Exhibit No.:

Issue: ACA Recovery Method

Witness: Lewis

Exhibit: Direct Testimony

Sponsoring Party: Associated Natural Gas
Case No.: GR-97-191

ASSOCIATED NATURAL GAS A DIVISION OF ARKANSAS WESTERN GAS COMPANY CASE NO. GR-97-191

DIRECT TESTIMONY

OF

BRADLEY R. LEWIS

	_Exhibit No	1
Oate ±₩5 5	-99 Case No.	GR97-191
Reporter <u>M</u>	(a)	

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1		Introduction
2	Q.	Please state your name and current business address.
3	A.	My name is Bradley R. Lewis and my current business address is 11524 Hemlock,
4		Overland Park, Kansas 66210.
5 6	Q.	What is your present occupation?
7	A.	I am an independent utility consultant.
8		
9	Q.	What is your educational background?
10	A.	I have a Bachelor's degree in Business Administration and a Master's degree in
11		economics from the University of Missouri.
12		
13	Q.	What experience have you had in the public utility field?
14	A.	I have 24 years of utility experience. I have participated in numerous electric and
15		gas regulatory proceedings and have presented expert testimony in several state
16		and federal jurisdictions. I have held senior management positions in the areas of
17		utility regulation, finance, and marketing. I worked for the Missouri Public
18		Service Commission from 1975 to 1977, the utility consulting firms of Drees
19		Dunn Lubow & Company, Lubow, McKay, Stevens, & Lewis, and Hagler Bailly
20		from 1978 to 1988, and UtiliCorp United and EnergyOne LLC from 1989 to
21		1998.

Q. Have you previously participated in proceedings similar to this case involving 1 Associated Natural Gas (ANG)? 2 Yes. I have prepared testimony and exhibits and served as a witness in regulatory 3 A. proceedings before the Missouri Public Service Commission ("the Commission"). 4 5 I participated in and testified on behalf of ANG in its retail rate filings in both Arkansas and Missouri when I worked for a consulting firm. I have been 6 involved with similar filings by other utility companies in Missouri and other 7 8 states.

1 Purpose

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Q. What do you understand to be the purpose of this proceeding? This is an Actual Cost Adjustment (ACA) case for ANG covering a twelve month A. period in 1996 and 1997, ending August 31, 1997. In an ACA proceeding, the Staff and the affected gas company reconcile "gas costs" with "gas revenues" for an historic twelve-month period. The overall purpose is to allow the gas company to recover, on a dollar for dollar basis, the prudently-incurred cost it incurred in purchasing and delivering natural gas to its customers. The ACA process is essentially a "true-up" type of process where revenues are compared to costs. If revenues are found to have exceeded costs, a refund amount is passed back to ratepayers by adjusting a component of the rate. If revenues have been less than costs, a "make-up" rate is billed in the same manner. Gas costs typically involve the cost of the natural gas itself plus related transportation and, if applicable, storage costs. Gas costs do not involve things such as the cost of salaries, trucks, pipes, office buildings, and other expenses of running the business. Those nongas costs are set in general rate cases and collected through what is generally referred to as "base rates." While ACA rates typically are adjusted on a yearly basis, base rates only change as a result of general rate cases, which are on no set schedule. It is important to recognize throughout that the gas company makes no profit on "gas costs" in this situation. The Company is subject, however, to having some of those gas costs disallowed if the Commission determines they

1		nave been imprudently incurred by the gas company. In this case, I am not aware
2		of any imprudence being alleged.
3		
4	Q.	What is the purpose of your direct testimony?
5	A.	I will be presenting direct testimony for ANG regarding an adjustment Staff
6		proposed in its memorandum filed August 3, 1998, titled "Staff's
7		recommendation in Associated Natural Gas Company's 1996-1997 Actual Cost
8		Adjustment Filing." Basically, Staff is recommending disallowance of \$382,162
9		in NGPL non-S2 and LNG storage withdrawal costs, alleging the withdrawal
10		costs have been previously recovered through the operation of the purchased gas
11		adjustment tariff in effect prior to July 1982. In summary, I disagree with the
12		Staff's conclusions and will be explaining why those conclusions lack a factual
13		basis and are contrary to widely held notions of gas rate making in this state.

Q.

Overview of LNG and NGPL Non-S2 Storage Gas

Before you begin to address the specific issues in this proceeding, could you

A. As is the case with many natural gas distribution companies, ANG has a greater demand for gas from its customers during the winter season due to heating needs.

ANG meets these needs by purchasing "flowing gas" which is gas that comes directly from gas wells or gas marketers as needed, and "storage gas" which is gas that ANG has stored at other times of the year so it can be withdrawn at times when it is needed.

ANG maintains gas storage capability to ensure that gas will be available during the winter and as a means of providing gas during the winter at a lower cost than if ANG sought to buy the gas at the same time it was needed. Therefore, ANG generally injects gas into storage during the times of the year when gas prices are typically lower due to lack of demand, and withdraws "storage gas" during the winter months when market prices for gas are typically higher, thereby providing a lower cost for the gas to its customers.

Interstate pipelines connected to ANG's system maintain storage facilities of their own. One of these pipelines is Natural Gas Pipeline Company of America (NGPL). ANG has multiple storage services under contract with NGPL, and each has a name such as "S2." At issue in this case is gas stored via the NGPL services other than S2; gas stored via these other services is termed "NGPL non-S2."

1	ANG operates a liquefied natural gas storage facility to meet part of its
2	peak needs. Before injections can be made into the LNG facility, ANG must
3	acquire and transport gas to the facility for liquefaction. As gas is needed to meet
4	peaking requirements, ANG withdraws gas from storage, transforms the liquid
5	natural gas back to a gaseous state, and then pumps the gas into ANG's
6	transmission system.

1		Summary of Staff Adjustment
2	Q.	Please explain the change in ACA gas cost accounting methodology implemented
3		by ANG on December 1, 1995.
4	A.	The Staff addressed this issue in the prepared direct testimony of Michael J.
5		Wallis in Case No. GR-96-227 where he stated the following:
6 7 8 9 10 11 12 13 14 15		"On December 1, 1995, ANG changed its Actual Cost Adjustment (ACA) recovery methodology with regard to Liquefied Natural Gas (LNG) storage and Natural Gas Pipeline Company (NGPL) non-S2 storage by showing both the injections and withdrawals of gas as separate components in its ACA filing. Prior to December 1, 1995 ANG did not reflect the LNG and NGPL non-S2 storage injections or storage withdrawals as separate components of the ACA filing, but instead ANG accounted for the storage injections and storage withdrawals as part of the invoiced flowing supplies in the months in which the gas was purchased by ANG."
16	Q.	Who recommended this change in gas cost accounting methodology?
17	A.	The Staff did. In Case No. GR-93-169, the first recommendation of the Staff was
18		"the Company to adjust gas costs in future ACA filings to account for storage
19		injections and withdrawals on the NGPL system." The Staff expanded on this
20		recommendation in this same memorandum by stating, "The Staff believes a more
21		accurate matching of the customers' usage and the cost of that usage would be
22		achieved if the Company would adjust gas costs for injections and withdrawals on
23		NGPL's system. This would also achieve consistency with the adjustments that
24		are made for ANG's storage transactions on the TETC, ANR, and PEPL pipeline

