

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA**

In the Matter of the Application of SOUTHERN)	
CALIFORNIA GAS COMPANY to Establish)	Application No. 04-08-018
Regulatory Authority Over the Access for Natural)	(Filed August 16, 2004)
Gas Provided by California Gas Producers)	
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**Prepared Direct Testimony
of R. Thomas Beach
on behalf of
the California Producers**

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On Behalf of
THE CALIFORNIA PRODUCERS

January 31, 2006

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1 **Q: Please state for the record your name, position, and business address.**

2 A: My name is R. Thomas Beach. I am principal consultant of the consulting firm
3 Crossborder Energy. My business address is 2560 Ninth Street, Suite 316, Berkeley,
4 California 94710.

5 **Q: Please describe your experience and qualifications.**

6 A: My experience and qualifications are described in the attached *curriculum vitae*, which is
7 **Attachment RTB-1** to this testimony.

8 **Q: Have you testified previously before this Commission?**

9 A: Yes, I have. A current list of the testimony that I have filed before this Commission is
10 included in my CV.

11 **Q: On whose behalf are you testifying today?**

12 A: I am testifying on behalf of the California Producers (Producers), which include the
13 Indicated Producers,¹ the Western States Petroleum Association, and the California
14 Independent Petroleum Association. The California Producers produce significant
15 volumes of natural gas associated with crude oil production in southern California. In

¹ The Indicated Producers, for the purposes of this testimony, include Aera Energy LLC; Chevron U.S.A. Inc; and Occidental of Elk Hills, Inc.

1 many cases the only means for these gas producers to transport their production to market
2 is over the pipeline facilities of the applicant in this matter, the Southern California Gas
3 Company (SoCalGas). The Producers thus have a substantial interest in the changes that
4 SoCalGas proposes in the terms and conditions under which California gas producers will
5 have access to the SoCalGas system.

6 I. SUMMARY AND RECOMMENDATIONS

7 **Q: Please summarize the principal recommendations of your testimony.**

8 A: California gas production offers unique benefits that the state does not obtain from out-
9 of-state supplies delivered over interstate pipelines. The California Legislature has
10 recognized these benefits in enacting P.U. Code Section 785 to encourage the in-state
11 production of natural gas and to ensure that California production has access to the gas
12 utilities' systems under terms that do not discriminate against California production,
13 compared to interstate sources of natural gas.

14 With respect to the balancing of nominations and deliveries (or usage), SoCalGas
15 presently allows California producers, end users, and some interstate pipelines to balance
16 on a monthly basis with a 10% tolerance. PG&E also allows monthly balancing for the
17 California production attached to its system. SoCalGas' testimony in this case identifies
18 only one significant problem with the current balancing regime for California producers –
19 the tendency of producers to over-deliver on days when high nomination operational flow
20 orders (OFOs) are in effect. The Commission has resolved the identical problem on the
21 PG&E system, in the PG&E Gas Accord II case (D. 03-12-061), by making producers
22 subject to the same tariffed OFO tolerances and noncompliance penalties as end users.
23 The Commission should adopt the same solution in this case, by requiring producers to
24 abide by SoCalGas' Rule 30 provisions for daily balancing on OFO days. This is the only
25 needed change to the terms of producer balancing on the SoCalGas system.

1 II. INTRODUCTION

2 A. Background: Stipulation on Issues to be Addressed in this Case

3 Q: How did this proceeding originate?

4 A: This proceeding resulted from a settlement agreement² between SoCalGas and California
5 producers, including the Indicated Producers, in A. 04-01-034, an application to consider
6 making certain volumes of native gas in California available to the market. As part of
7 that settlement, SoCalGas agreed to file the instant application to address specific issues
8 related to the terms of access of California producers to the SoCalGas system. These
9 issues include interconnection, balancing, and gas quality issues.

10 B. Goals

11 Q: What should be the Commission's goals in this case?

12 A: The recent sharp spikes in U.S. natural gas prices following Hurricanes Katrina and Rita
13 highlight the crucial need for California to maximize the supplies of natural gas available
14 to the state. As I will describe in more detail below, California gas production offers
15 unique benefits to the state that California does not realize from out-of-state supplies.
16 Accordingly, in this case the Commission should establish terms and conditions for
17 California production to access the SoCalGas system that maximize the production of
18 California gas and promote safe and reliable operation of the utility system. Furthermore,
19 California production should have non-discriminatory access to the SoCalGas system,
20 compared to interstate sources of natural gas.

21 C. Legal Context

22 Q: Please describe the statutory framework under which the Commission regulates the

² See Motion of Southern California Gas Company, the Indicated Producers, California Independent Petroleum Association and the Western States Petroleum Association for approval of stipulation dated July 21, 2004.

1 **terms of access for California production to the systems of the regulated natural gas**
2 **utilities in California.**

3 A: The California Legislature has long recognized the importance of encouraging the
4 production of California's indigenous gas resources. Public Utilities Code Section
5 785(a) opens with a general admonition to the Commission in this regard:

6 785. (a) To the extent consistent with federal law and regulation and
7 contractual obligations regarding other available gas, the commission
8 shall, in consultation with the Division of Oil and Gas of the Department
9 of Conservation and with the State Energy Resources Conservation and
10 Development Commission, encourage, as a first priority, the increased
11 production of gas in this state....

12 P.U. Code Section 785.2 directs the Commission to remove impediments that may favor
13 out-of-state gas supplies over in-state production:

14 785.2. The commission shall investigate, as part of the rate proceeding for
15 any gas corporation, impediments to the in-state production and storage of
16 natural gas. The commission may adopt a tariff that encourages in-state
17 production or storage of natural gas, including, but not limited to, reducing
18 local transmission rates applicable to in-state gas blends, unless the
19 commission finds that adopting the tariff will likely result in consequences
20 adverse to the interests of gas customers.

21 Finally, P.U. Code Section 785.7 specifies that the Commission can establish no
22 discrimination in transportation rates for California production compared to gas from
23 interstate sources:

24 785.7. (a) No gas corporation shall charge, directly or indirectly, a higher
25 rate for the transportation of gas produced in this state than for the
26 transportation of gas from any other source. No gas corporation shall
27 require a producer of gas or a customer for whom any gas transportation
28 service is performed to utilize the corporation's services or facilities either
29 to deliver gas from the producer's facility to the corporation's gas plant or
30 to process the gas to render it compatible with the corporation's gas plant.

31 **D. California Production Compared to Interstate Gas**

32 **Q: Please describe the benefits that California gas production provides to the state's**
33 **gas consumers, compared to out-of-state supplies.**

- 1 A: California natural gas production ...
- 2 • **serves the California market.** Virtually all of the gas produced in California is
3 consumed in California. All new, incremental California production places
4 competitive pressure on out-of-state supplies.
 - 5 • **is not subject to upstream diversion (either economic or regulatory).** During
6 periods of high demand (such as winter cold waves), California must compete
7 with upstream states to ensure that adequate interstate gas supplies reach “the end
8 of the pipeline” in California. California production does not carry such risks.
 - 9 • **supports the California economy with jobs and taxes.** In contrast, the purchase
10 of out-of-state supplies supports the economies of other states and provinces.
 - 11 • **is subject to state and local regulations.** The movement of California
12 production to market is almost entirely state jurisdictional. California’s ability to
13 access these supplies is not subject to FERC policies that may or may not be in the
14 best interest of California.
 - 15 • **helps to maximize associated California oil production.** The state derives
16 benefits from its local crude oil production that are similar to those from
17 indigenous gas production. Incremental in-state oil production will be encouraged
18 if producers have the assurance that they can market associated gas production
19 under reasonable terms and conditions.

20 **Q: Are there significant differences between SoCalGas’ receipt of California**
21 **production into its system, compared to its receipt of out-of-state gas?**

22 A: Yes. In 2006, California production is anticipated to supply about 13% of SoCalGas’
23 market.³ California produced gas is received through approximately 45 receipt points on
24 the SoCalGas system, which average approximately 7 MMcfd in interconnection
25 capacity. Putting this in context, California producer interconnects with SoCalGas are 10
26 to 100 times smaller than SoCalGas’ interstate pipeline interconnects, which typically
27 move hundreds or thousands of MMcf per day into the SoCalGas system. Due to their
28 smaller size, California producers do not have the upstream tools that are available to
29 interstate shippers to manage flows into the SoCalGas system. Interstate gas supplies
30 must comply with interstate pipeline balancing rules, and have significant resources to

³ According to data in the *2004 California Gas Report*, SoCalGas’ expected 2006 California production transported on its system is 313 MMcf/d, about 13% of its total supplies of 2,354 MMcf/d.

1 enable them to match nominations to actual flows before the gas reaches the California
2 border. These resources include interstate pipeline balancing services, large and
3 competitive gas markets at upstream basin and border points, and, in some cases,
4 upstream storage. Obviously, such resources are not available to California producers
5 who deliver their production directly into the SoCalGas system from much smaller
6 gathering systems.

9 III. CURRENT BALANCING RULES ON THE SOCALGAS SYSTEM

10 A. Commission-Approved Balancing Frameworks

11 **Q: What balancing terms are contained in SoCalGas' current access agreements with**
12 **California producers?**

13 A: The typical California producer access agreement⁴ in effect today requires the producer to
14 balance its nominations and deliveries into the SoCalGas system to within 10% on a
15 monthly basis, with no separate balancing charge. Producers are not subject to more
16 stringent balancing requirements on days when SoCalGas invokes the operational flow
17 order (OFO) provisions of its balancing tariff, Rule 30.

18
19 **Q: Describe the balancing terms in SoCalGas' current operational balancing**
20 **agreements (OBAs) with interconnecting interstate pipelines.**

21 A: The balancing terms of SoCalGas' OBAs differ somewhat from agreement to agreement.
22 As one example, SoCalGas' OBA with Transwestern Pipeline allows cumulative monthly

⁴ This testimony does not address or offer a proposal to modify the balancing provisions in the existing access agreement between Exxon Mobil Corporation and SoCalGas in light of the unique circumstances under which the agreement was executed.

