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DIRECT TESTIMONY

OF

DAVID REARDEN

POLICY PROGRAM

ENERGY DIVISION

ILLINIOS COMMERCE COMMISSION

THE PEOPLES GAS LIGHT AND COKE COMPANY

DOCKET NO. 01-0707

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Witness Rearden
Date 4/21/05 Reporter JR

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1. Introduction.

Q: Please state your name, job title and business address.

A: My name is David Rearden and I am a Senior Economist on the Staff of the Illinois Commerce Commission ("Staff" and "Commission") in the Policy Program. My business address is 527 East Capitol Avenue, Springfield, Illinois 62701.

Q: Please outline your education.

A: I have an M.A. and Ph.D. in economics (specialties in econometrics and microeconomic theory) from the University of Kansas in 1991. I received a Bachelor's in economics and history from Eastern Illinois University in 1982, and studied economics at the Southern Illinois University graduate school from 1982-1984.

Q: Please state your work background.

A: Before joining Staff, I was a Manager of Regulatory Policy for Sprint Corporation ("Sprint") from 1998 until 2001. I wrote and defended testimony before state regulatory commissions, helped develop policy for Sprint, provided analysis and advice for the business units and supported other aspects of Sprint's external affairs activity. Sprint had assets in local, long distance and wireless markets, and it was critical to integrate the differing interests in these markets when formulating and advocating policy.

I was a Managing Regulatory Economist at the Kansas Commerce Commission from June 1994 until January 1998. I wrote and defended testimony on both energy and telecommunications issues. I was promoted to Chief of Rate Design and Managing Telecommunications Economist in 1997. I supervised five employees that analyzed rate design for regulated energy companies in Kansas including purchased gas adjustment ("PGA") proceedings.

I taught economics at the undergraduate and graduate levels at the University of Kansas (1992-1994) and Cleveland State University (1990-1992). Besides introductory and basic intermediate courses, I taught public finance, econometrics and graduate level microeconomics.

Q: What's the purpose of your testimony?

A: The purpose of this testimony is to report my findings after examining The Peoples Gas Light and Coke Company's ("Peoples Gas" or "Company") purchasing and other activities during the fiscal year beginning October 1, 2000 and ending September 31, 2001 and their effect on the cost of gas under Peoples Gas' "Rider 2". Rider 2 is more familiarly known as Peoples Gas' PGA.

Q: Briefly describe the scope of your investigation.

A: The investigation considers the prudence of the Company's gas procurement with special consideration for transactions with Enron North America ("Enron") during the reconciliation period from October 2000 through September 2001. Among all of the Company's contracts to buy gas, the largest is the Gas Purchase and Agency Agreement ("GPAA") with Enron (attached to the Direct Testimony of Staff witness Dennis L. Anderson), which was not put out for bid, but was negotiated solely with Enron.

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Peoples Gas uses storage assets to benefit PGA customers and to provide services to third parties. Peoples Gas does not flow the revenues generated from third parties through the PGA. Storage use, coupled with Peoples Gas' complex inter-related dealings with Enron, Enron MW, enovate, PEC, and other Enron and Company affiliates, have necessitated Staff investigations beyond just the GPAA and off-systems sales.

The process of evaluating the prudence of Peoples' gas procurement is further complicated by a lack of documentation or analysis to support the Company's decisions. It is notable that neither the Board of Directors for PEC nor Peoples Gas considered the GPAA's prudence prior to signing it.[1] The Company conducted no formal numerical analysis to analyze the full economic impact of the decision to sign the GPAA.[2] In fact, Peoples Gas states in its response to ENG 2.89 that

> The number of assumptions and variables associated with trying to re-create what would have occurred had Respondent not entered into the Gas Purchase and Agency Agreement with Enron North America (ENA) makes the performance of such a study infeasible. Accordingly, Respondent has not performed such a study.

However, Peoples Gas significantly altered the Company's historical purchasing practices by entering into the GPAA. And the absence of analysis is all the more remarkable considering that the contract was awarded following private negotiations rather than a competitive bidding process. If a competitive bidding process had been used to price the contract (e.g., having bidders bid on the size of the discount), it is possible that its results could have supported a finding that signing the GPAA was a prudent decision.

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[1] See the Company's responses to POL 1.38 and POL 7.6.
[2] See the Company's responses to ENG 2.68, ENG 2.75 and ENG 2.88.Staff made other requests for analysis of the GPAA that Peoples Gas might have conducted prior to signing the contract.

Q: Please outline your testimony.

A: In Section 2, I discuss the concept of prudence, and how I implement it in this docket. Ratepayers should not pay higher costs if the utility makes an imprudent decision than they would have if the Company had made a prudent decision. Utilities, and not ratepayers, should be at risk for the economic consequences of imprudent decisions.

In Section 3, I evaluate the GPAA's prudence using a forward-looking approach that employs only information available when the contract was made. I conclude that the GPAA was imprudent. Given information known at the time the agreement was made, my analysis shows that Peoples Gas should have expected that the agreement was likely to increase gas costs above the Company's existing purchasing practices. My analysis complements Staff witness Dennis Anderson's Direct Testimony that addresses, in detail, the lack of numerical review or support for Peoples Gas' decision to execute the GPAA. Either approach supports a finding of imprudent behavior by itself. Together, they illustrate the importance of requiring utilities to justify their actions with sound and verifiable analysis.[3]

In Section 4, my testimony also appraises the prudence of the Company's off-system sales during the reconciliation period. Off-system sales are gas sales that use assets or commodities for which costs pass through the PGA. Off-system sales prior to the GPAA were largely demand credit-type transactions, where Peoples Gas would buy gas at one location and sell it at another for a margin. I find that the Company was imprudent in two of these off-system sales and, as a result, earned less revenue from them than it should have earned. I calculate the revenue deficit and recommend a disallowance.

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[3] Alternatively, the Company could use competitive bidding under the right circumstances to establish a reasonable price.