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systems." I think it is important to point out that the Staff did not say anything

I		about a claim of "double recovery" if such a change were to be made by following
2		the Staff recommendation.
3		
4	Q.	What impact will this change in accounting for the determination of the actual
5		annual cost of purchased gas consumed by jurisdictional customers recovered
6		through the ACA have on ANG's Missouri jurisdictional customers?
7	A.	In the long term, changing from the cost of gas "purchased" to the cost of gas
8		"consumed" method will have a negligible impact on the amount of ACA
9		revenues ultimately collected from ANG's Missouri jurisdictional customers.
10		However, in the short term, application of this new method should provide a
11		better match of current revenues and expenses on a monthly and annual basis.
12		
13	Q.	How does Staff describe the adjustment at issue?
14	A.	In its summary, Staff stated the following:
15 16 17 18 19 20 21 22 23 24 25 26		"On December 1, 1995, ANG changed its ACA recovery methodology with regard to Liquefied Natural Gas (LNG) storage and Natural Gas Pipeline Company (NGPL) non-S2 storage by showing both the injections and withdrawals of gas as separate components in its ACA filing. Prior to December 1, 1995, ANG did not reflect the LNG and NGPL non-S2 storage injections or storage withdrawals as separate components of the ACA filing, but instead ANG accounted for the storage injections and withdrawals as part of the invoiced flowing supplies in the months in which the gas was purchased by ANG." "Staff agrees with ANG's decision to change its ACA recovery methodology with regard to LNG and NGPL non-S2 storage. However, Staff believes that ANG's approach of changing its storage recovery methodology over a one month period (which ignores the fact that the only storage withdrawals that should be shown in
27		the filing are those associated with gas supplies injected into storage after

1 December 1, 1995) results in ANG receiving a double recovery of all LNG and NGPL non-S2 gas withdrawn from storage." 2 3 What is your understanding of the impact of the Staff's adjustment in this case? 4 Q. 5 I have prepared and attached a document marked as Schedule BRL-1 that A. 6 provides an overview of the context of this proceeding. For the ACA year ended August 31, 1997, ANG delivered approximately \$16,740,000 of purchased gas to 7 8 its jurisdictional customers in Southeast Missouri and collected approximately 9 \$16,785,000 in base rate and PGA gas revenues from those customers. After 10 reducing the ACA approximately \$25,000 for prior period adjustments and adding the net prior year ACA credit balance remaining of \$250,000, the final proposed 11 12 ACA balance for Southeast Missouri prepared by ANG is a credit of \$319,364, meaning that ANG believes that it collected in revenue \$319,364 more than its 13 14 costs, and that that difference should be flowed back to ratepayers through the 15 ACA refund process. The Staff's proposed adjustment, however, effectively 16 recommends that an additional \$382,162 be refunded to ANG's Missouri 17 jurisdictional customers. 18 19 Has the Staff previously proposed any similar adjustments? Q. 20 Yes. As shown on Schedule BRL-1, in Case No. GR-96-227 the Staff made a A. 21 similar adjustment for \$254,476. In that proceeding, the Staff estimated that if the 22 Commission upheld its position in Case No. GR-96-227, an additional estimated

1		\$409,000 would be disallowed in future ACA cases. The Staff summarized its
2		final position on this issue in the prepared surrebuttal testimony of Staff witness
3		Michael J. Wallis as follows:
4		"It is the Staff's position that the disallowed storage withdrawal amount
5		(\$254,476) has been double-recovered by ANG in its 1995/1996 ACA filing. The
6		Company has already recovered this storage withdrawal amount as a result of its
7		use (both before and after July 8, 1982) of an up-front storage recovery
8		methodology which allows ANG to recover its storage withdrawal costs as
9		volumes are injected into storage."
10		"As I indicated in my rebuttal testimony, Staff is concerned that prior to
11		July 8, 1982 (the date when ANG began recovering its procurement gas costs
12		through the ACA true-up mechanism), ANG recovered approximately \$663,000
13		(ANG's total-company amount is \$835,859) of Missouri allocated storage
14		withdrawal costs in an up-front fashion by charging its Missouri customers a
15		tariffed estimated Purchased Gas Adjustment (PGA) rate (approved by the
16		Commission) which was based on a determination of the Company's average cost
17		of gas by using the most recent supplier invoices (including gas supplies injected
18		into storage)."
19		"Thus, despite the NGPL non-S2 and LNG storage balance of \$835,859
20		which Mr. Kidd claims (throughout his rebuttal testimony) was unrecovered (per
21		ANG's books) as of September 1, 1982 and of which amount \$827,927 allegedly
22		remained unrecovered (per ANG's books) as of November 30, 1995 the Company
23		by following its pre July 8, 1982 Missouri PSC PGA tariffs has, in a previous
24		period, already recovered the entire \$835,859 balance of NGPL non-\$2 and LNG
25		storage withdrawal costs. In addition, Staff would point out that it is difficult to
26		understand how ANG could have a booked capitalized (asset) inventory balance
27		of \$835,859 as of September 1, 1982 (or \$827,927 as of November 30, 1995)
28		when the Company has always expensed its storage costs, in an up-front fashion,
29		as the gas supplies are purchased from the supplier and injected into storage."
30		
31	Q.	Did the Commission accept the Staff's adjustment?
32	A.	Yes. The Commission addressed this issue beginning on page 10 of its Report
33		and Order in Case No. GR-96-227 where it stated the following:
34		"ANG's theory is premised on the existence of a pre-existing balance of
35		gas in storage at the start of the ACA process in 1982. Staff did not attempt to

refute ANG's calculations regarding the interaction between the "as injected" and "as withdrawn" methods. Instead, Staff argued that the value of the pre-existing balance of gas in storage had already been recovered by ANG prior to the inception of the ACA process."

"As the basis for this theory, Staff cited the operation of tariff sheet 44, which was the PGA mechanism in effect for ANG for the period of June 2, 1978 to July 8, 1982. Staff argued that tariff sheet 44 allowed ANG to recover its storage withdrawal cost in an up-front fashion by charging its Missouri customers an estimated PGA rate which was based on the Company's average cost of gas determined by using the most recent supplier invoices - to compute the appropriate adjustments to its rates. Staff pointed out that tariff sheet 44 does not state that ANG was to use the most recent supplier invoices less storage injections. Therefore, ANG would have been allowed to include the value of all gas purchased, whether stored or sold, in its PGA rates."

"Staff's position is persuasive. From June 2, 1978 to July 8, 1982, tariff sheet 44 served as ANG's PGA Clause for the SEMO District and it controlled ANG's recovery treatment of storage injection and withdrawal costs during that period. As of July 8, 1982, the date tariff sheet 44 was canceled, ANG had fully recovered its storage costs incurred up to that date. In order to understand the fact of this recovery, it is important to understand that tariff sheet 44 operated in a pre-FERC Order 636 environment in which all components of gas supply and service were provided by the pipeline and appeared on the pipeline invoices."