1 imbalances of up to 10%.⁵ The Transwestern OBA also allows up to 90 days for the party
2 owing such an imbalance to resolve the imbalance through in-kind deliveries or cash-out
3 payments.⁶ Overall, the Transwestern OBA arguably represents the most favorable OBA
4 administered by SoCalGas.

5 **Q: What balancing requirements apply to end use customers?**

6 A: SoCalGas' gas transportation Rule 30 includes a requirement that large, noncore
7 customers must balance their nominations and burns within 10% on a monthly basis, and
8 includes the opportunity for imbalance trading. Ten percent monthly balancing for end
9 users has been the standard on the SoCalGas system since the utility began offering
10 unbundled gas transportation services in the late 1980s. SoCalGas provides monthly
11 balancing for end users using a reservation of storage capacity for load balancing. End
12 users pay a cost-based component of their transportation rate to cover the costs of this
13 storage reservation. When an end-user exceeds its monthly tolerance and is unable to
14 trade the excess imbalance, SoCalGas will "buy back" positive imbalances or "sell" gas
15 to eliminate a negative imbalance at rates stated in Schedule No. G-IMB.

16
17 **Q: PG&E also receives significant volumes of California production into its system in
18 northern and central California. What are the balancing requirements for
19 producers delivering gas into the PG&E system?**

20 A: PG&E's producer balancing requirements are set forth in its tariffed "California
21 Production Balancing Agreement" (Form 79-944).⁷ PG&E allows monthly balancing for
22 California production attached to its system. Monthly imbalances larger than a tolerance
23 band of plus or minus 150 Dth⁸ must be cleared to within the tolerance band by the end of

⁵ See Transwestern OBA, at Section 6. The Transwestern OBA is **Attachment RTB-2** to this testimony.

⁶ *Ibid.*, at Sections 4(b) and 7.

⁷ This agreement is available on-line at <http://www.pge.com/tariffs/pdf/G79-944.pdf>.

⁸ It should be noted that, for southern California producers, 150 Dth would represent, on average, only 2% of a day's deliveries. For large producers, 150 Dth could represent as little as

1 the subsequent month (i.e. a 30-day pay back). Imbalance trading between producers is
2 allowed. After the 30-day payback period, remaining imbalances outside of the tolerance
3 band are cashed out, under a tiered cash-out scheme. Imbalances that are 10% or less of
4 actual deliveries (Tier I) are cashed out at 95% or 105% of recent spot prices (for
5 overdeliveries or underdeliveries, respectively). Imbalances that are greater than 10% of
6 actual deliveries (Tier II) are cashed out at 50% or 150% of recent spot prices. Thus,
7 under PG&E's tiered cash-out provisions, significant penalties for uncured imbalances
8 only accrue if the producer is more than 10% out of balance on a monthly basis.

9 **B. SoCalGas' Concern with Current Producer Balancing**

10 **Q: Does SoCalGas' testimony identify any problems with the balancing provisions in**
11 **SoCalGas' current producer access agreements?**

12 A: Yes. Mr. Watson's testimony notes that producers are not subject to the OFO provisions
13 of SoCalGas' balancing tariff (Rule 30), including the requirement that shippers balance
14 on a daily basis on OFO days.⁹ He asserts that producers tend to overdeliver on high
15 nomination OFO days. In order to deal with these overdeliveries, SoCalGas may have to
16 inject some or all of the excess production into storage. Mr. Watson asserts that such
17 practices deprive end use customers of the use of this injection capacity for load
18 balancing – capacity for which end use customers pay in their cost-based transportation
19 rates.

20 **Q: Has SoCalGas estimated the costs that this problem imposes on end use customers?**

21 A: Yes. In discovery, the Office of Ratepayer Advocates (ORA) asked SoCalGas for data on
22 the cost impacts of the problem that the utility's testimony identified with the current
23 balancing provisions applicable to California producers. In response, SoCalGas provided
24 data on producer overdeliveries on high nomination OFO days, and calculated that

.5% or less of a day's deliveries.

⁹ See Watson Testimony, at 6-7.

1 producers use \$1.6 million per year in system balancing resources.¹⁰

2 **Q: To the extent that California producers use storage resources on high nomination**
3 **OFO days, is it clear that the cost impacts are 100% a ratepayer issue?**

4 A: No, it is not. In addition to providing load balancing storage for end users, SoCalGas also
5 has significant unbundled storage capacity that it markets to end users and marketers.
6 Pursuant to SoCalGas' last BCAP decision (D. 00-04-060), the incremental revenues
7 from unbundled storage services are shared 50/50 between ratepayers and shareholders.¹¹
8 Thus, to the extent that SoCalGas has unbundled injection capacity that is uncontracted or
9 unused on high nomination OFO days, the potential cost to ratepayers from producers
10 using this injection capacity "for free" is only 50% of what SoCalGas has estimated, or
11 \$800,000 per year. SoCalGas does not make public the amount of unbundled storage that
12 it sells, so it is difficult to know the exact impact of this problem on ratepayers, except to
13 say that it can be estimated to lie between \$800,000 and \$1.6 million per year.

14 **Q: Has SoCalGas cited any other problems with the current balancing provisions in**
15 **California producer access agreements – in particular, any other problems that**
16 **have a cost impact on SoCalGas ratepayers?**

17 A: No, it has not. The utility has identified no other cost impacts on ratepayers from the
18 current balancing provisions in California producer access agreements.

19 IV. PROBLEMS WITH SOCALGAS' PRODUCER BALANCING PROPOSAL

20 **Q: Please describe SoCalGas' proposal for new balancing provisions that the utility has**
21 **asked the Commission to apply to all California producers under new producer**
22 **access agreements.**

¹⁰ This data response is provided in **Attachment RTB-3**. The data response also lists \$128,000 per year in lost transportation charges, apparently due to producer imbalances. It is unclear how SoCalGas loses transportation revenues on imbalances that producers must make up in future periods.

¹¹ See D. 00-04-060, at 10-11 and 76-79.

1 A: SoCalGas proposes to require California producers to balance their nominations and
2 deliveries into the SoCalGas system with a cumulative daily tolerance of 10% of the
3 producer's interconnect capacity. Producers would have just 7 days to pay back any total
4 cumulative imbalance to zero. Mr. Watson's testimony states that SoCalGas chose these
5 provisions from various of its pipeline OBAs, and has proposed similar terms for its new
6 standardized interstate pipeline OBA. After the pay back period, producers would pay
7 SoCalGas 150% of the highest California border spot gas price reported by *Gas Daily* for
8 remaining underdeliveries; SoCalGas would pay the producer 50% of the lowest
9 California border spot gas price reported by *Gas Daily* for remaining overdeliveries.
10 SoCalGas also proposes to have the right to install physical flow controls on producers
11 who overdeliver by more than 10% of the interconnect capacity on three or more OFO
12 days within a 12-month period.¹²

13 **Q: What problems do you see with SoCalGas' producer balancing proposal?**

14 A: First, by using its proposed OBA for interstate pipelines as a model, SoCalGas' proposal
15 suggests that the circumstances of in-state producers are comparable to those of interstate
16 pipelines. As discussed above, and in the testimony of the Producer Panel regarding
17 access terms and conditions (the Access Testimony), such comparability does not exist.
18 SoCalGas simply has not justified the need for OBA-style daily balancing provisions for
19 California producers. Compared to interstate pipeline interconnects, California producers
20 deliver much smaller volumes into the SoCalGas system at many more interconnection
21 points. Equipment outages or production fluctuations in California gas fields can cause
22 unexpected changes in deliveries to SoCalGas that can be much larger in percentage
23 terms than the typical fluctuations in the vastly larger flows at interstate pipeline
24 interconnects. Most important, California producers do not have access to the upstream
25 balancing resources - competitive gas markets, line pack, and (in some cases) storage - or
26 to the interstate pipeline balancing requirements that enable interstate pipelines and their
27 shippers to match closely the nominations and flows into the SoCalGas system. As a
28 result, it is not practicable to require California producers to balance on a daily basis to

¹² See Watson Testimony, at 6-8.

1 the same tolerances included in some of SoCalGas' pipeline OBAs.¹³

2 Second, SoCalGas' picks and chooses its proposed balancing provisions from its pipeline
3 OBAs in such a way that those provisions, in total, do not satisfy Section 785, because
4 they are less favorable than the balancing terms of SoCalGas' most favorable OBA with
5 one of its interstate pipeline suppliers. The Transwestern OBA, described above, allows
6 monthly balancing with a 10% tolerance and up to a 90-day pay back period for
7 cumulative imbalances. These terms are substantially less burdensome than those that
8 SoCalGas has proposed for California producer balancing.

9 Third, SoCalGas' proposed producer balancing requirements are substantially more
10 stringent than PG&E's balancing provisions for California production in northern and
11 central California or than the Rule 30 balancing terms for SoCalGas' end use customers.
12 SoCalGas has failed to justify the need to discriminate against southern California gas
13 production in this regard.

14 Fundamentally, SoCalGas has identified only one significant problem with its current
15 producer balancing regime – the tendency for producers to overdeliver on high
16 nomination OFO days. The best means to reform producer balancing is to address this
17 problem directly, without imposing far more burdensome daily balancing requirements on
18 California producers.

19 **Q: Has the Commission addressed the same problem with producer overdeliveries on**
20 **OFO days on the PG&E system?**

21 A: Yes, it has. In D. 03-12-061, to address the same problem of producer overdeliveries on
22 OFO days, the CPUC made producers on the PG&E system subject to the same tariffed
23 OFO/EFO tolerances and noncompliance penalties as end users. Mr. Watson's
24 testimony, at page 8, admits that SoCalGas would accept such a solution as an alternative

¹³ The fourth and last cycle on nominations occurs at 3 p.m. on the date of gas flow, leaving one-third of the day remaining during which adjustments cannot be made. Moreover, adjustments are limited in the third and fourth cycles of nominations.