In Section 5, I support Staff's position, also advocated by Staff witnesses Anderson and Knepler, that revenue from Peoples Gas' non-tariff services revenue should be recorded in Rider 2 (i.e., flowed through the PGA) for policy reasons. Non-tariff transactions consist of Federal Energy Regulatory Commission ("FERC") Operating Statement transactions and third party storage exchanges. Peoples Gas argues that these dealings rely exclusively on the Company's Manlove Field and its Mahomet pipeline, which are assets for which costs are recovered in base rates. The Company concludes that the revenue from non-tariff transactions should therefore be recorded against the costs for those assets as determined in a rate case. However, Staff witness Anderson demonstrates in his Direct Testimony that hub operations are dependent upon all of Peoples Gas' assets, including leased storage and/or flowing gas, the costs of which are recovered through Rider 2 under the Commission's PGA rule. I argue that, absent flowing such transactions through the PGA, the Company has incentives to engage in behavior that increases gas costs. Indeed, I find in Section 5.g. that Peoples Gas substantially raised costs to ratepayers at a time when gas prices were reaching historic levels.

Later in Section 5, I find that the Company imprudently used the Manlove storage field during the reconciliation period, which raised customers' gas costs. I assess the impact of those decisions on costs to ratepayers. During December 2000 and January 2001, Peoples Gas continued to provide non-tariff services using capacity from Manlove Field rather than interrupting those services and using the capacity at Manlove for PGA ratepayers. As a result, the Company's PGA rates closely reflected spot prices during the winter of 2000-2001. Rather than use the storage field to deliver $6.23 per dekatherm gas to ratepayers, Peoples Gas entered the spot market to buy gas for as much as $xxxxx a dekatherm.

Lastly, in Section 6, I join other Staff witnesses in recommending that the Commission order a management audit of Peoples Gas. See the Direct Testimony of Staff witnesses Anderson and Steven Knepler. I support that recommendation by discussing various actions taken by the Company.

2. Evaluation of prudence and assessing disallowances.

Q: What criteria does the Commission use to determine prudence?

A: The Commission has defined prudence as:

> that standard of care which a reasonable person would be expected to exercise under the circumstances encountered by utility management at the time decisions had to be made. In determining whether or not a judgment was prudently made, only those facts available at the time the judgment was exercised can be considered. Hindsight review is impermissible.
>
> Imprudence cannot be sustained by substituting one's judgment for that of another. The prudence standard recognizes that reasonable persons can have honest differences of opinion without one or the other necessarily being 'imprudent'.

(Commission v. Commonwealth Edison Company, Docket No. 84-0395, Order dated October 7, 1987, page 17).

Q: Why is the concept of prudence important?

A: When a utility is a monopoly, those customers cannot switch to competing providers. They must buy from the utility and consequently rely upon it to prudently purchase gas supplies. A prudence review investigates whether the utility appropriately carried out its obligation as a purchasing agent for its customers in a reasonable manner. If costs were imposed on ratepayers, they should be held harmless from the utility's imprudent action.

Q: How did Staff conduct its prudence review?

A: Staff employed a before the fact, or *a priori*, analysis using only the information known at the time Company decisions were made under the alternatives Peoples Gas actually faced; Staff did not conduct hindsight review. Although Staff's determination of imprudence is based on *a priori* analysis, the disallowance is necessarily based on costs actually incurred.

Q: Which of the Commission's rules are the basis for Staff's review and disallowances?

A: Section 525.70(b) of the Commission's PGA rule states in relevant part,

> If, after hearing, the Commission finds that the utility has not shown all costs to be prudently incurred...the difference determined by the Commission shall be refunded...along with any interest or other carrying charge authorized by the Commission.

Section 525.40 (d) of the PGA rule states in relevant part,

> Taking into account the level of additional recoverable gas costs that must be incurred to engage in a given transaction, the utility shall refrain from entering into any such transaction that would raise the Gas Charge(s).

Q: If a utility makes an imprudent decision, does this decision always result in a staff-recommended disallowance?

A: No. A utility can recover reasonable costs incurred. Only when an imprudent decision raised the incurred costs above reasonable costs does Staff recommend disallowances. An imprudent decision that fortuitously results in costs below reasonable costs does not call for a disallowance.

3. The Enron GPAA.

Q: Please summarize your analysis of the GPAA.

A: I first discuss the components of the GPAA. I next address the Company's support for the prudence of the agreement and Staff's evaluation of that support. Given Staff's concerns about Peoples Gas' support for the GPAA, I judge the prudence of the GPAA by performing an *a priori* numerical analysis of the total financial impact of the various terms in the contract. Notably, Peoples Gas did no such analysis prior to entering into the agreement, which itself was imprudent. Since both Mr. Anderson and I determine that the GPAA is imprudent, I next calculate the additional costs imposed upon ratepayers by the GPAA compared to purchasing those same gas volumes without the contract. In this calculation, I employ actual prices and demand for gas that occurred during the test year.

3.a. GPAA terms.

Q: Please outline the GPAA's terms.

A: The GPAA's gas purchases have three main components: (1) Baseload, (2) Summer Incremental Quantity ("SIQ") and (3) Daily Incremental Quantity ("DIQ"). The baseload quantities are specified over the life of the contract, and prices are at the xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx minus a xxxxxxxxxx discount. The SIQ allows Enron to select a quantity of gas between the minimum and maximum specified in the contract that Peoples must buy each day at xxx less a xxxxxxxxxx discount. The DIQ gives Peoples Gas the right to buy gas at the xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx up to the DIQ capacity level specified in the contract.

The GPAA has a resale provision that allows Peoples Gas to resell gas back to Enron at the Company's discretion at xx less a penalty that depends on the quantity resold and when the resale quantity is nominated.

Enron can reprice various amounts of demand in three parts of the GPAA. They are the Baseload Pricing Adjustment ("BLPA") and two "Flexible Pricing" terms (Article 4.2b and Article 4.2c). These provisions permit Enron to reprice each day, at its option, various amounts from xxx to xx during the

Winter Period (December through March). For the BLPA, that amount is xxxxxx MMBtus per day; for Article 4.2b, it is xxxxxx MMBtus per day; for Article 4.2c, it is xxxxxx MMBtus per day.[4] Peoples Gas insists that Enron never exercised the BLPA.[5] And the Company never offered any incentives for Enron to refrain from exercising the BLPA.[6] Nevertheless, an *a priori* evaluation of the GPAA must account for the effect that the BLPA and Article 4.2b and 4.2c might have had on gas costs. That is, these elements were in the contract and Peoples Gas exposed itself to Enron exercising them.

Finally, Peoples Gas released some of its interstate pipeline capacity into the Chicago citygate to Enron. After Peoples Gas signed the GPAA, its off-systems sales were dominated by resales of gas back to Enron pursuant to GPAA terms. Many of the remaining sales were to the Enron subsidiary Enron MW. The effect of this element of the contract is to lower the revenues that Peoples Gas can earn from engaging in demand credit transactions or releasing unneeded capacity to other shippers.