"Before the Federal Energy Regulatory Commission (FERC) issued Order 636, interstate natural gas pipeline companies provided local distribution companies with a bundled gas supply, transportation and storage. FERC Order 636 required interstate natural gas pipelines to unbundle their gas supply service from their transportation and storage services. Prior to FERC Order 636, components of gas supply service included fixed and variable storage charges, fixed and variable transportation charges and all gas supply costs, irrespective of whether that gas supply flowed directly to the city gate or was injected into storage. Thus, fixed and variable storage charges would have been included on pipeline supplier invoices in the pre-Order 636 environment in which tariff sheet 44 operated. When ANG changed its recovery mechanism for LNG and NGPL non-S2 gas on July 8, 1982, it had already recovered the gas cost associated with those volumes injected into storage prior to that date. To allow it to recover those costs again when the gas was removed from storage after December 1, 1995 would indeed result in double recovery."

Q. If all of the Staff's assumptions in GR-96-227 and this case are correct, do you

have an opinion as to what that might mean as an overall impact on ratepayers?

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1 Yes. As I said before, Staff essentially asserts that ANG has already collected all Α. of the \$827,927 storage gas balance as of November 30, 1995 (Missouri 2 3 jurisdictional amount of approximately \$660,000) from its ratepayers and that by changing gas cost accounting methodology, ANG effectively will receive double 4 5 recovery on all gas withdrawn from storage. If one accepted that all of the Staff's astonishing assumptions were correct. 6 7 the Staff's estimate of the impact on ratepayers is grossly understated and 8 inaccurate. Storage gas has been a component of ANG's jurisdictional rate base 9 since at least 1978. Assuming a fair return on approximately \$650,000 of 10 jurisdictional rate base and allowing for income taxes, ANG's annual rates for 11 Southeast Missouri have been increased approximately \$100,000. Therefore, if the Staff is correct, and scores of regulatory and utility experts are wrong, ANG 12 13 has over-collected well over \$1,000,000 in base rates. 14 15 How accurate do you believe your \$1,000,000 figure to be? Q. 16 It's a conservative estimate. The \$650,000 estimate of storage gas represents a Α. seasonal low balance. The average investment in storage gas included in rate base 17 18 would be higher. In addition, it is likely that recovery of storage gas in rate base began prior to 1978. 19 . 20 21 Q. So are you recommending that ANG refund \$1,000,000 to ratepayers?

1 A. Absolutely not. I'm trying to point out that I find it very hard to believe that all of 2 the people over all of the years that have looked at this topic in ANG rate cases 3 and ACA filings could have overlooked something of this magnitude. The fact 4 that it is only being brought up as an issue these many years later should cause the Commission to view the accuracy of the Staff's assertion with great skepticism. 5 6 7 Do you believe the Staff's assumptions have implications regarding rates paid by Q. 8 other customers of other gas companies? 9 Yes. The Staff's assumptions regarding the operation of tariff sheet 44 would A. 10 apply to the use of "standard" PGA's by numerous gas utilities in the 1960's. 11 1970's, and 1980's in Missouri and throughout the country. Therefore, if the 12 Commission believes the Staff is correct and endorses its theory, the net logical 13 result is that hundreds -- perhaps thousands -- of regulatory and utility experts 14 nationwide will be declared to have been wrong and numerous gas utilities have 15 been deemed to have over-collected tens of millions of dollars, perhaps hundreds 16 of millions of dollars, over the last 30 years. I will provide a detailed description 17 of "standard" purchase gas adjustments later in my pre-filed testimony. 18 19 Why are you stressing that is it important to understand the true impact of the Q. 20 Staff's recommendations?

1	A.	The Staff has turned back the clock 17 years to 1982 and developed some
2		astonishing and unsupported assumptions about the Pre-July 1982 PGA. These
3		assumptions contradict the recommendations and assumptions of all parties that
4		participated in the ratemaking process of that era and imply that significant errors
5		were made in calculating gas rates by many people directly involved in the
6		process. It is important to gain an appreciation of the relative magnitude of the
7		true impact of these astonishing assumptions prior to discussing the specific
8		issues associated with this proceeding. Also, because Staff's position is directly
9		counter to precedent, it clearly suggests that Staff cannot meets its burden by
10		reading the tariff and leaving ANG's arguments unrefuted.

1		Overview of ANG's Position
2	Q.	In the Report and Order in Case No. GR-96-227 you just quoted, the Commission
3		stated that "ANG's theory is premised on the existence of a pre-existing balance
4		of gas in storage at the start of the ACA process in 1982." What is ANG's
5		position, as reflected by your direct testimony, premised on in this proceeding?
6	A.	ANG's position that it has a recoverable gas inventory balance is based upon the
7		following:
8		A general understanding of the objectives and operation of purchase gas
9		adjustment mechanisms
10		Familiarity with the specific operation of the Pre-July 1982 PGA
11		Transition from Pre July 1982 PGA to ACA
12		Reports and recommendations of numerous utility experts
13		Monthly PGA computations required to comply with Pre July 1982 PGA
14		Previous General Rate Proceedings
15		Familiarity with other purchase gas adjustment and fuel adjustment
16		proceedings
17		
18	Q.	Based on your experience with PGAs in general, and ANG's in particular, do you
19		think that the Staff's theory "that the value of the pre-existing balance of gas in
20		storage had already been recovered by ANG prior to the inception of the ACA
21		process" is valid and supported by any facts or evidence?

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- 1 Α. No. This conclusion is based on the following review:
- 2 Purpose of ANG Purchase Gas Adjustments - The Pre July 1982 PGA 3 was designed to provide an opportunity for ANG to recover the actual annual cost of purchased gas consumed by jurisdictional customers. This 4 5 gas recovery rate mechanism was never intended to allow the recovery of storage gas (gas in inventory) which had not yet been consumed by 6 7 jurisdictional customers.
- Application of ANG Purchase Gas Adjustments A review of the 9 application of the Pre July 1982 PGA for the period of October 1970 10 through July 1982 indicates that as was intended, ANG has been allowed to recover an amount of base and PGA revenues which approximates the 12 actual annual cost of purchased gas consumed by jurisdictional customers. During this period, ANG did not recover storage gas not yet consumed by 13 14 jurisdictional customers.
 - Determination of ANG Base Rates The Staff's claim that storage gas was previously recovered through the application of the Pre July 1982 PGA tariff directly contradicts recommendations made by the Commission Staff, the Commission, and ANG in numerous general rate proceedings.
 - Other Independent Reviews Financial statements, Securities and Exchange Commission data submittals, regulatory filings, Commission orders, presentations to financial analysts, and accounting records