1 to automated flow control provisions for producers who habitually overdeliver on OFO
2 days. California Producers believe that the OFO solution that the Commission adopted
3 for PG&E in D. 03-12-061 is adequate to address the entire problem that SoCalGas has
4 identified with the current producer balancing regime.

5 **Q: Does this mean that PG&E's overall balancing approach would be suitable for**
6 **southern California producers?**

7 A: Not entirely. As noted in the Access Testimony on behalf of the Producers, natural gas
8 production in southern California is associated with oil production; natural gas is a
9 byproduct of oil production, in a sense. Consequently, the needs of the oil production
10 operations drive the manner in which natural gas is produced. Operations differ in
11 PG&E's service territory because the natural gas is not associated with oil production.

12 V. PRODUCER BALANCING PROPOSAL

13 **Q: What is the California Producers' proposal for changes to the balancing**
14 **requirements for California producers?**

15 A: The California Producers recognize that changes to the terms of producer balancing are
16 needed to address overdelivery problems on OFO days. California Producers on the
17 SoCalGas system can accept the same solution that D. 03-12-061 provided for producers
18 on the PG&E system – application of the OFO rules from SoCalGas' Rule 30 to producer
19 access agreements – on a prospective basis whenever new agreements are signed.

20 With this change, the California Producers propose to maintain the status quo of
21 balancing provisions in current access agreements (modeled on the Chevron Access
22 Agreement¹⁴), including the 10% monthly balancing requirement. SoCalGas has not
23 shown that other changes to producer balancing agreements are necessary or cost-
24 justified. In particular, draconian measures such as automated flow controls are
25 unnecessary when proven, established tariff measures are available to address the

¹⁴ The Chevron Access Agreement is Attachment B to the Access Testimony.

1 identified problem of overdeliveries on high nomination OFO days. As existing access
2 agreements expire, new access agreements should include balancing terms conformed to
3 the Chevron Access Agreement, plus a provision to make producers subject to the OFO
4 day requirements of SoCalGas' Rule 30.

5 **Q: Have the California Producers reviewed data comparing monthly producer and end**
6 **user imbalances on the SoCalGas system?**

7 A: Yes. Data on monthly producer and end user imbalances show that, in almost 60% of the
8 months over a recent two-year period, monthly producer imbalances actually reduced
9 overall imbalances on the SoCalGas system. In other words, when end-users had a net
10 positive imbalance, producers were more likely to have a net negative imbalance, and
11 vice versa. This data is summarized in **Table 1**. Thus, over time and on average,
12 monthly balancing for California producers does not appear to exacerbate system
13 imbalances on the SoCalGas system. This data supports the California Producers'
14 position that there is no need to make changes to producer balancing, beyond adding the
15 Rule 30 OFO requirements that are needed to address the problem of overdeliveries on
16 high nomination OFO days. When the OFO-day problem is addressed, the only identified
17 adverse impact of California production on system balancing will have been remedied.

18 **Q: Would applying both SoCalGas' OFO provisions and daily balancing have adverse**
19 **impacts for California producers?**

20 A: Yes. As noted throughout the California Producers' testimony in this proceeding,
21 California producing operations, unlike the flows on an interstate pipeline, vary from day
22 to day and hour to hour depending upon field and operating conditions. Requiring a
23 producer to meet daily balancing requirements would complicate producing operations
24 and could hinder a producer's efforts to maximize production.

25 Consider, for example, a producer delivering at its MDV that experiences an operational
26 upset at a processing plant late in the day. Because a producer cannot change its
27 nominations after 3 p.m., the upset would result in the producer's deliveries falling below
28 its nominations – an underdelivery or negative imbalance. Under a daily balancing

Table 1**Impact of CA Producer Imbalances on Total System Imbalances**

Sources: WSPA-IP DR1 Response 6.1 and DR8 Response 103

	Total CA Producer In-Month Imbalance Total (Dth)	Noncore & CTA In-Month Imbalance (Dth)	System In-Month Imbalance Total (Dth)
Jan-02	(103,641)	(2,123,861)	(2,227,502)
Feb-02	2,168	(68,888)	(66,720)
Mar-02	336,668	(1,935,869)	(1,599,201)
Apr-02	376,067	3,410,013	3,786,080
May-02	(327,004)	(529,804)	(856,808)
Jun-02	(122,701)	(1,820,811)	(1,943,512)
Jul-02	135,791	620,948	756,739
Aug-02	(317,344)	n/a	(317,344)
Sep-02	513,215	(327,722)	185,493
Oct-02	(638,682)	2,955,267	2,316,585
Nov-02	399,441	3,508,702	3,908,143
Dec-02	(348,767)	(5,263,084)	(5,611,851)
Jan-03	87,362	1,924,958	2,012,320
Feb-03	134,246	(2,953,005)	(2,818,759)
Mar-03	(175,517)	903,489	727,972
Apr-03	(163,046)	1,718,498	1,555,452
May-03	(296,032)	2,007,339	1,711,307
Jun-03	599,941	(1,597,969)	(998,028)
Jul-03	(66,160)	(2,233,460)	(2,299,620)
Aug-03	(218,114)	(532,452)	(750,566)
Sep-03	480,890	(1,128,500)	(647,610)
Oct-03	(174,423)	4,614,219	4,439,796
Nov-03	74,539	183,380	257,919
Dec-03	(28,683)	1,290,506	1,261,823
Jan-04	(204,466)	(2,519,256)	(2,723,722)
Feb-04	168,053	622,912	790,965
Mar-04	5,242	(2,518,430)	(2,513,188)
Apr-04	(58,498)	2,371,770	2,313,272
May-04	501,418	(12,453)	488,965
Jun-04	3,317	1,179,665	1,182,982
Jul-04	(489,664)	(2,362,864) *	(2,852,528)
Aug-04	348,265	654,348	1,002,613
Sep-04	(339,879)	(1,208,024)	(1,547,903)
Oct-04	98,562	4,818,218	4,916,780
Nov-04	140,045	(5,655,371)	(5,515,326)
Dec-04	(214,352)	1,938,462	1,724,110
Average Absolute:	241,450	1,986,129	1,961,931
2002 - 2004 Throughput*:	333 MMcf/d	1,672 MMcf/d	
Imbalance as % of T-put:	2.34%	3.83%	

* Source of 2002 - 2005 throughput data is the **2005 California Gas Report Supplement**.

1 regime in which SoCalGas does not allow the producer to schedule more than its MDV,
2 the producer could not deliver more than its MDV to make up for the production lost the
3 previous day even if producing operations were capable of the make-up. In other words,
4 staying in balance under a daily balancing scheme could prevent a producer from
5 optimizing production.

6 **Q: The Commission could decide to implement a producer balancing service**
7 **comparable to the current service provided to end users, a service for which**
8 **producers would pay a separate unbundled charge. Would you support such a**
9 **resolution?**

10 A. No. As a threshold matter, an unbundled charge for producer balancing would result in
11 two charges to transport California-produced gas across the SoCalGas system from the
12 point of receipt to the point of end use - the producer balancing charge and the regular
13 transportation rate for end use customers. In contrast, interstate gas suppliers moving gas
14 over the SoCalGas system would pay just the regular end use transportation rate. This
15 higher total transportation rate for California production appears to violate P.U. Code
16 Section 785.7.

17 Furthermore, an unbundled producer balancing service presumes that specific storage
18 resources need to be allocated to producer balancing. Again, SoCalGas has not shown
19 that such a need exists, once the OFO problem has been remedied. There has not been a
20 need for an unbundled producer balancing service on the PG&E system, and a producer
21 balancing charge on the SoCalGas system would run contrary to the Commission's
22 adopted rules for producer balancing in northern California.

23 **Q: Notwithstanding your position that such a charge is unnecessary and would violate**
24 **Section 785.7, if the Commission does decide to pursue an unbundled producer**
25 **balancing service, how should the associated balancing charge be designed?**

26 A: In order not to discriminate against producers compared to end users, the load balancing
27 charge would need to be cost-based, as is the load balancing rate component that end
28 users pay. Furthermore, a cost-based balancing charge recognizes that most California

1 producers have no choice except to use the SoCalGas system to deliver their production
2 to market and have no access to upstream balancing resources.

3 The Commission would charge producers no more than a cost-based rate for the storage
4 resources actually needed to provide this service. The design of such a rate would
5 recognize that average monthly producer imbalances (as a percentage of overall producer
6 deliveries into the SoCalGas system) are smaller than average monthly end-user
7 imbalances (as a percentage of average noncore end use throughput), as shown in Table 2.
8 The injection and withdrawal capacity dedicated to such a service thus would be based on
9 scaling the level of load balancing storage resources reserved by end users by the relative
10 level of producer imbalances, compared to end user imbalances. Thus, producers would
11 require just 61% of the storage resources required to balance a comparable amount of end
12 use throughput. This would result in 20.3 MMcf/d of injection and withdrawal resources
13 allocated to producer balancing in 2006. The reserved inventory capacity would need to
14 accommodate the largest observed monthly producer imbalance, which, based on the
15 historical data in Table 2, is 639 MDth (626 MMcf). This would result in an inventory
16 reservation that represents 31 days of injections and withdrawals. Based on these
17 parameters, SoCalGas' tariffed, cost-based G-LTS rates, and an assumed 2006 gas price
18 of \$8.50 per Dth, **Tables 2a and 2b** shows the development of a total revenue
19 requirement for producer balancing of \$1.15 million per year, or \$0.010 per Dth of
20 expected 2006 California production. If the Commission were to adopt a producer
21 balancing program based on the end user model, each California producer that signs a
22 new producer access agreement with SoCalGas in 2006 would begin to pay an \$0.010 per
23 Dth load balancing charge, and in exchange would retain the 10% monthly balancing
24 provisions in SoCalGas' Chevron Access Agreement.

