546,605	\$	38,558,611
	Purch & Sales	\$	0.3662	105,281,249	\$	38,558,611
	Purch.	\$	0.7574	50,906,928	\$	38,558,611

UNBUNDLED WORKSHEET

Control Area	*Current GMC	1.00	\$ 0.2722	0	\$ -
Scheduling	*Current GMC.	1.00	\$ 0.0856	0	\$ -
Congestion	*Current GMC..	1.00	\$ 0.0544	0	\$ -
Market Ops	P Current atS ame .	1.00	\$ 0.1789	0	\$ -
Billing/Settlements	P Current atS ame .	1.00	\$ 0.1867	0	\$ -
TOTAL					\$ -

SC	(All)
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		Data		
Bucket	Billing Determinants	Sum of Dollars	Sum of Billable Qty	
Control Area	*Current GMC	\$ 56,231,307	206546604.8	\$ 0.27224513
	Gross Load-QF	\$ 56,231,307	237597785.6	\$ 0.23666596
Scheduling	*Current GMC.	\$ 17,672,696	206546604.8	\$ 0.08556275
	Gross Load	\$ 17,672,696	247805785.6	\$ 0.07131672
	Net Load	\$ 17,672,696	219370449.8	\$ 0.08056097
Congestion	*Current GMC .	\$ 11,246,261	206546604.8	\$ 0.05444903
	Net Sch. Load	\$ 9,528,584	59174875.71	\$ 0.16102415
Market Ops	*Current GMC .	\$ 36,952,002	206546604.8	\$ 0.17890394
	Purch & Sales	\$ 36,952,002	105281249	\$ 0.35098369
	Purch.	\$ 36,952,002	50906928.41	\$ 0.72587372
Billing/Settlements	*Current GMC .	\$ 38,558,611	206546604.8	\$ 0.18668237
	Purch & Sales	\$ 38,558,611	105281249	\$ 0.36624386
	Purch.	\$ 38,558,611	50906928.41	\$ 0.75743345
Grand Total		\$ 469,018,693	2356864061	\$ 0.19900116