1		produced and reviewed by scores of regulatory and utility industry experts
2		from the Commission Staff, ANG, and independent agencies over the last
3		twenty years contradict the Staff's assertion that the investment in storage
4		gas has already been recovered through the PGA.
5		• Fallacy of Key Staff Assumption – Staff's implication that jurisdictional
6		customers have paid for more gas than they have consumed is unsupported
7		and totally inaccurate.
8		Retroactive Ratemaking - Staff's proposed adjustment should not be
9		approved because it represents an inappropriate retroactive ratemaking
10		adjustment.
11		
12	Q.	Does ANG agree with Staff's recommendation to disallow \$382,162 of NGPL
13		non-S2 and LNG gas inventory costs?
14	A.	No. A careful and thorough analysis of the key issues in this proceeding
15		overwhelmingly indicates that Staff has a total misunderstanding of the pre July
16		1982 PGA recovery process which forms the basis for Staff's recommendation.
17		
18	Q.	Do you agree with Staff's recommended \$254,476 negative adjustment
19		recommended in Case No. GR-96-227 for 1995/1996 ACA year?
20	A.	No. Staff's reasoning for recommending the adjustment of the \$254,476 is the
21		same as that used to recommend the adjustment of \$382,162 in this proceeding.

As I will demonstrate, the reasoning supporting the adjustment of \$382,162 is totally inaccurate and based upon a complete misunderstanding of the gas cost recovery process prior to July 1982. Therefore, since the Staff used the same misguided logic to recommend the adjustment of \$254,476, I can not agree with their prior recommendation.

ANG indicated in GR-96-227 (case for the 1995/96 ACA audit which is currently on appeal) that the impact of the gas inventory accounting change made it necessary to address the recovery of gas storage costs that occurred after the ACA process began in July 1982. To reflect the impact of the accounting change, the gas costs for the 1995/96 ACA year should be increased by \$19,522 and reduced by \$55,159 in the 1996/97 ACA year. The net of these two adjustments, a \$35,637 reduction in gas costs, is the appropriate adjustment rather than adjustments proposed by Staff.

16 Q. The Report and Order in Case No. GR-96-227 stated "....To allow it [ANG] to
17 recover those costs again when the gas was removed from storage after December
18 1, 1995 would indeed result in double recovery." If the Commission rejects the
19 Staff's adjustment in this proceeding, will this decision result in double recovery

of storage gas costs by ANG?

1	A.	No. Because, as I will demonstrate ANG never recovered the gas held inventory
2		by operation of the pre July PGA 1982 as alleged by Staff; therefore, there can be
3		no "double recovery".
4		
5	Q.	Can you provide an outline of the organization of the remainder of your direct
6		testimony?
7	A.	My direct testimony is organized into the following topics:
8		Purpose of ANG Purchase Gas Adjustments
9		Application of ANG Purchase Gas Adjustments
10		Determination of ANG Base Tariff Rates
11		Other Independent Reviews
12		• Fallacy of Key Staff Assumptions
13		Retroactive Ratemaking
14		• FERC Order 636

1		rurpose of ANG rurchase Gas Adjustments
2	Q.	Why is it important to discuss the origin and objectives of ANG's purchase gas
3		adjustments?
4	A.	From my reading of what the Staff presented in Case No. GR-96-227, the Staff
5		did not demonstrate an understanding of the purpose and operation of the Pre-
6		July 1982 PGA, and this misconception apparently has carried over into this case.
7		
8	Q.	Are you familiar with ANG's purchase gas adjustments?
9	A.	Yes. During the period of 1978 to 1986, I provided consulting services to ANG.
10		My responsibilities included the preparation of the majority of ANG's general rate
11		filings before the Arkansas and Missouri Commissions. During the course of this
12		work, I frequently reviewed ANG's PGA filings and monthly PGA rate
13		calculations and was very familiar with the operation of both the Pre July 1982
14		PGA and the ACA. Recently, I have refreshed my memory by reviewing
15		currently available documentation.
16		
17	Q.	Historically, what have purchased gas adjustments been designed to accomplish
18		for gas utilities?
19	A.	Purchase gas costs are a normal operating expense incurred by a gas company in
20		order to provide safe and reliable gas service to its jurisdictional customers. Mos
21		gas companies do not produce their own gas. They purchase it from others.

Normally, a representative level of gas cost expense would be included in base rates and collected from customers. For the years prior to the Commission approving purchased gas adjustment tariffs, when gas cost expense levels changed, the only option a company had was filing a rate case and updating the level of current expense recovered.

However, because purchased gas expense represented such a material portion of total operating expenses and was subject to frequent and volatile price increases, it was not practical to follow normal ratemaking procedures through a general rate case, which could take about a year to process. A purchase gas adjustment provided an alternative ratemaking method for collecting purchase gas costs on a more timely basis and helped minimize the number of general rate cases which involve significant efforts by the company, the Staff, and the regulatory commission.

I have excerpted pertinent conclusion statements from the order in Case No. 15,139 dated September 22, 1964, concerning Missouri Natural Gas Company's application for approval of a purchased gas adjustment clause. These excerpts address the design and objectives of purchase gas adjustments.

19 "The clause is designed to cope with the increasingly frequent 20 changes in the wholesale prices for gas, which in turn have increased the 21 frequency of applications for changes in retail rates to reflect the wholesale

rate changes."

"It is clear that the wholesale price of gas is an expense that must be recovered by the company and that the fixing of such wholesale rates is a

1 matter over which the company and this commission have virtually no 2 control. Changes in wholesale rates represent changes in a very large element 3 of the company's costs and, accordingly, have a substantial effect upon the 4 results of its operations. The adverse effects upon the company and its 5 customers, as the case may be, due to the delay and expense involved in present procedures can be substantially eliminated by the operation of the 6 clause." 7 8 9 "The operation of the purchased gas adjustment clause does not affect the return of the company one way or the other. Increases or decreases 10 in wholesale gas cost are simply offset by corresponding increases in retail 11 12 rates." 13 Was it an absolute necessity for regulatory commissions to implement purchase 14 Q. 15 gas adjustments? Theoretically, no. However, from a practical standpoint, it was not feasible to 16 A. 17 subject all parties to constant preparation and review of general rate proceedings. 18 What are or were the major purposes of a purchase gas adjustment? 19 Q. 20 Most state jurisdictions at one time had purchased gas adjustments. Almost all of A. 21 these purchased gas rate mechanisms had some administrative and structural differences but they shared the primary purpose of providing a reasonable 22 23 opportunity for the timely collection of the current actual annual cost of purchased 24 gas consumed by jurisdictional customers. Other purposes are as follows: Proper matching of revenues and expense 25 26 Appropriate documentation of actual purchase gas costs 27 Minimize the administrative burden

Were there difficulties in creating a purchase gas adjustment which appropriately 1 Q. balanced these objectives? 2 3 A. Yes. One significant difficulty was unique to the gas industry. From September through January when customer gas usage is constantly on the upturn because of 4 cold weather conditions, the actual monthly cost of purchase gas consumed by 5 jurisdictional customers far exceeds actual recoveries being accomplished through 6 7 rates. This situation exists because gas purchases, which are recorded currently for accounting purposes (current calendar month costs), are reflecting the 8 9 beginning of the new heating season while recorded revenue reflects usage primarily from the prior month due to the lag effect of cycle billing. This trend 10 11 eventually reverses itself during the period of February through May when usage is declining. This dramatic "seasonal characteristic" made it challenging to 12 effectively match revenues and expenses without creating a significant 13 14 administrative burden. 15 How was this seasonal characteristic addressed in most purchased gas 16 Q. adjustments? 17 18 The purchase gas adjustment was calculated using annual or a moving twelve A. 19 months of information. While it is very difficult to match gas purchases and consumption on a monthly basis, much fewer difficulties occur on an annual 20 21 basis.

