

**Pacific Gas and Electric Company**



California Gas Transmission

**OFO Report**

**Fourth Quarter 2004**

(October – December 2004)

# OFO Report: Fourth Quarter 2004

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## I. BACKGROUND

PG&E is providing this Operational Flow Order (OFO) Report (Report) as required by its OFO Settlement Agreement (OFO Settlement or Settlement)<sup>1</sup> and as part of its continued commitment to keep California natural gas market participants informed. These Reports are provided quarterly. This Report covers the fourth quarter of 2004 – October 1 through December 31. The purpose of the OFO Report is to document “the number and causes of each customer-specific and system-wide OFO, EFO and ‘trimming’ occasion (‘Event’) within the prior three months.”<sup>2</sup>

The OFO Settlement has been in effect since April 1, 2000. As demonstrated in the previous quarterly reports, this Settlement has been successful in reducing the market impacts of OFOs. This, and future, quarterly reports will focus on providing the data specified in the Settlement. Background information and discussion of the OFO process is available from the Pipe Ranger Web site, located on the Internet at [http://www.pge.com/pipeline/library/foefodiv/fo\\_index.html](http://www.pge.com/pipeline/library/foefodiv/fo_index.html).

## II. OFO EVENTS DURING THE QUARTER

### A. OFO Event Summary

During the quarter ending December 31, 2004, PG&E called a total of twenty-eight (28) OFO events. All twenty-eight (28) OFO events were a result of high pipeline inventory; that is, customers were delivering more gas supply into the pipeline system than they were using at their meters. Twenty-two (22) of the OFO events system-wide OFOs and six (6) were customer-specific OFOs. There were no EFO events during this quarter.

There were no “trimming”, or receipt point capacity allocation, events during the quarter. However, in order to help avoid “trimming” events, PG&E did call six (6) OFO events later than the typical notification time of 7:30 a.m. on the day prior to the OFO day. All six of these events were called after the first nomination deadline (Timely cycle), but prior to the second cycle deadline (Evening cycle). All six (6) of these events were customer-specific OFOs. These “later-notice” OFOs were effective in avoiding the implementation of a receipt point capacity allocation event.

Table 1 provides a summary of each OFO event during the quarter.

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<sup>1</sup> PG&E’s OFO Settlement was approved by the CPUC in Decision 00-02-050 on February 17, 2000. The Settlement tariffs were effective April 1, 2000.

<sup>2</sup> See Section C.1.f, page 5 of the OFO Settlement.

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**Table 1: OFO Event Summary**

<b>Date</b>	<b>Type</b>	<b>Cause / Comments</b>
Friday, <b>October 1, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 2 at \$1.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,593 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Wednesday, <b>October 6, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,761 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because previous operating experience with Customer-Specific OFOs, in similar market conditions, did not result in improved pipeline system conditions.</li> </ul>
Friday, <b>October 8, 2004</b>	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> <li>● No. Customers: 10</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,750 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>
Saturday <b>October 9, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,715 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Wednesday, <b>October 13, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,851 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Thursday, <b>October 14, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 2%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,750 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because of insufficient projected relief from targeted customers.</li> </ul>
Friday, <b>October 15, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 10%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,600 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Sunday, <b>October 17, 2004</b>	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 4%</li> <li>● No. Customers: 8</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,750 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>
Wednesday, <b>October 20, 2004</b>	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> <li>● No. Customers: 10</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,809 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>

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Thursday, <b>October 21, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 1%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,750 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Friday, <b>October 22, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 6%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,573 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Sunday, <b>October 24, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,778 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because more than ten balancing entities were targeted.</li> </ul>
Monday, <b>October 25, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,605 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Wednesday, <b>October 27, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 2%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,699 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because more than ten balancing entities were targeted.</li> </ul>
Friday, <b>October 29, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 9%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,647 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because previous operating experience with Customer-Specific OFOs, under similar market conditions, did not result in improved pipeline system conditions.</li> </ul>
Sunday, <b>November 7, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 5,075 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Monday, <b>November 8, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,661 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Wednesday, <b>November 10, 2004</b>	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,607 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li> <li>● Customer-Specific OFO not called because previous operating experience with Customer-Specific OFOs, under similar market conditions, did not result in improved pipeline system conditions.</li> </ul>