Q: How does the GPAA address interstate transportation capacity cost recovery?

A: The GPAA mandates that Peoples Gas ultimately pays for all interstate pipeline transportation capacity costs associated with GPAA volumes. In practice, Peoples Gas released pipeline capacity to Enron. The capacity cost was taken off of the pipelines' bills to Peoples Gas. However, Enron

[4] Peoples Gas must elect Article 4.2b and 4.2c by xxxxxxxxxxxxxxxxx and xxxxxxxxxxxxxxx respectively in order to take advantage of them.
[5] See the Company's response to POL 1.10 ("ENA [Enron] did not elect the use of the "Baseload Price Adjustment" provision during the reconciliation period. As with other terms and conditions in the agreement, the "Baseload Price Adjustment" provision was part of the negotiation process. By agreeing to the provision Respondent obtained a discount of xxxxx rather than xxxxx on all Baseload and SIQ quantities purchased under the agreement.")
[6] See the Company's response to POL 1.50 ("The Company did not offer any incentives to ENA [Enron] to deter it from implementing the Baseload Pricing Adjustment during the reconciliation period, since it is at ENA's discretion.").

billed the capacity costs back to Peoples Gas under Article 4.3 of the GPAA. Thus, transportation capacity costs are unchanged by the GPAA.

3.b. GPAA prudence.

Q: Does Peoples Gas view its decision to sign the GPAA as prudent?

A: In its response to ENG 2.68, Peoples Gas opines, "Yes, Respondent's Gas Purchase and Agency Agreement with Enron North America is prudent." The remainder of the response produces documents about the method that led to Enron as the entity with which to negotiate the contract. It is clear from the response that the Company did not ask for bids from gas marketers. ENG 2.75 requested a "Business Case" for the GPAA. The Company's response to that data request outlined the process that led to the GPAA. It also attempted to explain why the contract was beneficial to ratepayers, but its explanation was perfunctory, and its quantification of an alleged savings was later revealed to have been an after-the-fact calculation (and is later shown in my testimony to have been both inaccurate and misleading as a statement of the net impact of the agreement).

> Under the terms and conditions of the GPAA, Respondent released a portion of its firm pipeline capacity to ENA and made ENA agent for certain supply agreements. In return, Respondent received index-priced natural gas supplies at the citygate. The default price for natural gas purchased by Respondent is a first of month citygate index for baseload purchases and a daily citygate index for swing purchases. In addition, Respondent received a $xxxx/MMBtu credit on all baseload purchase volumes, which reduced $xxxxxxxxxxx of gas cost savings.

This is the entire "Business Case" that Staff received.

The Company's response to ENG 2.88 ("Provide all studies, analyses, and internal communications that address the economic benefits of the ENA contract.") simply refers to its previous responses to ENG 2.68 and ENG 2.75, discussed above. Staff can only conclude that Peoples Gas signed a xxxxxxxxx contract that purchased hundreds of millions of dollars of gas in fiscal year 2001 without first analyzing its expected effects on PGA gas costs. In fact, the Company "believes that the realization of these five objectives demonstrates the prudence of the GPAA. Respondent does not believe it is essential to a showing of prudence to produce a document memorializing the operation and economic considerations that resulted in the GPAA." (Company's response to POL 2.42.) It appears Peoples Gas believes that such an investigation is not even necessary.

Q: Does Staff agree that the Company's decision to sign the GPAA was prudent?

A: No. Staff witness Anderson shows in his Direct Testimony that, with neither a bidding procedure nor a credible economic analysis, Peoples Gas cannot demonstrate that it expected the GPAA, at the time it was signed, to be the least cost method of purchasing gas. Only in retrospect and with unsubstantiated assertions does the Company try to show that the contract was prudent.[7] Notwithstanding the Company's after-the-fact claims, there is no evidence that, before signing the contract, Peoples Gas investigated whether the GPAA provided a given amount of gas at prices no higher than alternative sources.

Q: How does the Company explain why it signed the contract?

A: In response to ENG 2.75, Peoples Gas states,

> Respondent concluded that there existed a strong likelihood that basis at Respondent's field-purchase locations would be negatively affected by the proposed incremental pipeline capacity to the Chicago area. This, in turn, would erode the value of Respondent firm transportation assets, resulting in relatively higher delivered costs for gas supplies connected with field purchases versus those at the citygate. When firm transportation is devalued, Respondent would

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[7] See, for example, the Company's responses to ENG 2.68, ENG 2.75 and ENG 2.88, POL 1.4 and POL 1.58 as well as the Additional Direct Testimony of David Wear.

> also expect a loss of demand credits that are earned through the off-system transactions. The ENA [Enron] proposal would remove that basis-risk by ensuring index-based market pricing for gas supply and guaranteeing demand credits for the term of the GPAA. Therefore, the proposal met two overriding criteria used in evaluating the proposal.

Q: Please explain your understanding of Peoples Gas' statement in this data request response.

A: Basis, as it is commonly used, is the difference between the price of something at two different points. In this particular case, basis is the difference between the price of gas in the field where it is produced and the price of the gas at the citygate. How much a buyer is willing to pay for the right to move gas between the field and the citygate depends on this basis. The greater the basis, the more valuable the right to transport gas between the two points becomes. Peoples Gas forecast that the basis would fall. A falling basis has two consequences. First, it reduces the value of demand credits from off system transactions. That is, shippers are willing to pay less per MMBtu to transport gas to the citygate. Second, a lower basis means that gas purchased in the field becomes more expensive relative to the citygate price. In other words, a citygate purchase becomes relatively more attractive as the difference in the price of field gas and citygate gas decreases.

Q: Does Company witness David Wear's Additional Testimony provide any further explanation of circumstances surrounding the GPAA's signing?

A: Mr. Wear attempted to address this issue in his Additional Testimony. However, Mr. Wear does not provide any detailed, numerical, before-the-fact analysis. The majority of Company witness Wear's discussion centers on the goals that Peoples Gas had when it entered into negotiations with Enron. While the goals may be admirable, his testimony gives no sense of their relative economic values. For example, while Mr. Wear lists protecting the value of Peoples Gas' leased transportation assets from a falling basis, he does not assign a dollar value to the basis at the beginning of the GPAA, how much the Company expected that dollar value to fall to or how that decline compared to the variable cost to transport gas to Chicago. Since the GPAA is a xxxxxxxx contract, those relative values should have been estimated for the full xxxxxxxx term. Peoples Gas, nowhere in its testimony or in its discovery responses, mentions that it looked at this issue.