1 Q. Are there different types of purchase gas adjustments? There are at least two common types of purchase gas adjustments: a "standard" 2 A. PGA and a "dollar tracker" PGA. 3 4 What is the objective of a "standard" PGA? 5 Q. The objective of a "standard" PGA was to provide a reasonable opportunity for 6 A. the gas utility to collect a "representative level" of the current actual annual cost 7 of purchased gas consumed by jurisdictional customers. 8 9 Please describe the operation of a "standard" PGA. 10 Q. Each month the "standard" PGA would assume recovery of a fixed amount per 11 Α. unit sold-- either thousand cubic feet (MCF) or hundred cubic feet (CCF) --12 through base rates. In addition, it would apply a purchased gas adjustment to each 13 unit sold (either MCF or CCF) based on the incremental changes (both increases 14 and decreases) in the authorized current wholesale rates of gas suppliers included 15 16 in base rates. 17 Please describe what is meant by a "representative level" of the current actual 18 Q. annual cost of purchased gas consumed by jurisdictional customers. 19 Significantly, there was no "ACA" type of function in this rate mechanism. In 20 Α. other words, there was no "reconciliation" or "true-up" process as is commonly 21

used today in the ACA process to match actual gas costs with the revenues billed pursuant to PGA tariffs. Therefore, the "standard" PGA did not provide for the collection of the "exact amount" of the actual cost of purchased gas consumed, but rather provided for the application of a current PGA rate to all units of jurisdictional sales. The recovery provided by applying the current PGA rate to all units sold was the amount the utility was allowed to retain as recovery of the gas costs consumed by customers whether or not the recovery was above or below the actual gas costs incurred by the utility. This, in essence, provided the utility with the opportunity to collect a "representative level" of the current actual annual cost of purchased gas consumed by jurisdictional customers, but it had no assurance that it would collect the exact amount. Did the "standard" PGA prove to be a useful ratemaking mechanism? Yes. The "standard" PGA was most common from the late 1960's to the early 1980's. During this period the gas industry experienced rapid increases in natural gas prices. The application of the "standard" PGA allowed both gas utilities and utility commissions to minimize the frequency of general rate proceedings while

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purchased gas costs.

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providing gas utilities a reasonable opportunity to recover a representative level of

1 Q. Please describe the operation of the PGA which ANG utilized prior to the implementation of the ACA process in July 1982. 2 3 From October 1970 to July 1982, ANG had a "standard" PGA. As mentioned A. 4 earlier, this type of PGA was fundamentally different from what is in use today. 5 Each month the Commission would allow ANG to collect from its customers the 6 effect of wholesale gas supplier price increases or decreases (reflecting these rate 7 changes in ANG's billings to customers on a two month lag basis), above or 8 below that level of purchased gas which was included in the last determination of 9 base rates in a general rate case. This additional monthly billing was collected in 10 the form of a purchased gas adjustment factor appearing on the customer's bill. 11 12 What was the purpose of the Pre July 1982 PGA? Q. 13 The Pre July 1982 PGA provided for the application of a current PGA rate to all A. 14 units of jurisdictional sales. This, in combination with the level of purchased gas per MCF included in base rates, provided ANG with the opportunity over an 15 16 annual period to collect a "representative level" of the current actual annual 17 purchased gas cost consumed by jurisdictional customers. However, the Pre July 18 1982 PGA did not guarantee the annual recovery of an exact amount of current 19 gas costs.

1 The Pre July 1982 PGA, like all other purchase gas adjustments, was not 2 designed to allow the recovery of the cost of storage gas which had not yet been 3 consumed by jurisdictional customers. 4 5 Q. From your reading of the material in Case No. GR-96-227, what did you observe 6 about the Staff's understanding of a "standard" PGA? 7 It is my observation that Staff witness Michael J. Wallis was confused. He A. 8 highlights this fundamental confusion in his prepared surrebuttal testimony in that proceeding where he states "... In addition, Staff would point out that it is 9 10 difficult to understand how ANG could have a booked capitalized (asset) 11 inventory balance of \$835,859 as of September 1, 1982 (or \$827,927 as of 12 November 30, 1995) when the Company has always expensed its storage costs, in an up-front fashion, as the gas supplies are purchased from the supplier and 13 14 injected into storage." The statement by Mr. Wallis that "the Company has always expensed its 15 16 storage costs" is a clear signal to me that he did not fully understand or was not 17 willing to admit the intent and practical application of the Pre July 1982 PGA. 18 The Pre July 1982 PGA did not allow the recovery of storage gas which had not 19 been consumed by jurisdictional customers. The Pre July 1982 PGA did not 20 reconcile purchase gas revenues and purchase gas "expenses." As I will discuss 21

later in my testimony, this lack of understanding led the Staff to conclusions

1		which directly contradict decades of work performed by the rest of the utility,
2		financial, and regulatory community.
3		I also found it significant that Mr. Wallis could not point to any exact tariff
4		sheet language to support his conclusions regarding gas in storage. He instead
5		said that it was "implicit" in the tariff.
6		
7	Q.	What is the purpose of a "dollar tracker" PGA?
8	A.	The objective of a "dollar tracker" PGA was to provide for the collection of an
9		"exact amount" of the current actual annual cost of purchased gas consumed by
10		jurisdictional customers.
11		
12	Q.	Did the "dollar tracker" PGA provide a better match of revenues and expenses
13		than the "standard" PGA?
14	A.	Yes. The application of a "standard" PGA rate provided the opportunity to
15		recover a representative level of purchased gas costs. Utilities could either over or
16		under recover the actual gas cost incurred because there was no matching of gas
17		cost expense with gas cost revenues. However, the "exact amount" collected
18		through the "dollar tracker" PGA could be precisely reconciled to PGA revenues.
19		
20	Q.	Please summarize your review of the purpose of ANG's Pre July 1982 PGA.