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Thursday, November 11, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,562 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Friday, November 12, 2004	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> <li>● No. Customers: 11</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,675 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>
Sunday, November 14, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 5,110 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Monday, November 15, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,629 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Thursday, November 18, 2004	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> <li>● No. Customers: 9</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,688 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>
Friday, November 19, 2004	<ul style="list-style-type: none"> <li>● <b>Customer-Specific</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 0%</li> <li>● No. Customers: 4</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,617 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li> <li>● OFO called after the normal 7:30 a.m. notification time.</li> </ul>
Wednesday, November 24, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,875 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li> <li>● Customer-Specific OFO not called because previous operating experience with Customer-Specific OFOs, under similar market conditions, did not result in improved pipeline system conditions.</li> </ul>
Friday, November 26, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,688 MMcf exceeded the upper pipeline operating limit of 4,500 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>
Saturday, November 27, 2004	<ul style="list-style-type: none"> <li>● <b>System-Wide</b></li> <li>● <b><u>High Inventory</u></b></li> <li>● Stage 3 at \$5.00/Dth</li> <li>● Tolerance Band: 5%</li> </ul>	<ul style="list-style-type: none"> <li>● Projected ending inventory of 4,665 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li> <li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li> </ul>

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Sunday, November 28, 2004	<ul style="list-style-type: none"><li>● <b>System-Wide</b></li><li>● <b><u>High Inventory</u></b></li><li>● Stage 3 at \$5.00/Dth</li><li>● Tolerance Band: 5%</li></ul>	<ul style="list-style-type: none"><li>● Projected ending inventory of 4,652 MMcf exceeded the upper pipeline operating limit of 4,600 MMcf.</li><li>● Customer-Specific OFO not called because the projected relief from targeted customers was insufficient to bring the pipeline inventory back within the specified operating limits.</li></ul>
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### B. Receipt Point Capacity Allocation Events

There were no receipt point capacity allocation events during the quarter.

## III. DETAILED IMBALANCE DATA

Appendix A shows the imbalance detail for each end-use balancing entity for each OFO day and the three days prior to the OFO.<sup>3</sup> This includes the daily supply, usage and imbalance quantities based on billing data.<sup>4</sup>

Appendix A also indicates which entities were targeted during a customer-specific OFO event and which entities met the following four criteria for significant contributors to each OFO event:

- Total imbalance on 3-prior days exceeds 10 percent and 5,000 Dth. (This definition of significant contributor is specified in Section B.3.b of the OFO Settlement.)
- Total imbalance on 3-prior days exceeds 5,000 Dth.
- Total imbalance on 3-prior days exceeds 10 percent of usage.
- During a Customer-Specific OFO, both the imbalance and the supply increase during a high inventory OFO (or decrease during a low inventory OFO) by over 5,000 Dth on the OFO day.

The last three measures are added to provide more information for evaluating which entities may be contributing to an OFO event.

Appendix B contains detailed data for each OFO event for pipeline imbalances, net market center imbalances, pipeline balancing provided by allocated “balancing” storage, and pipeline inventory levels based on operating data.<sup>5</sup> Also included is a description of each data element shown in the tables.

<sup>3</sup> See Section C.1.f.(1), page 5, of the OFO Settlement.

<sup>4</sup> The billing data for Core Procurement Groups (CPGs) is based on their “Determined Usage”, which is the forecast on the morning of flow day.

<sup>5</sup> This data is required by Sections C.1.f.(2), (3), (4), and (5) of the OFO Settlement.