25 Finally, if producers must pay a balancing fee, they should also have the same rights as
26 end users to trade imbalances.

27 **Q: Would SoCalGas be placed at risk for recovery of these balancing revenues, if the**
28 **Commission were to move in this direction?**

Table 2a

Proposed Producer Storage Reservation

- Sources:*
CSA, Section 3.2.3.4
- SoCalGas System Load Balancing Resources

Injection	250 <i>MMcf/d</i>	
Inventory	5.3 <i>Bcf</i>	
Withdrawal	250 <i>MMcf/d</i>	

 - | | | |
|------------------------------|---------------------|--------------------------|
| 2006 Producer MDV: | 313 <i>MMcf/d</i> | <i>2004 CGR, page 66</i> |
| 2006 SoCalGas System Supply: | 2,354 <i>MMcf/d</i> | <i>2004 CGR, page 66</i> |
| Producer MDV as % of System: | 13.3% | |

 - Monthly Average Imbalance

Producer:	2.34%	<i>SoCalGas Response to WSPA-IP DR1, Q 6.1 and DR8, Q103. Uses 2002 to 2004 data.</i>
Noncore / CTA:	3.83%	
Producer as % of Noncore / CTA:	61.1%	

 - California production is 13.3% of SoCalGas' system supply. The average producer imbalance is 61.1% as large as the average end user imbalance (see Table 2). Thus, allocate to California producers $13.3\% \times 61.1\% = 8.12\%$ as much load balancing resources as end users. This calculation is consistent with the adjustment of system load balancing resources for self-balancing in CSA Section 3.2.3.4., and is conservative because producers may improve their balancing performance once they are subject to OFO rules. The inventory reservation is increased to equal the highest monthly producer imbalance from 2002 through 2004.

Proposed Producer Storage Reservation @		8.12%
Injection	20.3 <i>MMcf/d</i>	
Inventory	0.626 <i>Bcf</i>	
Withdrawal	20.3 <i>MMcf/d</i>	

Table 2b

Proposed Producer Balancing Charge

10% MONTHLY BALANCING SERVICE

MDV FIRM CAPACITY		
SoCalGas Proposed MDV		
Line 85	160	MMcfd
Coastal	150	MMcfd
Total	310	MMcfd

ASSUMPTIONS FOR BALANCING SERVICES

Input BTU Assumption	1.02		
Firm injection	20.30	MMcfd	20,700 MMBtu/d
Firm withdrawal	20.30	MMcfd	20,700 MMBtu/d
Inventory	626,471	Mcf	639,000 MMBtu
MDV on Daily Basis	316,200	MMBtu/d	

ASSUMED VOLUMES USED FOR COST SCENARIO	
Inventory	639,000
Firm Injection, MMBtu/d	20,700
Firm Withdrawal, MMBtu/d	20,700

APPLY G-LTS RESERVATION CHARGES

<http://www.socalgas.com/regulatory/tariffs/tm2/pdf/G-LTS.pdf>

Annual Inventory	G-LTS	\$0.2140 Per Dth	\$136,746
Annual Firm Injection	G-LTS	\$0.0943 Per Dth/day	\$476,038
(Firm Injection services during months April thru Nov)			
Annual Firm Withdrawal	G-LTS	\$11.5840 Per Dth/day	\$239,789
Total Annual Reservation Charges			\$852,573
On per MMBtu basis (across entire MDV volumes for 1 year)			\$0.0074

APPLY G-LTS VARIABLE CYCLE CHARGES

Injection	\$0.01210	per Dth for Apr - Nov only
Withdrawal	\$0.01770	per Dth for Dec - Mar only
In-Kind	2.44%	not charged Dec - Mar
Input cost of gas for in-kind costs	\$8.50	
In-Kind Equivalent	\$0.2074	
Input storage cycle "duration" to go in/out in days	120	days for entire Inject/Withdrawal
Cycles charged for withdrawal Nov - Mar	1.26	no w/d chgs Apr - Oct
Cycles for injections and inkind Apr - Nov	2.03	no inj chgs Dec - Mar
Injection and In-Kind Charges	\$284,813	
Withdrawal Charges	\$13,885	
Total Variable Costs	\$298,698	
On per MMBtu Basis	\$0.0026	(Across entire MDV volume for 1 yr)

TOTAL PRODUCER BALANCING SCENARIO CHARGES

Annual Demand/Reservation Charge	\$852,573	per Year
Annual Variable Charges	\$298,698	per Year
Total Annual Cost	\$1,151,270	per Year
Estimated Scenario Cost per MMBtu	\$0.010	Across entire MDV volume for 1 yr

1 A: No. Today SoCalGas has 100% balancing account protection for its revenue requirement
2 for noncore transportation services, including load balancing. Comparable treatment
3 should apply to the revenue requirement for producer balancing. Like load balancing for
4 end users, producer balancing is a monopoly service that, on the SoCalGas system, can
5 only be provided by SoCalGas' line pack and storage capacity. Unlike the position of
6 interstate shippers, there is no other alternative for balancing. There is no independent or
7 third-party storage attached to the SoCalGas system, and producers cannot use line pack
8 and, in most cases, cannot deliver to an alternative market. Thus, the producer balancing
9 charge should be cost-based, not market-based, and SoCalGas should bear the same level
10 of risk for producer balancing costs that it does for its load balancing costs for end use
11 customers.¹⁵ Balancing account treatment also makes sense given that a producer
12 balancing charge would need to be phased-in over time, as producer access agreements
13 expire.

14 **Q: Mr. Watson's testimony observes, at page 7, that the majority of California**
15 **producers also market their production to end use customers, or are also end users**
16 **themselves. If an unbundled producer balancing charge is implemented, should**
17 **such producers be required to pay twice for balancing services for California**
18 **production, once as producers, and again as marketers, agents for end users, or end**
19 **users themselves?**

20 A: No, they should not. California producers and the end users that consume that gas should
21 not have to pay twice for balancing for the same stream of gas on the SoCalGas system.
22 Thus, as an alternative, zero-cost option, California producers should be able to use the
23 monthly balancing rights of their end use customers, so that a producer would be able to
24 deliver into the SoCalGas system within 10% of his end use customer's consumption in
25 each month, without paying a separate producer balancing charge. For example, assume
26 that the producer under-delivered by 5% in a month; his associated end user could over-
27 consume by up to 5% in that month, while still keeping both producer and consumer

¹⁵ The California Producers recognize that the appropriate level of SoCalGas' risk for transportation services (including load balancing) is an issue in R. 04-01-025.

1 within the total 10% monthly balancing tolerance for that stream of gas. This producer
2 and end user also would be within the 10% tolerance if the producer under-delivered by
3 5% and the end user under-consumed by up to 15% in that month.

4 This option would work particularly well for producers that elect to use the services of a
5 Contracted Marketer on the SoCalGas system. Contracted Marketers pool the
6 nominations and imbalances of their end use customers, and could provide the same
7 function for their affiliated California production. Under this zero-cost option,
8 imbalances arising from the end-use load and the producer deliveries could be offset in
9 the Contracted Marketers' pool with no cost to or impact on other ratepayers.

10 **Q: Does this complete your direct testimony?**

11 A: Yes, it does.

Attachment RTB-1

Experience & Qualifications of R. Thomas Beach

Mr. Beach is principal consultant with the consulting firm Crossborder Energy. Crossborder Energy provides intelligence, strategic advice, and economic consulting services on market and regulatory issues concerning the natural gas and electric industries. The firm is based in Berkeley, California, and its practice focuses on the energy markets in California, the western U.S., Canada, and Mexico.

Since 1989, Mr. Beach has participated actively in most of the major energy policy debates in California, including the addition of new natural gas pipeline capacity to serve the state, the restructuring of the state's gas and electric industries, and a wide range of issues concerning California's large independent power community. From 1981 through 1989 he served at the California Public Utilities Commission, including five years as an advisor to three CPUC commissioners. While at the CPUC, he was a key advisor on the CPUC's restructuring of the natural gas industry in California, and worked extensively on the state's implementation of PURPA.

AREAS OF EXPERTISE

- ▶ *Restructuring the Natural Gas and Electric Industries:* consulting and expert testimony on numerous issues in California's troubled restructuring of the state's electric industry. He has testified before the CPUC on transition cost and transmission pricing issues, and before the FERC on the protocols for California's Independent System Operator.
- ▶ *Energy Markets:* studies and consultation on the dynamics of natural gas and electric markets, including the impacts of new pipeline capacity on natural gas prices and of electric restructuring on wholesale electric prices.
- ▶ *Qualifying Facility Issues:* consulting with QF clients on a broad range of issues involving independent power facilities in California. He has negotiated complex QF contract restructurings with the California electric utilities, and is one of the leading experts in California on the calculation of avoided cost prices. Other QF issues on which he has worked include electric transmission and interconnection issues, property tax matters, electric standby rates, QF efficiency standards, and natural gas rates for cogenerators. Crossborder Energy's QF clients include the full range of QF technologies operating in California, both fossil-fueled and renewable.
- ▶ *Pricing Policy in Regulated Industries:* consulting and expert testimony on natural gas pipeline rates and on marginal cost-based rates for natural and electric distribution utilities.

EDUCATION

Mr. Beach holds a B.A. in English and physics from Dartmouth College, and an M.E. in mechanical engineering from the University of California at Berkeley.

ACADEMIC HONORS

Graduated from Dartmouth with high honors in physics and honors in English.
Chevron Fellowship, U.C. Berkeley, 1978-79

PROFESSIONAL ACCREDITATION

Registered professional engineer in the state of California.