Q: Does Staff believe that Peoples Gas' limited analysis is sufficient explanation for signing the GPAA?

A: No. The entire "Business Case" offered by Peoples Gas in response to ENG 2.75 is a verbal explanation of some of the factors it considered. But it constitutes neither a rigorous nor complete analysis. Some aspects of the GPAA could be beneficial to ratepayers, while others are demonstrably not. A serious evaluation of the contract should forecast the key factors that influence the value of the contract. Assumptions should all be supported and documented. Then the analysis should carefully project the Company's expected purchases under the GPAA and determine how they compare to expected purchases without the GPAA. Peoples Gas apparently performed no such analysis. Indeed, Peoples Gas apparently performed no rigorous analysis of any kind.

Q: Peoples Gas witness Wear contends that the xxxxxxxxxx "discount" off the citygate price in the GPAA protects Peoples Gas and its ratepayers against a falling basis. Does Staff agree?

A: Staff disagrees. See the Direct Testimony of Dennis Anderson for a discussion of this issue. The GPAA needs to be evaluated in its entirety. The xxxxxxxxxx discount is just one aspect among many in an examination of the GPAA's prudence. Peoples Gas does not indicate in its data request responses or in testimony the relationship it believes exists between the xxxxxxxxxx discount and what it expects the basis to do.

Mr. Wear also ignores several points that undermine his favorable assessment of the GPAA based on just one factor. First, a large initial differential between the basis and variable transportation costs[8] may mean that an eroding basis does not alter whether the basis is larger or smaller than variable transportation cost, if the difference is large enough at the beginning of the period under consideration. In the present case, the basis may not fall fast enough to make the three cents compensatory over the entire, xxxxxxxxx GPAA term. The most basic comparison is between the variable cost of transport and the basis. If the variable transport cost plus three cents is less than the basis, it is cheaper to buy gas in the field and pay the variable transport costs rather than buy gas at the citygate under the GPAA with the xxxxxxxxxx discount.

Consider the following example. Suppose the price in Chicago is $4 per MMBtu, while the price is $3.90 per MMBtu at the Henry Hub. The basis is 10¢. First suppose that the variable cost of transportation from the Henry Hub to Chicago is 15¢. When a shipper buys gas at Henry Hub, its delivered cost of gas is $4.05. This is a higher price than if it bought the gas at the Chicago citygate. On the other hand, consider the case when the variable cost of transport from the Henry Hub to Chicago is 5¢. Here, a shipper could buy gas at Henry Hub and deliver it to Chicago at a cost of $3.95. When the basis is less than the variable transport cost, it's cheaper to buy at the citygate. But gas bought at Henry Hub is cheaper when variable transport cost is lower than the basis. This illustrates Peoples xas' contention that a falling basis makes citygate purchases more attractive.

[8] I discuss this concept more fully below. It is the sum of the commodity rate and fuel costs.

Q: Does Peoples Gas show that the GPAA is the best way to deal with a falling basis?

A: No. While Peoples Gas witness Wear indicates that the GPAA protects the value of leased transportation assets from a falling basis, the Company nowhere indicates that it considered any alternatives to the GPAA to deal with this perceived Company concern.

Q: Peoples Gas advances the flexible pricing term in the GPAA as a major benefit. Does Staff believe that flexible pricing within the GPAA has significant benefits?

A: No. The flexible pricing term is not a significant benefit of signing the GPAA. First, the flexibility afforded by Article 4.2a merely restores flexibility lost by signing such a long-term contract. Furthermore, this article is the only element that provides flexibility to Peoples Gas. All other parts of Article 4.2 decrease Peoples Gas' flexibility and enhance Enron's flexibility, allowing Enron to raise gas prices to Peoples Gas. Peoples Gas did invoke Article 4.2a to price some baseload (and minimum SIQ) gas forward within the GPAA by locking in those prices during the reconciliation period. While this practice may have protected Peoples Gas ratepayers from price spikes, the GPAA does not uniquely provide this opportunity. Peoples Gas can always purchase gas in the forward market without a xxxxxxxx contract. Thus, the value of the flexibility in Article 4.2a is largely a function of the xxxxxxxx term of the GPAA. Shorter contracts obviate the need for flexibility terms.

Second, Peoples Gas cannot unilaterally invoke pricing changes within the GPAA. The counter party (Enron) must agree to the change. Presumably Enron will only agree to a change if it sees a benefit for itself as well. If the initial price is very good for Enron, it is unlikely to agree to a change that erodes that value without appropriate compensation. In other words, flexible pricing does not compensate for pricing provisions that do not provide least cost gas. Based upon my professional experience, almost every contract can be changed through a mutual agreement of the parties, so the flexibility to alter a term in a contract through mutual consent provides no unique value.

3.c. Expected value of the GPAA relative to standard purchase practices.

Q: How do you evaluate the GPAA?

A: Staff's analysis compares the total cost of all delivered and used gas under the GPAA during the term of the contract versus what Peoples would have paid for those volumes by buying in the field and transporting them to Chicago. This is an *a priori* forward-looking analysis that uses only information available at the time Peoples Gas entered into the GPAA to estimate the costs for alternatives relative to the GPAA. In effect, I create an analysis that I believe that Peoples Gas should have done before signing the GPAA. See the Appendix to Exhibit 1.00 for the algebraic derivation of the equation underlying this analysis.

Q: Does the GPAA differ from standard gas purchasing methodology?

A: Yes. The GPAA is not simply a purchase of a given quantity of gas for a fixed price or relative to an index. Commodity pricing in the GPAA has several components at varying prices. While baseload volumes are set over the term of the contract, the seller (not the buyer) chooses some volumes each day. An arrangement whereby a seller can choose the amount of a utility's purchases to serve its utility load is anomalous. Further, Peoples Gas surrenders control of a portion of its leased interstate pipeline capacity to Enron. That surrender means the value of transportation capacity must be evaluated along with the commodity pricing terms. Therefore, comparisons between the GPAA with standard gas deals are not straightforward.[9] The

[9] Mr. Wear describes the contract terms in his Additional Direct Testimony. In his Direct Testimony, Staff witness Mr. Anderson also discusses the GPAA.

contract must be evaluated in its entirety. I break up my analysis into smaller pieces, and then I determine whether it is prudent by summing the effects of all the pieces.