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### **IV. DISCUSSION**

This section of the OFO Report provides PG&E's comments and observations of the data presented, and also offers PG&E's recommendations for possible change.<sup>6</sup>

#### **A. Effectiveness of Customer-Specific versus System-Wide OFOs**

Through previous experience with customer-specific OFOs during high inventory situations, PG&E has learned that customer-specific OFOs do not provide satisfactory relief from high pipeline inventory levels. During past high inventory customer-specific OFOs, "targeted customers" traded their imbalances to "non-targeted customers". This behavior left the aggregate gas supply imbalance on the pipeline system and therefore failed to relieve the high inventory situation.

During the spring of 2001, the ineffectiveness of the customer-specific OFOs required PG&E to implement receipt point capacity allocations on three occasions. Following these events, PG&E adopted a policy of only calling system-wide OFOs during high inventory conditions, even when the customer-specific OFO criteria were met.<sup>7</sup> By calling system-wide OFOs, PG&E expects to avoid the disruptive market impacts associated with a receipt point capacity allocation. For low inventory OFOs, PG&E will continue to apply and use the customer-specific OFO criteria.

Beginning in October 2004, PG&E experimented with calling high inventory customer-specific OFOs after the usual OFO notification timeline under certain conditions. When the forecast level of gas supply unexpectedly increased after (and typically as a result of) the timely cycle nominations (and after the "normal" OFO notification time of 7:30 a.m.), PG&E elected to call customer-specific OFOs in an effort to reduce the pipeline inventory. The effectiveness of these later customer-specific OFOs was mixed. PG&E avoided implementing a receipt point capacity allocation, but another OFO event was called on the following day in three of the six occurrences of the "later-notice" customer-specific OFOs.

Feedback from customers suggests a preference for these later customer-specific OFOs compared to other measures. During appropriate conditions, PG&E will continue using this tool to maintain safe pipeline inventory. The success of these later customer-specific OFOs does depend upon targeted balancing entities changing their supply, rather than simply trading their imbalance to a non-targeted entity.

#### **B. High Frequency of OFO Events during October and November**

High inventory conditions persisted throughout the months of October and November, 2004. This led to the unusually high number of OFO events experienced during this period. These high inventory conditions were largely

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<sup>6</sup> The OFO Settlement Agreement specified that the quarterly OFO report would contain "any proposed changes to any OFO and balancing procedures and/or methodology addressed in this Settlement." See Section C.1.f.6, page 5.

<sup>7</sup> The operational flexibility to call system-wide OFOs is provided in Section C.3.b.9 of the OFO Settlement.



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driven by customer over-deliveries. That is, customers were consistently delivering more gas supply into the PG&E system than the customers were using at their meters.

There appeared to be economic incentive for this customer behavior. Customer imbalances from October are carried forward into December (up to a 5% monthly limit and after an imbalance trading period in November) and November imbalances carry forward into January. During October, the gas commodity futures prices for December shot upward and were much higher than the actual daily gas prices during October. If customers over-delivered in October, this gas would be credited to them in December -- when prices were expected to be much higher. This same market condition existed during November with the January gas commodity futures prices being much higher than the daily cash price during November.

### **V. CONCLUSIONS**

The number of OFO events during this quarter (28) is much higher than recently experienced. All the OFO events during the quarter were high inventory OFOs. During October and November, customers consistently over-delivered gas supply into the PG&E system. There appeared to be unique market pricing conditions that may have provided incentive for this behavior.

The majority of the events were system-wide OFOs. PG&E did call several customer-specific, high-inventory OFOs after the normal OFO notification timeline. PG&E will continue these customer-specific OFOs when they can help avoid a receipt point capacity allocation event.

In the majority of cases, when OFOs are forecast by 7:30 a.m., PG&E will continue the current policy of calling only system-wide OFOs during high inventory conditions. PG&E believes this policy is necessary to avoid the more disruptive receipt point capacity allocation that can occur under high inventory conditions.