EXPERT WITNESS TESTIMONY BEFORE THE CPUC

1. Prepared Direct Testimony on Behalf of **Pacific Gas & Electric Company/Pacific Gas Transmission** (I. 88-12-027 — July 15, 1989)
 - *Competitive and environmental benefits of new natural gas pipeline capacity to California.*
2.
 - a. Prepared Direct Testimony on Behalf of the **Canadian Producer Group** (A. 89-08-024 — November 10, 1989)
 - b. Prepared Rebuttal Testimony on Behalf of the **Canadian Producer Group** (A. 89-08-024 — November 30, 1989)
 - *Natural gas procurement policy; gas cost forecasting.*
3. Prepared Direct Testimony on Behalf of the **Canadian Producer Group** (R. 88-08-018 — December 7, 1989)
 - *Brokering of interstate pipeline capacity.*
4. Prepared Direct Testimony on Behalf of the **Canadian Producer Group** (A. 90-08-029 — November 1, 1990)
 - *Natural gas procurement policy; gas cost forecasting; brokerage fees.*
5. Prepared Direct Testimony on Behalf of the **Alberta Petroleum Marketing Commission and the Canadian Producer Group** (I. 86-06-005 — December 21, 1990)
 - *Firm and interruptible rates for noncore natural gas users*

6.
 - a. Prepared Direct Testimony on Behalf of the **Alberta Petroleum Marketing Commission** (R. 88-08-018 — January 25, 1991)
 - b. Prepared Responsive Testimony on Behalf of the **Alberta Petroleum Marketing Commission** (R. 88-08-018 — March 29, 1991)
 - *Brokering of interstate pipeline capacity; intrastate transportation policies.*
7. Prepared Direct Testimony on Behalf of the **Canadian Producer Group** (A. 90-08-029/Phase II — April 17, 1991)
 - *Natural gas brokerage and transport fees.*
8. Prepared Direct Testimony on Behalf of **LUZ Partnership Management** (A. 91-01-027 — July 15, 1991)
 - *Natural gas parity rates for cogenerators and solar powerplants.*
9. Prepared Joint Testimony of R. Thomas Beach and Dr. Robert B. Weisenmiller on Behalf of the **California Cogeneration Council** (I. 89-07-004 — July 15, 1991)
 - *Avoided cost pricing; use of published natural gas price indices to set avoided cost prices for qualifying facilities.*
10.
 - a. Prepared Direct Testimony on Behalf of the **Indicated Expansion Shippers** (A. 89-04-033 — October 28, 1991)
 - b. Prepared Rebuttal Testimony on Behalf of the **Indicated Expansion Shippers** (A. 89-04-0033 — November 26, 1991)
 - *Natural gas pipeline rate design; cost/benefit analysis of rolled-in rates.*
11. Prepared Direct Testimony on Behalf of the **Independent Petroleum Association of Canada** (A. 91-04-003 — January 17, 1992)
 - *Natural gas procurement policy; prudence of past gas purchases.*
12.
 - a. Prepared Direct Testimony on Behalf of the **California Cogeneration Council** (I.86-06-005/Phase II — June 18, 1992)
 - b. Prepared Rebuttal Testimony on Behalf of the **California Cogeneration Council** (I. 86-06-005/Phase II — July 2, 1992)
 - *Long-Run Marginal Cost (LRMC) rate design for natural gas utilities.*

13. Prepared Direct Testimony on Behalf of the **California Cogeneration Council** (A. 92-10-017 — February 19, 1993)
 - *Performance-based ratemaking for electric utilities.*
14. Prepared Direct Testimony on Behalf of the **SEGS Projects** (C. 93-02-014/A. 93-03-053 — May 21, 1993)
 - *Natural gas transportation service for wholesale customers.*
15.
 - a. Prepared Direct Testimony on Behalf of the **Canadian Association of Petroleum Producers** (A. 92-12-043/A. 93-03-038 — June 28, 1993)
 - b. Prepared Rebuttal Testimony of Behalf of the **Canadian Association of Petroleum Producers** (A. 92-12-043/A. 93-03-038 — July 8, 1993)
 - *Natural gas pipeline rate design issues.*
16.
 - a. Prepared Direct Testimony on Behalf of the **SEGS Projects** (C. 93-05-023 — November 10, 1993)
 - b. Prepared Rebuttal Testimony on Behalf of the **SEGS Projects** (C. 93-05-023 — January 10, 1994)
 - *Utility overcharges for natural gas service; cogeneration parity issues.*
17. Prepared Direct Testimony on Behalf of the **City of Vernon** (A. 93-09-006/A. 93-08-022/A. 93-09-048 — June 17, 1994)
 - *Natural gas rate design for wholesale customers; retail competition issues.*
18. Prepared Direct Testimony of R. Thomas Beach on Behalf of the **SEGS Projects** (A. 94-01-021 — August 5, 1994)
 - *Natural gas rate design issues; rate parity for solar powerplants.*
19. Prepared Direct Testimony on Transition Cost Issues on Behalf of **Watson Cogeneration Company** (R. 94-04-031/I. 94-04-032 — December 5, 1994)
 - *Policy issues concerning the calculation, allocation, and recovery of transition costs associated with electric industry restructuring.*
20. Prepared Direct Testimony on Nuclear Cost Recovery Issues on Behalf of the **California Cogeneration Council** (A. 93-12-025/I. 94-02-002 — February 14, 1995)
 - *Recovery of above-market nuclear plant costs under electric restructuring.*

21. Prepared Direct Testimony on Behalf of the **Sacramento Municipal Utility District** (A. 94-11-015 — June 16, 1995)
 - *Natural gas rate design; unbundled mainline transportation rates.*
22. Prepared Direct Testimony on Behalf of **Watson Cogeneration Company** (A. 95-05-049 — September 11, 1995)
 - *Incremental Energy Rates; air quality compliance costs.*
23.
 - a. Prepared Direct Testimony on Behalf of the **Canadian Association of Petroleum Producers** (A. 92-12-043/A. 93-03-038/A. 94-05-035/A. 94-06-034/A. 94-09-056/A. 94-06-044 — January 30, 1996)
 - b. Prepared Rebuttal Testimony on Behalf of the **Canadian Association of Petroleum Producers** (A. 92-12-043/A. 93-03-038/A. 94-05-035/A. 94-06-034/A. 94-09-056/A. 94-06-044 — February 28, 1996)
 - *Natural gas market dynamics; gas pipeline rate design.*
24. Prepared Direct Testimony on Behalf of the **California Cogeneration Council and Watson Cogeneration Company** (A. 96-03-031 — July 12, 1996)
 - *Natural gas rate design: parity rates for cogenerators.*
25. Prepared Direct Testimony on Behalf of the **City of Vernon** (A. 96-10-038 — August 6, 1997)
 - *Impacts of a major utility merger on competition in natural gas and electric markets.*
26.
 - a. Prepared Direct Testimony on Behalf of the **Electricity Generation Coalition** (A. 97-03-002 — December 18, 1997)
 - b. Prepared Rebuttal Testimony on Behalf of the **Electricity Generation Coalition** (A. 97-03-002 — January 9, 1998)
 - *Natural gas rate design for gas-fired electric generators.*
27. Prepared Direct Testimony on Behalf of the **City of Vernon** (A. 97-03-015 — January 16, 1998)
 - *Natural gas service to Baja, California, Mexico.*

28.
 - a. Prepared Direct Testimony on Behalf of the **California Cogeneration Council and Watson Cogeneration Company** (A. 98-10-012/A. 98-10-031/A. 98-07-005 — March 4, 1999).
 - b. Prepared Direct Testimony on Behalf of the **California Cogeneration Council** (A. 98-10-012/A. 98-01-031/A. 98-07-005 — March 15, 1999).
 - c. Prepared Direct Testimony on Behalf of the **California Cogeneration Council** (A. 98-10-012/A. 98-01-031/A. 98-07-005 — June 25, 1999).
 - *Natural gas cost allocation and rate design for gas-fired electric generators.*
29.
 - a. Prepared Direct Testimony on Behalf of the **California Cogeneration Council and Watson Cogeneration Company** (R. 99-11-022 — February 11, 2000).
 - b. Prepared Rebuttal Testimony on Behalf of the **California Cogeneration Council and Watson Cogeneration Company** (R. 99-11-022 — March 6, 2000).
 - c. Prepared Direct Testimony on Line Loss Issues of behalf of the **California Cogeneration Council** (R. 99-11-022 — April 28, 2000).
 - d. Supplemental Direct Testimony in Response to ALJ Cooke’s Request on behalf of the **California Cogeneration Council and Watson Cogeneration Company** (R. 99-11-022 — April 28, 2000).
 - e. Prepared Rebuttal Testimony on Line Loss Issues on behalf of the **California Cogeneration Council** (R. 99-11-022 — May 8, 2000).
 - *Market-based, avoided cost pricing for the electric output of gas-fired cogeneration facilities in the California market; electric line losses.*
30.
 - a. Direct Testimony on behalf of the **Indicated Electric Generators** in Support of the Comprehensive Gas OII Settlement Agreement for Southern California Gas Company and San Diego Gas & Electric Company (I. 99-07-003 — May 5, 2000).
 - b. Rebuttal Testimony in Support of the Comprehensive Settlement Agreement on behalf of the **Indicated Electric Generators** (I. 99-07-003 — May 19, 2000).
 - *Testimony in support of a comprehensive restructuring of natural gas rates and services on the Southern California Gas Company system. Natural gas cost allocation and rate design for gas-fired electric generators.*
31.
 - a. Prepared Direct Testimony on the Cogeneration Gas Allowance on behalf of the **California Cogeneration Council** (A. 00-04-002 — September 1, 2000).
 - b. Prepared Direct Testimony on behalf of **Southern Energy California** (A. 00-04-002 — September 1, 2000).
 - *Natural gas cost allocation and rate design for gas-fired electric generators.*