Q: Does Staff consider the GPAA to be imprudent only because it is complex?

A: No. Staff does not object to the complexity of the contract. However, the complexity does underscore the need for the Company to have performed a quantitative analysis of the GPAA before signing it.

Q: How do you disaggregate the elements of the GPAA so that you can compare gas costs between the GPAA and purchasing gas in the field?

A: I break the comparison down into seven factors.

GPAA Discount. The value of the xxxxxxxxxx discount for all baseload volumes and SIQs is the first factor. A Local Distribution Company ("LDC") like Peoples Gas should normally be able to purchase gas at the citygate at the xxx price. The xxxxxxxxxx discount represents real savings to ratepayers relative to purchases at the citygate, if all other factors are held constant.

Variable transport-basis comparison. The second factor compares the variable cost of transporting field gas versus the basis. When Peoples Gas buys gas at the citygate, it avoids paying variable transportation costs to the pipeline as well as the cost of gas used for compressor fuel, both of which are a part of the cost of gas that is bought in the field and delivered to ratepayers. To the extent that the basis (citygate price less field price) is less than the variable cost to transport field gas to the citygate (including cost of

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Mr. Wear does not agree that the contract represents a change in purchasing practices. See his Additional Direct Testimony at lines 44-67. He argues that the GPAA is not a major deviation from the Company's usual practices. My gas for compressor fuel), the GPAA lowers cost to Peoples Gas versus Peoples Gas buying gas and transporting it from the field. The applicable volumes for this term are the baseload volumes plus minimum SIQs. The SIQs are included since they have the same pricing as baseload, but the incremental SIQs (SIQ volumes above the minimum) can be avoided outside the GPAA and therefore are not part of the comparison.

Foregone demand credits. When Peoples Gas surrendered control over its pipeline capacity, it lost the ability to use that capacity to generate revenues by buying gas at one location and re-selling it at another. These purchases and resales are called demand credits. They take advantage of idle capacity to generate revenues that offset PGA costs. If, on the other hand, the basis falls, as Peoples Gas assumes, potential demand-credit revenues will be reduced. For example, suppose the variable cost of transportation to the Chicago citygate is 10¢ and the basis is 12¢. The LDC can earn a 2¢ margin and offset transportation capacity costs for its ratepayers by buying gas downstream and reselling it upstream. If the basis falls by 3¢ to 9¢, then that transaction is not available to it. Furthermore, even transactions that do remain profitably available earn smaller margins.

Repricing Options. There are three elements in the fourth factor. The BLPA is the first of these. The BLPA allows Enron to change the price of a portion of baseload volumes from xxx to xx during the Winter Period (December through March) without notice or limit. This change increases costs when xx exceeds xxx.[10] Enron did not in fact invoke this clause during the reconciliation period. However, in an *a priori* analysis that uses information

considerable analysis evaluating the contract, below, undermines his contention.

[10] In its response to xxxxxxxx, Peoples Gas asserts that this option does not necessarily raise costs, since Enron does not know the prices before it elects the option. I note here that the motive for the BLPA becomes highly mysterious unless it could be predicted to have some effect on the price that Peoples Gas buys gas.

available only at the time a decision is made, the BLPA must nonetheless be evaluated. The second and third elements of this factor are the "Flexible Pricing" terms of the GPAA (Articles 4.2b and 4.2c). These terms allow Enron, upon notice to Peoples Gas, to reprice volumes during the Winter Period to the daily price. They have a similar effect on gas costs as the BLPA. As with the BLPA, Enron did not invoke either of these terms. However, the potential monetary impact of both of these terms must be evaluated to determine whether the decision to enter into the GPAA was a prudent one. The volumes that apply to this factor are specified in the GPAA: xxxxxx MMBtus per day for the BLPA, xxxxxx MMBtus per day for Article 4.2b and xxxxxx MMBtus per day for Article 4.2c after xxxxxxxxxxxxxx, all during the Winter Period specified in the GPAA.

Resale penalty. The fifth factor is the resale penalty that Enron assesses on resales by Peoples Gas back to Enron. The relevant volumes are the resales back to Enron.

Avoided demand charge. The last factor takes into account the Company's claim that the GPAA enabled it to buy swing gas without a demand charge. Peoples Gas considers DIQ availability a replacement for swing contracts (defined as contracts for which Peoples Gas does not have to purchase on a given day) and DIQs have no explicit demand charge or other premium. DIQ is available up to the capacity of the pipelines leases released to Enron. In his Additional Direct Testimony, Company witness Wear estimates that avoided swing premiums are worth $xxxxxxx per year to ratepayers. (See Wear's Additional Direct Testimony at lines 362-366.)

SIQ option. The GPAA gives Enron the power to nominate incremental SIQ volumes priced at xxx. The minimum amount is specified in the agreement at xxxxxx MMBtus per day. In addition, Enron can nominate up to xxxxxx MMBtus per day in the Summer Period. Those incremental volumes are at

Enron's choice. For Enron to fully exploit the economic potential of the GPAA, Enron should nominate the entire amount of the possible incremental volumes when xxx exceeds xx. I estimate the value that Peoples Gas surrendered due to this aspect of the GPAA.

(1) GPAA discount.

Q: How did you calculate the expected value of the GPAA's xxxxxxxxxx discount?

A: I estimate this value by multiplying the sum of baseload and expected SIQ volumes by the xxxxxxxxxx discount. Baseload volumes are laid out in the GPAA for each month for the entire xxxxxxxxxx of the agreement. In its response to POL 1.2, Peoples Gas asserted that it expected SIQ volumes selected by Enron to be xxxxxxxxxx MMBtus, xxxxxxx between the minimum possible amount (xxxxxxxxxx) and the maximum (xxxxxxxxxx). This implies that the incremental SIQ (the volumes of SIQ that Enron chooses above the minimum level) averages xxxxxx MMBtus per day. Under the assumption that Peoples Gas chooses the minimum or maximum SIQ each day, the response implicitly assumes the xxx exceeds the xx on xx% of the days in the Summer Period. The Company's response to POL 1.51 and POL 1.52 provided daily and monthly price data back through fiscal year 1997. And xxx exceeds xx only xx% of the days during the Summer Period in those fiscal years. The average price differential when xxx is greater than xx is based on this same data. I substitute xx% for value implied by the Peoples Gas' estimate. This substitution provides an expected SIQ value that is smaller than that estimated by Peoples Gas. The expected value of the xxxxxxxxxx discount is the product of the expected sum of baseload volumes and SIQs times xxxxxxxxxxx.