## Appendix A: Detailed OFO Imbalance Report by Balancing Entity

### 1. Definition of End-Use Balancing Entity Types

There are three types of end-use customer Balancing Entities on the PG&E system. The first type is a Core Procurement Group (CPG), which includes PG&E's Core Procurement Department and all Core Transport Agents (CTAs) – also called Gas Energy Service Providers. These are indicated as 'CTARGAS'.

The second type is an agent or gas marketer managing a Noncore Balancing Aggregation Agreement (NBAA). These are indicated as "NBAA." An NBAA aggregates a group of noncore end-use customers into one entity for balancing purposes. An NBAA group can range from several customers up to over one hundred individual end-use customers. The NBAA agent is financially responsible for all imbalance charges, including OFO noncompliance charges.

The third type is an individual noncore end-use customer. These individual customers maintain an imbalance account under their Natural Gas Service Agreement, indicated as "NGSA." Sometimes the balancing for these NGSAs is managed by the end-use customer, and sometimes by an agent or marketer; however, each is required to balance individually during an OFO event.

### 2. Imbalance Data Elements

The data in this Appendix is organized by each of the OFO events during the quarter. This includes the daily supply, usage and imbalance quantities for the OFO Day and 3-days-prior for each balancing entity. Also, targeted entities during customer-specific OFOs and various calculations of significant contributor are included, along with a summary of these by balancing entity for all OFOs combined.

The following describes the data elements in the Appendix A tables:

Balancing Entity ID #: Each balancing entity is identified by a numerical identifier and the type of balancing entity, and not by name. If a customer operates two separate balancing entity accounts (e.g. an NBAA and a CPG (or CTARGAS)), the same numerical identifier is used for each entity.

Balancing Entity Type: (See discussion above.)

Supply Scheduled Volume: The quantity of gas supply, in decatherms (Dths), received into the PG&E system for delivery to the end-use customer(s) for that balancing entity. This quantity is the result of the gas supply nomination process. This process is the same for all types of balancing entities.

Usage: The quantity of gas, in decatherms (Dths), that is delivered off the PG&E system to the end-use customer(s) for that balancing entity. This is the demand deemed to be used, in order to determine the daily imbalance. For noncore customers (i.e., NBAA or NGSA), the usage is equal to the actual daily meter reading quantities. For core customers (i.e. CTARGAS) the usage is equal to the

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### **Appendix A – Detailed OFO Imbalance Report by Balancing Entity**

Determined Usage<sup>8</sup>. It is important to note that both the Determined Usage and the 24-Hour Forecast are forecasts that are made 24-hours and 48-hours prior to the end of the gas day, respectively.

Daily Imbalance: This is simply the *Supply Scheduled Volume* minus the *Usage*. A positive number indicates an over-delivery of supply (more supply than demand) and a negative number indicates an under-delivery of supply (less supply than demand).

3-Day Prior Net Imbalance: The sum of the *Daily Imbalances* for the three days prior to the OFO Day.

3-Day Prior Percentage Imbalance: The *3-Day Prior Net Imbalance* divided by the total *Usage* for the three days prior to the OFO Day. This represents the average percentage imbalance for these three days.

Targeted under Customer-Specific OFO: This column indicates those balancing entities that were targeted under each customer-specific OFO.

Significant Contributor: Two significant contributor columns are shown. The first indicates those balancing entities with total imbalances greater than 5,000 Dth and 10 percent of its usage in the three days leading up to each system-wide or customer-specific OFO, as defined in the OFO Settlement.<sup>9</sup> The second significant contributor column identifies those balancing entities which increased both their supply and imbalance by more than 5,000 Dth on the OFO day, during a customer-specific OFO.

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<sup>8</sup> Effective January 1, 2004, the Determined Usage is used on all days, including use to measure compliance with OFO orders. Prior to this date, the 24-Hour Forecast was used to determine core customer usage on OFO days and the Determined Usage was used on non-OFO days.