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32. a. Prepared Direct Testimony on behalf of **Watson Cogeneration Company** (A. 00-06-032 — September 18, 2000).
b. Prepared Rebuttal Testimony on behalf of **Watson Cogeneration Company** (A. 00-06-032 — October 6, 2000).
- *Rate design for a natural gas “peaking service.”*
33. a. Prepared Direct Testimony on behalf of **PG&E National Energy Group & Calpine Corporation** (I. 00-11-002—April 25, 2001).
b. Prepared Rebuttal Testimony on behalf of **PG&E National Energy Group & Calpine Corporation** (I. 00-11-002—May 15, 2001).
- *Terms and conditions of natural gas service to electric generators; gas curtailment policies.*
34. a. Prepared Direct Testimony on behalf of the **California Cogeneration Council** (R. 99-11-022—May 7, 2001).
b. Prepared Rebuttal Testimony on behalf of the **California Cogeneration Council** (R. 99-11-022—May 30, 2001).
- *Avoided cost pricing for alternative energy producers in California.*
35. Testimony of R. Thomas Beach in Support of the Application of **Wild Goose Storage Inc.** (A. 01-06-029—June 18, 2001).
- *Consumer benefits from expanded natural gas storage capacity in California.*
36. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of **Wild Goose Storage** (A. 01-06-029—November 2, 1991)
37. Prepared Direct Testimony of R. Thomas Beach on behalf of the **County of San Bernardino** (I. 01-06-047—December 14, 2001)
- *Reasonableness review of a natural gas utility’s procurement practices and storage operations.*
38. a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 01-10-024—May 31, 2002)
b. Prepared Supplemental Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 01-10-024—May 31, 2002)
- *Electric procurement policies for California’s electric utilities in the aftermath of the California energy crisis.*

-
39. a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Manufacturers & Technology Association** (R. 02-01-011—June 6, 2002)
- *“Exit fees” for direct access customers in California.*
40. Prepared Direct Testimony of R. Thomas Beach on behalf of the **County of San Bernardino** (A. 02-02-012 — August 5, 2002)
- *General rate case issues for a natural gas utility; reasonableness review of a natural gas utility’s procurement practices.*
41. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Manufacturers and Technology Association** (A. 98-07-003 — February 7, 2003)
- *Recovery of past utility procurement costs from direct access customers.*
42. a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council, the California Manufacturers & Technology Association, Calpine Corporation, and Mirant Americas, Inc.** (A 01-10-011 — February 28, 2003)
- b. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council, the California Manufacturers & Technology Association, Calpine Corporation, and Mirant Americas, Inc.** (A 01-10-011 — March 24, 2003)
- *Rate design issues for Pacific Gas & Electric’s gas transmission system (Gas Accord II).*
43. a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Manufacturers & Technology Association; Calpine Corporation; Duke Energy North America; Mirant Americas, Inc.; Watson Cogeneration Company; and West Coast Power, Inc.** (R. 02-06-041 — March 21, 2003)
- b. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of the **California Manufacturers & Technology Association; Calpine Corporation; Duke Energy North America; Mirant Americas, Inc.; Watson Cogeneration Company; and West Coast Power, Inc.** (R. 02-06-041 — April 4, 2003)
- *Cost allocation of above-market interstate pipeline costs for the California natural gas utilities.*
44. Prepared Direct Testimony of R. Thomas Beach and Nancy Rader on behalf of the **California Wind Energy Association** (R. 01-10-024 — April 1, 2003)
- *Design and implementation of a Renew able Portfolio Standard in California.*

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45.
 - a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 01-10-024 — June 23, 2003)
 - b. Prepared Supplemental Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 01-10-024 — June 29, 2003)
 - *Power procurement policies for electric utilities in California.*
 46. Prepared Direct Testimony of R. Thomas Beach on behalf of the **Indicated Commercial Parties** (02-05-004 — August 29, 2003)
 - *Electric revenue allocation and rate design for commercial customers in southern California.*
 47.
 - a. Prepared Direct Testimony of R. Thomas Beach on behalf of **Calpine Corporation and the California Cogeneration Council** (A. 04-03-021 — July 16, 2004)
 - b. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of **Calpine Corporation and the California Cogeneration Council** (A. 04-03-021 — July 26, 2004)
 - *Policy and rate design issues for Pacific Gas & Electric's gas transmission system (Gas Accord III).*
 48. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (A. 04-04-003 — August 6, 2004)
 - *Policy and contract issues concerning cogeneration QFs in California.*
 49.
 - a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council and the California Manufacturers and Technology Association** (A. 04-07-044 — January 11, 2005)
 - b. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council and the California Manufacturers and Technology Association** (A. 04-07-044 — January 28, 2005)
 - *Natural gas cost allocation and rate design for large transportation customers in northern California.*
 50. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Solar Energy Industries Association** (R. 04-03-017 — April 28, 2005)
 - *Cost-effectiveness of the Million Solar Roofs Program*

51. Prepared Direct Testimony of R. Thomas Beach on behalf of **Watson Cogeneration Company, the Indicated Producers, and the California Manufacturing and Technology Association** (A. 04-12-004 — July 29, 2005)
 - *Natural gas rate design policy; integration of gas utility systems.*
52.
 - a. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 04-04-003/R. 04-04-025 — August 31, 2005)
 - b. Prepared Rebuttal Testimony of R. Thomas Beach on behalf of the **California Cogeneration Council** (R. 04-04-003/R. 04-04-025 — October 28, 2005)
 - *Avoided cost rates and contracting policies for QFs in California*
53. Prepared Direct Testimony of R. Thomas Beach on behalf of the **California Manufacturers and Technology Association and the Indicated Commercial Parties** (A. 05-05-023 — January 20, 2006)
 - *Electric marginal costs, revenue allocation, and rate design for commercial and industrial electric customers in southern California.*

EXPERT WITNESS TESTIMONY BEFORE THE NEVADA PUBLIC SERVICE COMMISSION

1. Pre-filed Direct Testimony on Behalf of the **Nevada Geothermal Industry Council** (Docket No. 97-2001—May 28, 1997)
 - *Avoided cost pricing for the electric output of geothermal generation facilities in Nevada.*
2. Pre-filed Direct Testimony on Behalf of **Nevada Sun-Peak Limited Partnership** (Docket No. 97-6008—September 5, 1997)
3. Pre-filed Direct Testimony on Behalf of the **Nevada Geothermal Industry Council** (Docket No. 98-2002 — June 18, 1998)
 - *Market-based, avoided cost pricing for the electric output of geothermal generation facilities in Nevada.*

EXPERT WITNESS TESTIMONY BEFORE THE PUBLIC UTILITIES COMMISSION OF OREGON

1. a. Direct Testimony of Behalf of **Weyerhaeuser Company** (UM 1129 — August 3, 2004)
- b. Surrebuttal Testimony of Behalf of **Weyerhaeuser Company** (UM 1129 — October 14, 2004)
- *Policies to promote the development of cogeneration and other qualifying facilities in Oregon.*

LITIGATION EXPERIENCE

Mr. Beach has been retained as an expert in a variety of civil litigation matters. His work has included the preparation of reports on the following topics:

- The calculation of damages in disputes over the pricing terms of a natural gas sales contract.
- The valuation of a contract for the purchase of power produced from wind generators.
- The compliance of cogeneration facilities with the policies and regulations applicable to Qualifying Facilities (QFs) under PURPA in California.
- Audit report on the obligations of a buyer and a seller under a direct access electric contract in the California market.
- The valuation of interstate pipeline capacity contracts.

In several of these matters, Mr. Beach was deposed by opposing counsel. Mr. Beach has also testified at trial in the bankruptcy of a major U.S. energy company.

Attachment RTB-2

Operating Balancing Agreement
between
Transwestern Pipeline Company
and
Southern California Gas Company

TRANSPORTATION SERVICE AGREEMENT
OPERATOR BALANCING AGREEMENT
between
TRANSWESTERN PIPELINE COMPANY
and
SOUTHERN CALIFORNIA GAS COMPANY

THIS AGREEMENT ("OBA" or "Agreement") made and entered into by and between TRANSWESTERN PIPELINE COMPANY ("Transporter") and SOUTHERN CALIFORNIA GAS COMPANY ("Company"), (collectively the "Parties" or individually as "Party") this 27th day of April, 1995.

WITNESSETH

WHEREAS, the facilities operated or to be operated by Transporter and Company interconnect at a point or points specified in the Exhibit 1 attached hereto and incorporated herein by this reference (hereinafter referred to as "Interconnect Point," whether one or more); and

WHEREAS, Transporter and/or Company (at times hereinafter referred to as the "Parties" or individually as a "Party") have entered into one or more agreements with third party shippers (hereinafter referred to as "Shipper" or "Shippers") for the transportation of gas to or from the Interconnect Point on their respective systems (said agreements hereinafter referred to as "Shipper Agreements"); and

WHEREAS, from time to time, the quantities of gas confirmed by Company and scheduled by Transporter to be delivered to or received from the Interconnect Point (said quantities hereinafter referred to as the "Scheduled Quantities") may be greater or lesser than the quantities of gas which are actually delivered at the Interconnect Point, resulting in inadvertent over-or under-deliveries relative to Scheduled Quantities; and

WHEREAS, the Parties desire to implement a balancing agreement in order to facilitate more efficient operations, accounting, and systems management at the Interconnect Point and on the Parties' respective systems.

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein, the Parties agree as follows:

1. Prior to the effective date of Shipper nominations at each Interconnect Point, the Parties shall reconcile and confirm nominations received by each Party from Shippers for whom the Parties will be delivering or receiving gas at that point. Such reconciliation and confirmation between the Parties shall be made verbally with subsequent confirmation in writing, unless otherwise mutually agreed to by the Parties. Except as provided in Section 3 below, any changes to such Scheduled Quantities during the month shall be effective only if requested by Shipper or Company and agreed to in writing by both Parties. Such written communication provided by the Parties regarding changes shall be substantially in the form set out on the attached Exhibit 2, or in any other form mutually agreeable to the Parties. All nominations and confirmations must be made in accordance with the requirements of Section 22 of the General

Terms and Conditions of Transporter's Tariff, as may be revised from time to time. Provided further, the terms and provisions of this OBA shall be subject to Sections 1 - Definitions; 2 - Quality; 4 - Measurement; and 5 - Measurement Stations, of the General Terms and Conditions of Transporter's FERC Gas Tariff, as may be revised from time to time.