Q: What is the expected value of the GPAA's xxxxxxxxxx discount per year?

A: I calculate the expected discount for each month during the entire term of the GPAA. See Discount WP for these values. Exp Volumes WP provides the expected volumes by month. Table 2 below shows the estimated value of the discount by fiscal year.

(2) Variable transport-basis comparison.

Q: How do you evaluate the cost of transport versus the basis?

A: I compare the cost to buy and transport gas from the field to the citygate to the price differential or basis between those two locations. This factor is crucial to Peoples Gas' claim made in its "Business Case" above. The Company focused on the basis falling over time. Staff believes the relevant consideration is the level of variable transport cost relative to the basis' value over the contract's xxxxxxxx term. If the basis is initially high enough, this element of the GPAA may raise gas costs despite a basis decline over time. Therefore, my analysis makes a direct comparison between the basis and variable transport cost rather than just the basis by itself.

Q: Please discuss the Company's basis forecast.

A: The Company's response to ENG 2.92, Exhibit D provides a basis forecast. PEC's "risk management area conducted the survey. It solicited quotes from xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. It received quotes from xxxxxxxxxxxxxxxxxxxxxxxxxxx....The quotes from xxxxx were not used."[11] The forecast for the Chicago-Henry Hub basis declined at approximately a penny a year. This agrees with Peoples Gas conclusion that the bases were falling. I use this information to calculate the expected value of transportation. According to this document, Peoples Gas expected the Henry Hub to Chicago basis to be xxxx¢ per MMBtu in fiscal year 2000 and fall to xxx¢ per MMBtu by fiscal year 2004 using a weighted average where expected GPAA volumes are the weights. I also calculate the basis between the Ventura

[11] See the Company's response to POL 2.12.

receipt point on Northern Border Pipeline Company and Chicago as the difference between the Chicago and Ventura Henry Hub bases. That calculation yields a figure between xxxx¢ and xxxx¢ as a weighted average.[12]

I calculate the overall average basis by weighting the two bases by the capacity of the pipelines that serve them.[13] The Ventura basis is assigned to the Northern Border, while the Henry Hub basis is assigned to all the other pipelines. This is shown in the workpaper Basis WP. The overall average basis is xxxx¢ per MMBtu

Table 1 below includes the weighted average values by fiscal year.

Q: How did you estimate variable transportation costs?

A: Peoples Gas released capacity to Enron on xxxx interstate pipelines. They are xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. The variable transportation cost consists of two parts. The first part is the variable commodity charges for transportation that are calculated as a dollar amount per MMBtu. The second part is the in-kind fuel that the pipeline needs to run its compressors and recover gas lost and unaccounted for. The pipelines recover this cost by taking a percentage of the gas delivered to the delivery point. My estimates are developed using the tariffs for the pipelines above on which Peoples Gas released capacity to Enron pursuant to Article 6 of the GPAA.[14]

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[12] The weights are total expected volumes under the GPAA. A weighted average is used since the basis is higher in the winter when volumes are higher. A simple average of monthly figures underestimates the annual average price differential for that reason.

[13] Capacities are from the GPAA's Schedule 6.1, allowing for capacity releases in Schedule 6.3 and noting the information in the Company's response to CUB 3.1a that some of the xxxxxxxxxxxxxxxxx contracts are 'feeder' contracts.

[14] See the tariff sheets from the applicable pipelines. Also see the Company's response to CUB 3.1a (Attachment).

Table 1 below provides the weighted average transportation cost per MMBtu by fiscal year. The weighted average variable transportation rate averages 5.31¢ per MMBtu over all fiscal years. See Transport WP for the calculation. The gas price used for the relevant month at the Henry Hub (the location for NYMEX futures delivery) is the price on September 15, 1999 for that month (or September 14, 1999 if there are no trades for a given month on that date) up to September 2002. For all remaining months, I use $3 per MMBtu.

Table 1 also shows the difference by fiscal year under the heading "Net." All are negative numbers. That means that for every fiscal year, buying gas in the field and transporting it to the citygate was cheaper than buying at the citygate price.

Table 1

Transport costs and basis per MMBtu by fiscal year

Fiscal Year	Weighted Average Transport Cost	Weighted Average Basis	Net
1999	xxxx¢	xxxxx¢	— xxxx¢
2000	Xxxx¢	xxxxx¢	— xxxx¢
2001	xxxx¢	xxxxx¢	— xxxx¢
2002	Xxxx¢	xxxxx¢	— xxxx¢
2003	xxxx¢	xxxxx¢	— xxxx¢
Sources: Exhibit 3.12			

My approach makes the basis-transport comparison appear more favorable for the Company than a complete modeling might suggest, because one expects price differentials to be positively correlated with gas prices. When gas prices are higher, the cost to transport gas to the citygate increases. This increase, in turn, raises the basis between the field and citygate. A full evaluation of the GPAA's cost should take this phenomenon into account. I do not account for this effect, so the comparison between the Henry Hub to Chicago and Ventura to Chicago basis and the variable transportation cost is more favorable to the Company as the price of gas rises.

Q: What is your conclusion with respect to the variable transport-basis comparison?

A: I estimate that this aspect of the GPAA is responsible for an increase in expected gas costs. See Exhibit 3.11 for the annual calculations.

(3) Foregone demand credits.

Q: Should an evaluation of the GPAA take lost demand credit revenues into account?

A: Yes. Demand credit transactions enable an LDC, such as Peoples Gas, to use its excess transportation capacity to offset pipeline capacity costs. The LDC buys gas from a trader in one location and resells it to the same (or perhaps another) trader in another location for a margin. When the margin exceeds variable cost (commodity transportation plus fuel), the extra amount is flowed through the PGA to offset demand costs. But, by signing the GPAA, Peoples Gas surrendered the ability to engage in demand credit transactions on the capacity given up to Enron. The Company also yielded to Enron its ability to release capacity to other parties. This value needs to be assessed to fully gauge the cost of gas under the GPAA.