The Pre July 1982 PGA was designed to provide an opportunity for ANG to 1 A. 2 recover a "representative" level of the actual annual cost of purchased gas consumed by jurisdictional customers. The Pre July 1982 PGA proved to be an 3 effective rate mechanism from October 1970 to July 1982. The Pre July 1982 4 PGA did not provide up-recovery of the cost of gas purchased and injected into 5 6 storage (recovery before it was withdrawn from storage and consumed by ANG's 7 jurisdictional customers) as alleged by Staff. 8 In July 1982 the ACA process was implemented for ANG. The ACA provided for a better match of current revenues and expenses because it more 9 10 effectively addressed a fundamental weakness of early purchase gas adjustments 11 of not matching gas costs incurred with gas cost revenues billed to jurisdictional 12 customers. The Pre July 1982 PGA was not intended to allow the recovery of storage 13 gas which had not yet been consumed by jurisdictional customers. 14

1		Application of ANG Purchase Gas Adjustments
2	Q.	What is the purpose of this section of your direct testimony?
3	A.	In this section, I will ask the simple question: "What costs were recovered?" The
4		results of my review of the application of the Pre July 1982 PGA for the period of
5		October 1970 through July 1982 confirm both that it allowed a recovery of an
6		amount of base and PGA revenues which approximated the annual actual cost of
7		purchased gas consumed by jurisdictional customers and that it did not allow the
8		recovery of storage gas which had not yet been consumed by jurisdictional
9		customers.
10		
11	Q.	What costs were intended to be recovered by the Pre July 1982 PGA?
12	A.	As stated earlier, from October 1970 to July 1982 the Pre July 1982 PGA
13		provided for the application of a current PGA rate to all units of jurisdictional
14		sales. This, in combination with the level of purchased gas per MCF included in
15		base rates, was designed to provide ANG with the opportunity over an annual
16		period to collect a "representative level" of the current actual annual cost of
17		purchased gas consumed by jurisdictional customers.
18		
19	Q.	Please describe your review of the amounts collected through the application of

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the Pre July 1982 PGA.

1 A. The PGA mechanism effective prior to July 8, 1982, as set forth in Sheet 44, was 2 not of the exact recovery variety. While there is not documentation in ANG's 3 accounting records of the type which exists in the exact recovery environment of the ACA, on and after July 8, 1982, it is possible to understand the operation of 4 5 Sheet 44 and to reach an irrefutable conclusion about whether the inventory 6 balances in question had been recovered. My review consisted of the following: 7 8 a determination for the period of October 1970 to July 1982 of the MCF volume of gas charged a monthly PGA rate by means of the Pre July 1982 9 PGA process. 10 11 an analysis of the monthly PGA rate applied to each MCF of gas metered and billed by ANG. 12 In combination, these reviews provide irrefutable evidence that Sheet 44 13 14 did not allow the recovery of storage gas which had not yet been consumed by 15 jurisdictional customers. 16 Why have you conducted your review in this manner? 17 Q. In the simplest of terms, if the volume of gas charged a monthly PGA rate through 18 A. the Pre July 1982 PGA equals the volume of gas consumed by jurisdictional 19 20 customers, and the sum of the base rate and PGA rate reflects the price per MCF 21 of purchased gas consumed by jurisdictional customers, then it is confirmed that

1		both the application of the Fre July 1982 FGA produced a recovery of base and
2		PGA revenues which approximated the actual annual cost of purchased gas
3		consumed by jurisdictional customers and that the Pre July 1982 PGA did not
4		allow the recovery of storage gas which had not yet been consumed by
5		jurisdictional customers. Or in mathematical terms:
6		(Volume Consumed) X (Price/MCF of Gas Consumed) = Cost of Gas
7		Consumed
8		
9	Q.	What volume of gas was charged a monthly PGA rate through the Pre July 1982
10		PGA from October 1970 to July 1982?
11	A.	The volume of gas charged a monthly PGA rate through the Pre July 1982 PGA
12		equals the volume of gas consumed by and billed to jurisdictional customers.
13		Sheet 44 describes this procedure as follows:
14 15 16 17 18		"The difference in annual cost determined above shall be divided by the CCF sold during the same twelve month period and the rate per CCF determined to the nearest \$.00001 will be used as a net adjustment applicable to monthly billings under all of the Company's Gas Rate Schedules not having a purchased gas adjustment clause as part of the schedule."
20		Therefore, simply put, Sheet 44 required that the monthly PGA rate apply
21		to all volumes consumed by (i.e., metered) and billed to jurisdictional customers.
22		
23	Q.	Can you provide an example which illustrates what volume of gas was charged a
24		monthly PGA rate through the application of the Pre July 1982 PGA?

1 A. Yes. Think of the interstate pipeline as the water faucet on the side of your house. 2 Think of storage gas as a bucket setting underneath the faucet. Think of ANG's distribution system as a garden hose. Imagine that there is a splitter in the hose 3 connected to the faucet that sometimes allows the water to flow into the bucket, 4 5 and there is a drain on the bottom of the bucket that is connected back to the hose. At times when you don't need to water the garden that much, the water flows into 6 the bucket and fills it for later use, but the drain at the bottom of the bucket is shut 7 8 and no water comes out of the bucket. Water also flows through the hose to water the garden. In times when you need more water, you let the water flow through 9 10 the hose and you also open up the drain on the bottom of the bucket and the water 11 in the bucket flows onto the garden. The way sheet 44 is worded, and the way it worked, ANG's customers 12 only paid for gas when it was consumed by them. Or in terms of the example, 13 14 they only paid when the water actually was put on the garden, regardless whether 15 the water flows directly from the faucet or from the drain at the bottom of the 16 bucket. 17 Please describe how the monthly PGA rate was calculated from October 1970 to 18 Q. 19 July 1982. 20 Schedule BRL-2 attached to this prepared testimony is a copy of canceled A.

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Missouri PSC PGA tariff sheet Number 44. It served as ANG's PGA Clause for

1 the Southeast Missouri District for the period of June 2, 1978 to July 8, 1982. 2 The PGA rate for the period of October 1970 to June 1978 was calculated in a 3 similar fashion. Sheet Number 44 is the sheet that I worked with, in conjunction with ANG and Staff personnel at the time, in providing consulting services to 4 5 ANG. The PGA factor was determined monthly by dividing the difference 6 between annualized current cost and annualized base costs by the Ccf (one 7 hundred cubic feet) sales for the most recent twelve month period of actual data 8 (the same period used to determine annualized current cost). (See Sheet 44, part 9 A.2). Annualized current cost was determined by accumulating the Mcf's 10 (thousand cubic feet), billed by ANG's suppliers for the most recent twelve month 11 period of actual data and multiplying by the most recent month's supplier rates. 12 (See Sheet 44, part A.1. (b)). The base cost was determined in the same way 13 except that the base rates set forth at part A.1. (a) were applied to the Mcf's billed 14 by ANG's suppliers. The operation of this tariff involves a two-month lag 15 between the most recent purchase month for which actual information is available 16 and the revenue month in which the PGA factor was applied (See Sheet 44, part 17 A.3). 18 19 Q. How was the seasonal characteristic of current purchased gas costs addressed in 20 the Pre July 1982 PGA?