2. The Parties intend that the volume of gas actually delivered and received each day at each Interconnect Point will equal the Scheduled Quantities (including Transport Fuel) for that point. Each Party will allocate volumes which are to be delivered and received at each Interconnect Point among the Shipper Agreements on its system pursuant to the Scheduled Quantities received for that point. Any Operational Imbalance created, when the actual physical flow is different than the Scheduled Quantities (on a monthly basis), will be the "Operational Imbalance," which will be the responsibility of the Parties to eliminate pursuant to this Agreement.
3. Estimated operating quantities flowing at each Interconnect Point shall be used on a daily basis during any current month to determine the estimated Operational Imbalance at such Interconnect Point, with physical flow adjustments to be made during that current month as mutually agreed to by both Parties to attempt to maintain or achieve an Operational Imbalance of zero at such point; provided, however, nothing herein shall affect Transporter's right to unilaterally re-schedule quantities upon 24-hour notice by Transporter to the Shipper (except in the case of operational distress) under Section 22.3 of the General Terms and Conditions of its FERC Gas Tariff, as may be revised from time to time.
4.
 - (a) The actual physical flow at each Interconnect Point each month will be determined and communicated in writing by the Interconnect Point Operator to the non-operating Party no later than the 12th of the succeeding month. The interconnect Point Operator shall be the Party which operates the meter at each interconnect Point ("Interconnect Point Operator"). Any Operational Imbalance for any Calendar month shall be determined on a dekatherm basis, and shall be confirmed in writing within thirty (30) days of the end of such month, substantially in the form set out on the attached Exhibit 3, or in any other form mutually agreeable to the Parties.
 - (b) Transporter and Company shall agree upon a plan which will resolve (including payback) any Operational Imbalance within ninety (90) days from the end of the month in which the Operational Imbalance occurs, or within such longer period of time as is mutually agreed to by the Parties. In the event either Party fails or refuses to resolve (including payback) an Operational Imbalance within ninety (90) days from the end of the month in which the imbalance occurs, or within such other time period which has been mutually agreed to by the Parties, then the other party may pursue any remedies which it may have to determine the amount (if in dispute) and to collect any Operational Imbalance owed such Party. In such event, interest shall accrue on the dollar value of the Operational Imbalance from the first day of the first month after the imbalance occurred until the date

of payment, in kind or in cash, at the interest rate set forth in 18 CFR 154.67(c)(2)(iii)(A), as may be amended from time to time; provided however, such interest charges shall not be assessed if Transporter is unable to schedule payback gas or Company is unable to receive payback gas from Transporter. Additionally, with respect to Operational Imbalances resulting from under-deliveries by Company which are not resolved within the time specified herein, all subsequent deliveries by Company to Transporter at the Interconnect Point may first be credited by Transporter to the existing Operational Imbalance, and thereafter, to Shipper's scheduled quantities.

5. Operational Imbalances shall be indexed to a monthly price (hereinafter referred to as the "Index Price") which shall be calculated as follows, as may be amended from time to time:
- (a) Transporter shall first determine any Operational Imbalance quantity for each month on a dekatherm basis. Transporter shall then determine a dollar equivalent utilizing the dekatherm quantity and the established Index Price.
 - (b) For Operational Imbalances remaining from previous month(s), the Operational Imbalance remaining from the previous month(s) will be adjusted on a volumetric basis by dividing the Operational Imbalance dollar amount by the current month's Index Price.
 - (c) The Index Price for each month shall equal the average of the daily prices for that month as reported in Gas Daily's table entitled "DAILY PRICE SURVEY" for delivery into Transporter's mainline system for the following: (1) "Texas--West Waha, Permian;" (2) "North--Texas Panhandle;" and (3) "New Mexico--San Juan Basin (Transwestern SJ)." (If a range of prices is shown for any particular day, the midpoint of such range shall represent that day's price at a particular location.) Notwithstanding the foregoing, Company shall be allowed to make an election to utilize the index for a single basin or an average of only two basins if the basin(s) is/are the source of all of its supplies under this Agreement. Such election shall be effective for no less than a one-year period. If, for any reason, Gas Daily ceases to be available for a particular month, the Index Price for that month will equal the average of the daily prices for the above-described locations for the applicable month as reported in any other generally accepted available industry publication chosen by Transporter. If another generally accepted industry publication becomes available that reports daily prices for the above-listed basins, Transporter shall incorporate said prices into the calculation(s) provided above.
 - (d) Prices used to calculate the Index Price will be prices quoted "into the mainline" in order to eliminate inconsistencies due to varying gathering and treating charges. Transporter will post the Index Price for each month on its Electronic Bulletin Board within one (1) business day following the end of the applicable month.

- (e) Operational Imbalances that may arise from time-to-time may be resolved, on a not unduly discriminatory basis, by payment on an "in-kind" basis or by either Transporter or Company, as appropriate, purchasing volumes necessary to clear the entire Operational Imbalance ("cash-out") at the Index Price (as indexed herein or at such other price as Parties may mutually agree). Transporter will accept nominations for and schedule the volumes necessary to resolve the Operational Imbalance subject to operational and financial considerations.
6. Notwithstanding anything herein that may be interpreted to the contrary, in the event that the aggregate Operational Imbalance for all Interconnect Points in any month is outside a 10% tolerance level (i.e., either exceeds 110% of the quantities scheduled, or is less than 90% of the quantities scheduled), and the Operational Imbalance exceeds 10,000 dth, then Company shall be assessed a penalty.

Company will be charged 30¢ per dekatherm (0.30/dth) for volumes outside the tolerance level, although Company will be granted an automatic waiver of such penalty for the first outside-tolerance month in any six-month period. In addition, if Company's deliveries or receipts are outside the tolerance level due to incorrect measurement data communicated to Company by Transporter, any such penalty will be waived. If any Operational Imbalance is due to an operational request of Transporter (which shall be confirmed in writing), or is otherwise caused by Transporter, no penalty shall be assessed.

7. Operational Imbalances that may arise from time-to-time shall be resolved at the option of the Party owing such imbalance on either an "in-kind" basis (upon mutual agreement of the Parties as to the timing and location of payback) or by "cash-out" (payment in cash), subject to the receipt of any necessary regulatory approval, by either Transporter or Company as appropriate, purchasing quantities necessary to clear the entire Operational Imbalance at the Index Price. Any quantities to be received or delivered by Transporter hereunder in order to resolve an Operational Imbalance must first be scheduled in accordance with Section 22 of the General Terms and Conditions of Transporter's Tariff, as may be revised from time to time.
8. In the event that a capacity constraint occurs on either Party's system which results in curtailment of quantities through an Interconnect Point, the Party on whose system the constraint has occurred shall determine the reallocation of quantities to the Shippers under the affected Shipper Agreements. Such change in Scheduled Quantities shall be confirmed in writing as required by Paragraph 1 above. If the constraint occurs at the Interconnect Point, the downstream Party shall determine the reallocation of quantities to the Shippers under the affected Shipper Agreements.
9. All quantities of gas hereunder shall be reported in dekatherms, and shall be determined by multiplying each Mcf of dry gas received and delivered by the dry heating value thereof. Any gas received and delivered to correct an Operational Imbalance shall be adjusted for variations in heating value. Unless otherwise mutually agreed, measurement of gas for all purposes hereunder

shall be in accordance with the provisions set forth in Transporter's then-effective FERC Gas Tariff.

10. This Agreement is entered into in order to facilitate operations and accounting between the Parties, and shall have no effect upon the Shipper Agreements or upon the effectiveness of any Party's FERC Gas Tariff.
11. Company agrees to immediately notify Transporter upon temporary or permanent cessation of gas flow into Transporter at an Interconnect Point or upon acquisition of a new Interconnect Point, and the Parties agree to timely amend this Agreement to delete or add such Interconnect Points as may be appropriate, by revising Exhibit 1 hereto.
12. Any new Interconnect Points between Transporter and Company shall be added to this Agreement prior to the commencement of any gas flow, or shall otherwise be deemed to have been added to this Agreement upon any gas flow.
13. This Agreement shall become effective on the first day of the month following execution by both Parties and the in-service date of the facilities to be constructed, if any, and shall continue for a primary term of one (1) month from the effective date and month to month thereafter; provided, however, either Party may terminate this Agreement at the end of the primary term, or thereafter by providing thirty (30) days prior written notice to the other Party.
14. Notwithstanding the termination of this Agreement, the Parties agree to reconcile and eliminate any remaining Operational Imbalance pursuant to the terms and conditions of this Agreement within ninety (90) days of termination of this Agreement or such other period of time which is mutually agreed to by the Parties.
15. This Agreement and the terms and conditions herein are subject to all present and future valid laws, orders, rules and regulations of duly constituted authorities having jurisdiction.
16. In the event a conflict exists or arises between this Agreement and Transporter's FERC Gas Tariff, as amended from time to time, it is agreed and understood that the latter shall control.
17. This Agreement is for accounting and system management purposes only, and is entered into by the Parties with the understanding that the balancing activities provided for hereunder will not subject any non-jurisdictional entity to regulation by the Federal Energy Regulatory Commission as a "natural gas company" under the provisions of the Natural Gas Act. If, at any time, it should be determined that such balancing activities do result in such regulation, then this Agreement shall immediately terminate, and any remaining Operational Imbalance shall be resolved by the Parties within ninety (90) days after termination of this Agreement.
18. Any entity which shall succeed by purchase, merger or consolidation to the properties, substantially as an entity, of either Party, shall be subject to the obligations of its predecessor to this Agreement. No other assignment of this Agreement or of any of the rights or obligations hereunder shall be made.