Q: Did Peoples Gas estimate the amount of foregone demand credits?

A: No. In his Additional Direct Testimony and in discovery, Peoples Gas witness Wear states that the Company did not estimate the foregone demand credits. He further asserts that these credits cannot be estimated.[15] In his Additional Direct Testimony, Mr. Wear estimated that the basis decreases by a penny per year, "[w]hen one looks at the various supply basins in aggregate." (lines 171 -172). But that estimate does not indicate the initial amount given up by Peoples Gas. It merely asserts that, absent the GPAA, the Company would get $xxxxxxx (line 179) less revenue to offset transportation demand charges.

Q: How does Staff estimate the expected value of the lost demand credits?

A: I examine evidence for the potential decrease in profitable off-system sales. I begin by examining the off-system transactions during fiscal year 1999 (before Peoples Gas signed the GPAA). According to Mr. Wear's Additional Direct at line 173, the basis will fall by a penny per year. For each off-system sale, I calculate the margin including transportation costs. For each additional fiscal year after 1999, I subtract one more cent from that margin and calculate the positive net revenues for those transactions. This provides the possible demand credits for all off-system transactions. Using the pipeline capacities that Peoples Gas released to Enron, I pro-rate the total demand credits possible between those lost due to the GPAA and retained by Peoples Gas. This approach provides an estimate of Peoples Gas' lost demand credits due to signing the GPAA. These calculations are shown in the workpapers 'PGL FY99' and 'off-syst FY99'.

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[15] See Company's response to POL 1.11, "Respondent has not prepared an estimate of the value of demand credits that Respondent would have received had the Gas Purchase and Agency Agreement (GPAA) with Enron North America not been in effect, nor would it be feasible to prepare such an estimate give the many unpredictable factors that affect the types of transactions that generate demand credits."

Q: What is Staff's estimate of the expected value of the lost demand credits?

A: I estimate demand credits of $xxxxxxxxx for fiscal year 1999. And the estimates for lost demand credits for the GPAA term vary from (minus) $xxxxxxxxx in fiscal year 2000 to (minus) $xxxxxxx for fiscal year 2004. Those estimates are in Table 2 below.

(4) Repricing terms.

Q: What are the elements in the GPAA that reprice volumes?

A: There are three elements in the GPAA that allow Enron to reprice volumes sold to Peoples Gas during the Winter Period from the xxx to the xx. One is the BLPA, which is explained in Article 1.4. The Flexible Pricing terms are Articles 4.2b and 4.2c. All three elements are detailed above.

Q: Did Peoples Gas invoke any of the repricing terms during fiscal year 2001?

A: No. For the BLPA, see the Company's response to POL 1.10

> ENA [Enron] did not elect the use of the "Baseload Price Adjustment" provision during the reconciliation period. As with other terms and conditions in the agreement, the "Baseload Price Adjustment" provision was part of the negotiation process. By agreeing to the provision Respondent obtained a discount of $xxxx rather than $xxxx on all Baseload and SIQ quantities purchased under the agreement.

For Articles 4.2b or 4.2c, see the Company's response to POL 1.9, "ENA [Enron] did not request that either pricing provision be implemented, and they expired before the reconciliation year that is the subject of this proceeding." However, an *a priori* analysis must nonetheless evaluate this element of the contract. Again, these terms are in the contract and *a priori* affected the price of gas in the contract.

Q: Why didn't Enron invoke the BLPA during fiscal year 2001?

A: That is unclear to Staff. During the month of December 2000, Enron appears to have left millions of dollars on the table by not invoking the BLPA. Peoples Gas response to POL 1.50 states "The Company did not offer any incentives to ENA [Enron] to deter it from implementing the Baseload Pricing Adjustment during the reconciliation period, since it is at ENA's discretion."

Q: Explain your analysis of the repricing terms.

A: The BLPA allows Enron to alter the price of some amount of baseload volumes from xx to xxx. In its response to POL 1.49, Peoples Gas asserts that the BLPA does not raise gas costs.

> In order for the Baseload Price Adjustment to result in higher gas cost, the Seller would need to exercise its right to change the price from the first of month index to the daily index on days when then [sic] daily index is the greater of the two. Since the daily index is not known at the time that election takes place, it is impossible to assert that it will result, or would have resulted, in higher gas costs.

While Enron does not know the daily price for the relevant day by the deadline for nominating the BLPA (as well as the provisions in Article 4.2b and 4.2c), Enron had little difficulty nominating SIQ in essentially the same time frame under essentially the same criteria (except that it apparently wanted to nominate the maximum SIQ amount when xx was less than xxx). While exact prices may not be precisely known at the time of nomination, there are many instances when the relative values of the daily and monthly prices were obvious. As an example, Enron mandated the maximum SIQ when xx was less than xxx and the minimum when xxx was less than xx on 95% of the days during the reconciliation period. Thus, Enron should have been highly confident that it could easily make this same sort of decision when faced with a similar lag in other circumstances.

Q: How did you develop your estimate for the cost of the repricing terms?

A: I calculated the percentage of the time xx was higher than xxx by using the data from the Winter Periods during FY1997-FY1999. I also computed the average differential between xxx and xx when xx was higher during the same period. The expected monthly value of the BLPA is then xxxxxx MMBtus times the percentage of the time that xx was higher than xxx times the average differential times the number of days in the month. Similarly for Article 4.2b and 4.2c, I substituted xxxxxx MMBtus and xxxxxx MMBtus respectively into the calculations.

Q: What is the expected value of the repricing terms?

A: The estimated probability that xx exceeds xxx is approximately 41%. The average price differential conditional on the daily price exceeding the monthly price is $0.2154. Therefore, the BLPA is worth $xxxxxxx per year (xxxxxx times 41% times $0.2154 times 121 days). Article 4.2b has an expected annual value of $xxxxxxx, while Article 4.2c has an expected valued of $xxxxxxx per year.[16] On a per MMBtu basis, all three terms together are worth from xxxx¢ to xxxx¢ depending on the fiscal year (see Exhibit 3.06).

(5) Resale penalty.

Q: Please explain the resale provision.