As detailed on Sheet 44 and illustrated in the example following, the Pre July 1 A. 2 1982 PGA, like most other purchase gas adjustments, based recovery of a representative level of gas cost on an annual basis in an attempt to manage the 3 seasonal characteristic of current purchased gas costs addressed earlier in my 4 5 testimony. Therefore, the current gas costs, gas costs in base rates, and most 6 recent gas sales were all determined on an annual basis. This annual approach 7 enabled the Pre July 1982 PGA to provide a reasonable match of purchase gas 8 costs consumed by customers and revenues. 9 10 Q. In your description of the operations of Sheet 44, do the annual gas volumes used 11 to calculate the annualized current gas costs and the annualized gas costs in base rates in the Pre July 1982 PGA rate monthly computation reflect the volume of 12 gas "purchased" or volume of gas "consumed"? 13 14 Sheet 44 specified that the annual gas volumes used to calculate the annualized Α. current gas costs reflect volumes "purchased" for the most recent twelve month 15 16 period. 17 18 Q. What is the difference between the annual gas volume "purchased" and 19 "consumed"? 20 A. Simply put, the volume "consumed" for a particular year is computed as follows: 21 Volume Consumed = Gas Purchases - Storage Injections + Storage Withdrawals

1 The volume "purchased" considers gas purchases with no adjustments. Where 2 storage injections and withdrawals are roughly equal, then there is practically no difference between volumes consumed and volume of gas purchased. 3 4 You said that the annualized current and base costs were both calculated using the 5 Q. volume "purchased" for the most recent 12 months. Would the use of volumes 6 "consumed" by jurisdictional customers for the most recent 12 months produce 7 8 different results in the Pre July 1982 PGA monthly rate computation? No. Although the determination of the volume "purchased" and "consumed" 9 A. 10 varies on a monthly basis, in the long run they are essentially the same on an 11 annual basis. The annual volumes used in both the current and base cost calculations would be slightly higher or lower each month, but over the long run 12 they would be practically the same. 13 This relationship is demonstrated on Schedule BRL-3 that I prepared. 14 This schedule documents the comparison of annual storage gas volumes 15 (September to August) using both the volume "purchased" and volume 16 "consumed" approaches for the period of 1979 through 1995. The data for 1979 17 18 represents the oldest data still currently available. Although these methods vary 19 materially in result on a monthly basis, in the long run they are essentially the 20 same on an annual basis. For the sixteen-year period of September 1979 through

1		August 1995, the volume "purchased" and "consumed" differed by only
2		approximately 17,500 MCF.
3		Assuming that the annual volume of gas consumed by jurisdictional
4		customers is approximately 4,000,000 MCF per year for Southeast Missouri, this
5		represents approximately 64,000,000 MCF for the sixteen-year period ending
6		August 31, 1995. Therefore, the volume "purchased" and "consumed" methods
7		have varied less than one tenth of one percent (17,500/64,000,000) for the period
8		from 1979 through 1995.
9		This comparison indicates that sometimes the volume purchased is a little
10		more and sometimes it is a little less than volumes consumed but over the long
11		run, on an annual basis, they are essentially the same.
12		Therefore, the relationship of the volume "purchased" and "consumed"
13		accounting methods for purchased gas in the long term on an annual basis can be
14		expressed as follows:
15		Consumption = Purchases - Injections + Withdrawals
16		Where injections and withdrawals are equal, then the formula can be simplified
17		as:
18		Consumption = Purchases
19		
20	Q.	Can you provide an example of a monthly Pre July 1982 PGA rate calculation
21		under Sheet 44?

1	A.	Yes. The following example, which assumes no demand costs (de	emand cost and
2		demand cost recovery are irrelevant to this proceeding because the	only cost ANG
3		recorded in inventory was the commodity costs) demonstrates the	basic
4		fundamentals of the monthly computation of a Pre July 1982 PGA	calculation. In
5		fact the information is taken directly from the PGA calculation file	ed with the
6		Commission for the PGA rate applicable to customer billings in the	ne Southeast
7		Missouri District for January 1982 (based upon information for th	e twelve months
8		ended November 1981 and the supplier rates for November 1981)	and is attached
9		to my testimony as Schedule BRL-4. Again, this example consider	ers only the
10		commodity cost portion of the filing. To see the complete calcula	tion please refer
11		to Schedule BRL-4. You should also note that the following infor	rmation is
12		obtained from the data identified either as "NEARK-SEMO" or "C	Combined Last
13		4 Suppliers".	
14		Annual Billed Volumes (Purchased) Volumes	9,879,731 Mcf
15		Present Commodity Rate \$/Mcf	\$2.5928
16		Annual Gas Cost in Dollars (9,879,731 X \$2.5928)	\$25,616,166
17		Base Rate (9,879,731 X \$.7634)	\$ 7,542,187
18		Increase (\$25,616,166-\$7,542,187)	\$18,073,979
19		Annual Sales In Mcf	9,752,914 Mcf
20		Gas Cost Adjustment (\$18,073,979/9,752,714)	\$1.8532
21		Therefore, under the Pre July 1982 PGA, ANG would be	entitled to charge

1 customers \$2.6166 per Mcf (\$1.8532 per Mcf PGA rate plus \$.7634 per Mcf base 2 rate) for all current gas consumed by customers in January 1982. This would provide ANG the opportunity to recover a representative level of the commodity 3 gas cost for the actual gas cost consumed by customers in January 1982. 4 5 6 Q. Mr. Lewis, if you look at Schedule BRL-4, the Gas Cost Adjustment is \$.19313 7 and the amount in the above example is \$1.8532. Please explain the difference. There are two reasons the adjustments are different. First, the adjustment in the 8 A. 9 above example is expressed as a rate per Mcf while the adjustment per the actual calculation is expressed as a rate per Ccf. ANG actually bills in quantities of Ccf. 10 In the above example, I expressed the rate in Mcf for simplicity. If you converted 11 12 the adjustment as shown in the actual calculation to a rate per Mcf the rate would be \$1.9313 per Mcf. Secondly, the reason the amount of the adjustment differs is 13 14 due to the above example excluding the demand cost portion of the gas cost 15 expense. Again, I excluded the demand cost because it has no relevance to the issue in this proceeding. 16 17 18 In your example, purchase volumes are 9,879,731 Mcf and sales volumes are Q. 9,752,714 Mcf. What causes a difference between purchase volumes and sales 19 volumes? 20 There are line losses that ANG experiences in transporting the gas through its 21 Α.

1 transmission and distribution system and delivering the gas to the customer's 2 meter; there is the seasonal and cycle billing lag that I discussed earlier in my testimony; and, there is the net difference between gas injected into storage and 3 withdrawn from storage. But as demonstrated on Schedule BRL-3, the annual 4 difference between storage injections and withdrawals is very small. 5 6 7 Q. You have told us that the above example demonstrates how the PGA adjustment 8 is calculated. Does this demonstrate if Sheet 44 recovers the gas purchased for injection into inventory in an up-front manner? 9 10 A. No, not directly. 11 Can you provide examples to show how, or more importantly, when Sheet 44 12 Q. 13 recovers gas purchased and injected into storage? Yes. I will use the PGA example above because it comes from an actual PGA 14 A. calculation but I will use a hypothetical situation that reflects storage injections 15 16 and withdrawals that will show that Sheet 44 does not collect the gas injected into 17 inventory in an up-front manner. I will also assume no line losses or cycle billing difference. To use the information from the actual PGA calculation I will have to 18 19 divide the cost in excess of the base recovery by the twelve months ending purchases rather than the twelve month ending sales. This will change the PGA 20 21 factor from \$1.8532 to \$1.8294 (\$18,073,979/9,879,731).