19. AS TO ALL MATTERS OF CONSTRUCTION AND INTERPRETATION, THIS AGREEMENT SHALL BE INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS.
20. Any notice, request, or statement provided pursuant to this Agreement shall be in writing and shall be considered as having been given, if delivered personally, when delivered, or, if either mailed by United States mail, postage prepaid, sent by express mail, or overnight delivery, or if telecopied to the other Party, then, when sent, to the following:

Transwestern Pipeline Company
Transportation Management
1400 Smith Street
P.O. Box 1188
Houston, TX 77251-1188
Telecopy No.: (713) 758-8114

Southern California Gas Company
Transportation Contract Advisor
P.O. Box 3249, M.L. 28DO
Los Angeles, CA 90051-1249

Changes to the above addresses shall be effectuated by a Party notifying the other Party in writing of the modification.

21. A waiver by either Party of any one or more defaults by the other Party hereunder shall not operate as a waiver of any future default or defaults, whether of like or different character.
22. Other Provisions: See Exhibit 4 attached hereto and incorporated herein.

IN WITNESS WHEREOF, the Parties hereto have executed duplicate originals of this Agreement on the date set forth hereinabove.

TRANSWESTERN PIPELINE COMPANY

Southern California Gas Company

By: Julia Y. White
Vice President

By: A. M. Stewart
Title: Senior Vice President

Date: APRIL 28, 1995

Date: April 27, 1995

obaagmt.doc

NYP
A. 27.95

EXHIBIT 1

To the Operator Balancing Agreement
Between
TRANSWESTERN PIPELINE COMPANY
and
SOUTHERN CALIFORNIA GAS COMPANY
Dated April 27, 1995

Interconnect Point(s)
between Transwestern Pipeline Company and Southern California Gas Company

<u>Company Meter No.</u>	<u>Transporter POI No.</u>	<u>Description</u>
10	10487	SoCal/Needles
9215	56697	SoCal/Topock

EXHIBIT 2 - OPERATOR CONFIRMATION
TO THE BALANCING AGREEMENT BETWEEN

SOUTHERN CALIFORNIA GAS COMPANY

and

TRANSWESTERN PIPELINE COMPANY

Dated: April 27, 1995

Operator Name: Southern California Gas Company
Operator Contract No.: 21763

POI Number	POI Name	POI Role	Meter Number	Shipper Name	Shipper Contact Number	Daily Nominated MMBTU	Daily Scheduled MMBTU
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EXHIBIT 3
Transwestern Pipeline Company
Contract Balance Confirmation
As of: _____

SHIPPER: «Company»
ATTN: Transportation Contract Advisor, ML 28DO
ADDRESS: P.O. Box 3249
Los Angeles, CA 90051-1249

Enclosed is an imbalance statement recorded by Transwestern Pipeline Company on the transportation agreement with your company as of _____

Please provide us with your company's balance in the space below, and return within 30 days. If you are in disagreement with our balance, refer to the contact name and phone below to discuss potential reconciliation procedures.

Contract <u>Number</u>	Contract <u>Date</u>	Cumulative Imbalance <u>MMBTU</u>	Cumulative Imbalance <u>Amount</u>	Balance Per <u>Company</u>
---------------------------	-------------------------	---	--	----------------------------------

' + ' Due Transwestern Pipeline Company

' - ' Due «Company»

(Your Name/Title)

(Telephone Number)

Your cooperation is greatly appreciated, and will help prevent future volume discrepancies.

For any questions on this statement, please contact Pat Weatherspoon at (713)853-6928.

EXHIBIT 4

22. Other Provisions:

- a. In the event that either party elects to cash-out an Operational Imbalance as provided in this Agreement, the cash-out amount shall be adjusted by the transportation charges associated with such volume of gas. For purposes of such adjustment, the transportation charges per dth shall be equal to the average transportation commodity rate plus applicable surcharges and average fuel (with such fuel valued at the Index Price, as set forth in Section 5 (c) herein) applicable to all firm and/or interruptible deliveries by Transwestern to the Interconnect Point during the month the Operational Imbalance occurred.
- b. The parties agree to use reasonable efforts to resolve (including payback) an Operational Imbalance within ninety (90) days as described in Paragraph 4 (b). The interest provisions of Paragraph 4 (b) shall not apply.
- c. The Parties agree to use reasonable efforts to prevent the aggregate Operational Imbalance for the Interconnect Point from exceeding the tolerance level described in Paragraph 6. The penalty provisions of Paragraph 6 shall not apply.
- d. This Agreement shall become effective on the first day of the month following execution by both parties and shall continue for a primary term ending October 31, 2005, which is the primary term of the Firm Transportation Service Agreement (Contract No. 8255) between Transporter and Company; provided, however, Company shall have the unilateral right to terminate this Agreement by providing thirty (30) days prior written notice to Transporter.
- e. Unless otherwise mutually agreed, in the event of any conflict between the terms of this Exhibit 4 and the form OBA contained in Transwestern's FERC Gas Tariff, as may be revised from time to time, this Exhibit 4 shall control.

EXHIBIT 4

22. Other Provisions:

- a. In the event that either party elects to cash-out an Operational Imbalance as provided in this Agreement, the cash-out amount shall be adjusted by the transportation charges associated with such volume of gas. For purposes of such adjustment, the transportation charges per dth shall be equal to the average transportation commodity rate plus applicable surcharges and average fuel (with such fuel valued at the Index Price, as set forth in Section 5 (c) herein) applicable to all firm and/or interruptible deliveries by Transwestern to the Interconnect Point during the month the Operational Imbalance occurred.
- b. The parties agree to use reasonable efforts to resolve (including payback) an Operational Imbalance within ninety (90) days as described in Paragraph 4 (b). The interest provisions of Paragraph 4 (b) shall not apply.
- c. The Parties agree to use reasonable efforts to prevent the aggregate Operational Imbalance for the Interconnect Point from exceeding the tolerance level described in Paragraph 6. The penalty provisions of Paragraph 6 shall not apply.
- d. This Agreement shall become effective on the first day of the month following execution by both parties and shall continue for a primary term ending October 31, 2005, which is the primary term of the Firm Transportation Service Agreement (Contract No. 8255) between Transporter and Company; provided, however, Company shall have the unilateral right to terminate this Agreement by providing thirty (30) days prior written notice to Transporter.
- e. Unless otherwise mutually agreed, in the event of any conflict between the terms of this Exhibit 4 and the form OBA contained in Transwestern's FERC Gas Tariff, as may be revised from time to time, this Exhibit 4 shall control.

4-28-95

John -

I did substitute an original Exh. 4 in your copy. Thought you might want to keep this for your files. Thanks for your help.

Julia

CSMS
NDP
4-27-95

Attachment RTB-3

Southern California Gas Company
Responses to
ORA
Second Set of Data Requests



Gregory Healy
Regulatory Case Administrator
California Regulatory Affairs
555 West Fifth Street, GT14D6
Los Angeles, CA 90013-1011



Tel: 213.244.3314
Fax: 213.244.8820
ghealy@semprautilities.com

September 29, 2004

Martin Homec
Office of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue, Room 4209
San Francisco, California 94102

RE: A.04-08-018 – SoCalGas Responses to ORA Second Set of Data Requests

Dear Mr. Homec:

Enclosed please find Southern California Gas Company's (SoCalGas) responses to the Second Set of Data Requests of the Office of Ratepayer Advocates (ORA) dated September 7, 2004 relative to A.04-08-018.

If you have any additional questions regarding the enclosed data responses, please feel free to contact me directly to discuss further.

Sincerely,

A handwritten signature in cursive script that reads "Gregory Healy".

Gregory Healy

Attachments

**SOUTHERN CALIFORNIA GAS COMPANY
CALIFORNIA PRODUCER ACCESS APPLICATION
(A.04-08-018)**

**2nd DATA REQUEST FROM
CPUC – OFFICE OF RATEPAYER ADVOCATES**

QUESTION 1

Provide work papers showing the revenues and costs for the California ratepayers expected with the proposal to standardize the new access provisions.

RESPONSE 1

It is expected that the net cost (revenues minus cost) of California producer access to the system will be zero after implementation of the proposal to standardize the new access provisions. As with all other suppliers, producers will be responsible for all necessary interconnection costs, capacity studies, system enhancements, quality control measures, and daily balancing.

QUESTION 2

Provide work papers showing the revenues and costs for the California ratepayers experienced for the past ten years using the separate access agreements for California gas producers and the interstate gas producers.

RESPONSE 2

The company has not tracked the revenues and costs (i.e., the net impact on California ratepayers) resulting from various disparate access agreements for California gas producers. (SoCalGas does not have any supply from "interstate gas producers.")

We believe that the subsidies provided to California producers to date have been significant. They are:

- (1) Utility liabilities (and therefore potential California ratepayer exposure) for accepting producer gas that does not meet Rule 30 and/or CARB specifications.
- (2) Free storage.
 - The First DR to WISP-IP, 6.1 shows that producers have collected monthly imbalances of 600 MMcf (June 2003), or about 200% of their total MDV levels. That volume could otherwise be used by noncore transportation customers at a rate of 21.4 cents/mcf, or \$128,000 annual value.
 - Producers significantly and consistently overdelivered gas into the system on OFO summer events—thereby confiscating limited injection capacity from

end-users who pay for such balancing in their rates. On average, producers confiscate 80 Mdth/d of injection on overnomination days. The annual tariff cost associated with this level of injection is \$1,614,000.

- Therefore, California producers are being provided storage worth at least \$1.74 Million/year!

(3) Blending costs of over \$250,000 per year associated with California production.¹

¹ \$312,000/yr O&M + \$64,000/year capital - \$104,000/year contribution from Chevron & Oxy.