A: The re-purchase provision (Article 4.1e of the GPAA) "allows" Peoples Gas to return up to xxxxxxx MMBtus back to Enron at daily citygate prices minus a penalty. The penalty's magnitude depends on two factors: (1) how timely Peoples Gas is at nominating the resale (the later the nomination, the larger the penalty), and (2) the amount of the resale (the larger the quantity being

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[16] For the first fiscal year of the contract, the amount is smaller, since Article 4.2c doesn't become effective until January 1, 2000.

resold, the larger the penalty). The penalty ranges from xxxxxxxxxxx to xxx xxxxx per MMBtu.

Q: Why does Peoples Gas claim this GPAA feature as a benefit?

A: The resale provision affords Peoples Gas the opportunity to sell unneeded gas back to Enron. Peoples Gas touts this feature as a benefit, since it provides a guaranteed outlet for excess gas (up to xxxxxx MMBtus per day). However, the very existence of the resale provision might indicate that the Company expected to have to purchase significant excess supplies under the GPAA. I note again that before it entered into the GPAA almost all off-system sales by Peoples Gas sales generated a positive margin. Thus, while an LDC may anticipate accidentally and unavoidably purchasing excess supplies in the normal course of its business, Peoples Gas apparently had little difficulty disposing of these supplies at prevailing market prices prior to the GPAA. Peoples Gas does not estimate the value of the resale benefit, but simply claims it as another element of the contract.

The Company made no serious attempt to demonstrate that GPAA Article 4.1e was superior to its own efforts to market excess supplies. And it did not show that the penalty structure improved upon its opportunities under the GPAA. That is, the Company provides no evidence that it investigated whether it would do better self-marketing the gas rather than surrendering the gas back to Enron.

Q: When did People Gas generally invoke the resale provision of the GPAA?

A: Resales occurred most often when Enron had already forced Peoples Gas to purchase the maximum amount under the SIQ component of the contract. Only xxx% of re-sales during the Summer Period[17] were made on days that the maximum (or near maximum) SIQ was <u>not</u> chosen by Enron. Further, Peoples Gas made re-sales back to Enron on xxxx% of the days that Enron forced Peoples Gas to buy the maximum (or near maximum) SIQ. Thus, on days when Enron opted for the maximum SIQ, it almost always forced Peoples Gas to buy more gas than the Company could use.

Q: Does Staff agree that the resale provision is a benefit?

A: No. When Peoples Gas has excess gas supply, it must either market the gas itself or return it back to Enron. When the Company chooses to invoke the resale term of the GPAA, it does so at terms that ensure a loss for Peoples Gas compared to the average conditions existing in the market at the time. The resale provision cannot be considered a benefit bestowed by the GPAA. Rather, it is a result largely engendered by the SIQ provision of the GPAA that forces Peoples Gas to buy volumes that it does not need and cannot otherwise dispose of.

Q: Did you develop expected re-sale volumes?

A: I estimate this particular quantity by assuming a relationship between incremental SIQs and re-sales. A detailed model for that relationship would take the interaction of unknown demand with the SIQ, baseload and any other purchases (non-GPAA) that the Company may be making along with the interactions between prices and these quantities.

However, sufficient information to derive such a model is not currently available. Instead I assume that re-sales are a fixed percentage of incremental SIQs. In this particular case, I arbitrarily assume xxxxxx MMBtus is resold on average from the incremental xxxxxx MMBtus.

Q: What is the estimate for the re-sale penalty per MMBtu?

A: I chose 1¢ per MMBtu as the average penalty.

[17] When the SIQ provision applies.

Q: What is the estimate for total re-sale penalties?

A: I estimate that this term is raised gas costs by $xxxxxx per year.

(6) Avoided demand charges.

Q: How does Peoples Gas characterize the benefits from the GPAA for its gas portfolio?

A: According to Mr. Wear's testimony, the DIQ element of the GPAA enabled Peoples Gas to buy "swing" gas with no reservation charges.[18] That is, LDC's typically pay demand charges for swing gas. Absent the GPAA, under this thinking, the demand charges rise and add to costs. Mr. Wear estimates that this aspect of the GPAA is worth $xxxxxxx for the reconciliation period.[19] I adopt this estimate for my GPAA evaluation.

(7) SIQ option.

Q: Please explain the background information you considered in this aspect of your evaluation.

A: The contract enabled Enron to force Peoples Gas to purchase maximum SIQ volumes only when xx was less than xxx. In fact, that is precisely what occurred, except in only x out of the xxx days during the fiscal year's Summer Period. Hence, Enron seldom missed picking the right days for maximizing the SIQ.

In effect, the GPAA granted Enron guaranteed arbitrage opportunities, which it exercised at Peoples Gas' expense. Furthermore, Peoples Gas should have anticipated that this arbitrage would occur, since it was such an obvious implication of the GPAA.

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[18] See Mr. Wear's Additional Direct Testimony at lines 350-366.

[19] Line 366. He calculates this by estimating the demand charge at xxx¢ per MMBtu times the available DIQ under the GPAA.

Q: How did you estimate expected increased gas costs caused by this provision?

A: Using the fiscal years 1997-1999, I calculated the percentage of days during the Summer Period (April through November) for which xx was below xxx. I also calculated the average differential on those days. Therefore, the value of the SIQ provision by month is the average percentage of days for which xx is less than xxx (xx%) times the average differential on those days (xx¢) times xxxxxx MMBtus times the number of days in the month.

Q: What is your estimate for the expected increase in gas costs caused by SIQ provision?

A: The value generated by this term is (minus) $xxxxxxxxx per year for all years during the GPAA's term. The calculation is constant over the GPAA's term since the same parameters are used for the entire contract term.

(8) Summary.

Q: Please summarize the results of your forward-looking evaluation of the GPAA.

A: In the table below, I present the results from my calculations. A positive number represents a savings to ratepayers due to the GPAA. That is, a positive number is the lower gas costs due to the GPAA. On the other hand a negative number means that the GPAA would increase costs. It implies that costs would be higher under the GPAA than not.

Table 2

Expected cost savings due to the GPAA

FY	Discount	Transport – Basis	Repricing Terms	Foregone Demand Credits	SIQ Option	Avoided Demand Charges	Resale Penalty	Total
2000	xxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxx x	xxxxxxxxxxx x	xxxxxxxxxxx x	xxxxxxxx	xxxxxxxxx	xxxxxxxxxxx x
2001	xxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxx x	xxxxxxxxxx	xxxxxxxxxxx x	xxxxxxxx	xxxxxxxxx	xxxxxxxxxxx x
2002	xxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxx	xxxxxxxxx	xxxxxxxxxxx