<sup>9</sup> OFO Settlement, Section B.3.b, page 3.

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### Appendix B: Detailed Pipeline Operating Data

#### 1. Data Background:

All data in this Appendix related to gas volumes are expressed in thousands of decatherms (Mdth) and are for the gas day, which begins at 7:00 AM on the date and ends at 7:00 AM on the following day. This is operating data that is compiled approximately 4 hours after the end of the gas day and represents the best information about flows, volumes, and inventories available at that time.

The ending inventory on the OFO day will often not exceed the criteria for an OFO. OFOs are called using the forecast of the ending inventory on the OFO day, and for this reason, the actual ending inventory will likely be different than the forecast ending inventory if the OFO has been effective.

The following sign convention has been employed in the spreadsheet. Any activity that decreases the pipeline system inventory such as a negative customer imbalance or a storage injection is shown with a (-) sign. Activities that increase the pipeline system inventory are positive and are shown without a sign.

#### 2. Data Elements

*Beginning Inventory:* The calculated volume of gas in the PG&E pipeline system at the beginning of the gas day.

*Ending Inventory:* The calculated volume of gas in the PG&E pipeline system at the end of the gas day. This forecast of ending inventory is used to determine whether an OFO is called, and is forecast and reported on the Pipe Ranger 5 times each day.

*Pipeline Storage Balancing:* The PG&E storage that was used to reduce the affect of imbalances on changes in the pipeline system inventory. This value is calculated by subtracting the scheduled storage activity including core, noncore, and GGMC Park/Lend activity from the net PG&E storage activity. There is 50 MMcf of daily storage injection and 70 MMcf of daily storage withdrawal assigned to the pipeline storage balancing activity.

*Total Customer Imbalance:* The total customer imbalance is the total supply scheduled for on-system customers minus the total on-system customer usage. The usage for noncore customers is based on operational meters. The usage for core customers is based on the Determined Usage. The Core Determined Usage is derived from the core load forecast prepared at approximately 7:30 AM at the beginning of the gas day.

*Pipeline Imbalance Detail:* This calculation is provided to show the contribution of core load forecast error on the day of gas flow to the total pipeline imbalance.

*Due to Core Forecast Differences:* This is the difference between the Core Determined Usage which is forecast at the beginning of the gas day and the Core calculated usage. The Core usage is calculated approximately four hours after the end of the gas day using daily data on interconnect and storage volumes, noncore

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### **Appendix B – Detailed Pipeline Operating Data**

daily usage volumes from the Automatic Meter Reading (AMR) system, and the change in the pipeline system inventory.

*All Other Causes:* This represents the sum of all the other contributors to pipeline imbalances including imbalances with interconnecting pipelines and storage facilities (other than PG&E), imbalance in California Gas Well production, shrinkage over or under collection.

*GGMC Net Scheduled Pack Draft:* This value is the net sum of the scheduled nominations for PG&E storage activity for scheduled GGMC Parks, Repays, Lends, and Unparks for the gas day. When the value is a negative (-) it means that storage injection is required to offset a net Pack (Park or Repay) position.

*GGMC Net Pack Allocated:* This is the PG&E storage injection capacity available to GGMC to facilitate their daily parking (Parks and Repays) activity. The amount of daily parking is limited to this quantity so that this activity does not adversely increase the pipeline system inventory and represents one of the measures to determine whether there was an imbalance created by the GGMC on any given day.

*GGMC Net Draft Allocated:* This is the PG&E storage withdrawal capacity available to GGMC to facilitate their daily lending activity. The amount of daily lending is limited to this quantity so that this activity does not adversely decrease the pipeline system inventory and represents one of the measures to determine whether there was an imbalance created by the GGMC on any given day.

*GGMC Imbalance:* This is determined by calculating the amount the *GGMC Scheduled Pack Draft* is outside the *Allocated Pack-Draft* range. These values represent the impact of the GGMC on the pipeline system inventory on any given day.