1	Assume that ANG pr	urchased 1,000,000 Mcf in January at	a commodity
2	price of \$2.5928 per Mcf (de	emand cost will be excluded because i	t is not relevant
3	to this proceeding). ANG in	jects 100,000 Mcf of the gas purchase	ed into storage.
4	Since I am assuming there a	re no billing lag or line losses, ANG's	s sales to its
5	customers (volumes measure	ed at the customer's meter) would be	900,000 Mcf
6	(1,000,000 Mcf purchased le	ess 100,000 injected into storage). Al	NG would
7	recover January's gas cost a	s follows:	
8			
9	Cost of Gas Purchased	(1,000,000 Mcf X \$2.5928)	\$2,592,800
10			
11	Base Rate Recovery	(900,000 Mcf X \$.7634)	\$ 687,060
12	PGA Recovery	(900,000 Mcf X \$1.8294)	\$1,646,460
13	Total Recovery	(\$687,060 + \$1,646,460)	\$2,333,520
14			
15	Un-recovered Gas Cost	(\$2,592,800 - \$2,333,520)	\$ 259,280
16			
17	Now assume that AN	NG's sales to its customers are 1,000,0	000 Mcf and
18	they are met by purchasing	flowing gas of 900,000 Mcf and without	lrawing 100,000
19	Mcf from storage. Assume	all the other facts remain the same as	above. ANG
20	would recover January's gas	costs as follows:	
21			

1		Cost of Gas Purchased	(900,000 Mcf X \$2.5928)	\$2,333,520
2				
3		Base Rate Recovery	(1,000,000 Mcf X \$.7634)	\$ 763,400
4		PGA Recovery	(1,000,000 X \$1.8294)	\$1,829,400
5		Total Recovery	(\$763,400 + \$1,829,400)	\$2,592,800
6				
7		Over-recovered Gas Cost	(2,333,520 – 2,612,412)	\$ 259,280
8				
9	Q.	What do the examples above	e demonstrate?	
10	A.	The first example demonstra	ites there is no way that Sheet 44 reco	vers gas
11		purchased for injection into	inventory in an up-front manner. Sta	aff's allegation
12		would say that ANG recover	red the full amount of gas purchased,	including the
13		100,000 Mcf injected into st	orage, of \$2,592,800. However, just	because the
14		purchases related to volume	s injected into storage show up on an	invoice does not
15		mean that recovery would be	e accomplished. As this example sho	ws, ANG did not
16		recover the full \$2,592,800	out only recovered \$2,333,520. The u	ınrecovered
17		amount is \$259,280. The ur	n-recovered amount is made up of sto	rage injections of
18		\$259,280 (100,000 Mcf X \$	2.5928).	
19		The second example	demonstrates that ANG recovers the	gas cost related
20		to gas maintained in storage	when volumes of gas are withdrawn	from storage and
21		consumed by customers. In	this example, ANG over recovered the	ne purchased gas

1 cost by \$259,280. The over recovery is due to ANG withdrawing storage 2 volumes from inventory and selling the volumes to its customers. ANG is recovering the cost of gas previously injected into inventory when the gas is later 3 4 withdrawn from storage. 5 The Report and Order in Case No. GR-96-227 stated "... Staff argued that tariff 6 Q. 7 sheet 44 allowed ANG to recover its storage withdrawal cost in an up-front fashion by charging its Missouri customers an estimated PGA rate which was 8 based on the Company's average cost of gas - determined by using the most 9 recent supplier invoices - to compute the appropriate adjustments to its rates." 10 Did Sheet 44 specify that the monthly PGA rate computation use the most recent 11 12 supplier invoices? Yes. As illustrated in my example, the wholesale current rate was based on the 13 A. most recent supplier invoices. The most recent supplier invoices reflected the 14 fixed component of the current cost of gas (i.e., demand) and the variable 15 16 component (i.e., commodity). 17 Did the Pre July 1982 PGA have a billing lag? 18 Q. 19 Yes. Under the Pre July 1982 PGA, a gas utility could change its rates to deal Α. with wholesale cost changes generally with a two month lag to allow time for the 20

1		company to prepare the PGA with the most recent actual data and the
2		Commission to review the "standard" PGA rate calculations.
3		
4	Q.	While the Pre July 1982 PGA was in effect, what was the trend in natural gas
5		prices?
6	A.	As shown on Schedule BRL-5 that I prepared, from 1971 to 1982, the gas
7		industry as a whole experienced double-digit rapid increases in natural gas prices.
8		As shown on Schedule BRL-6 which I prepared, a review of the annual average
9		cost per MCF of ANG storage gas injections indicates that ANG experienced
10		similar rapid price increases during that time period.
11		
12	Q	Did the Pre July 1982 PGA allow ANG to recover all of the current actual annual
13		cost of purchased gas consumed by jurisdictional customers for the period of
14		October 1970 to July 1982?
15	A.	No. Because of the lag in implementation of the PGA and a trend of rising prices
16		during the period of 1971 through 1982, the PGA had a general tendency to
17		undercollect current purchased gas costs. Therefore, during this period, the sum
18		of the base rate and PGA rate was somewhat less than the price per MCF of
19		purchase gas consumed by jurisdictional customers. Therefore, the Staff is
20		making the unsupported assertion that ANG previously recovered gas in storage

1		when the evidence clearly suggests it did not even totally recover the gas
2		consumed by jurisdictional customers.
3		
4	Q.	Please describe the transition to the current ANG PGA.
5	A.	In Case No. GR-82-108 the Staff proposed the implementation of the ACA.
6		
7	Q.	Did ANG support the implementation of the ACA?
8	A.	ANG supported the implementation of the ACA because that provided the
9		opportunity to fully recover its actual cost of gas consumed. The ACA was
10		subsequently approved by the Commission in its Report and Order for that case.
11		The ACA was implemented July 8, 1982.
12		
13	Q.	Did the Pre July 1982 PGA prove to be a useful ratemaking mechanism?
14	A.	Despite having a tendency to undercollect the actual cost of purchased gas
15		consumed by jurisdictional customers during periods of rapidly increasing
16		wholesale prices, the Pre July 1982 PGA did prove to be a useful ratemaking
17		mechanism. The Pre July 1982 PGA was in effect from October 1970 to July
18		1982. The application of the Pre July 1982 PGA allowed both ANG and the
19		Commission to minimize the frequency of general rate proceedings while
20		providing ANG a reasonable opportunity to recover a "representative level" of its
21		current actual annual cost of purchased gas provided to jurisdictional customers.

Please summarize your review of the amounts collected through the application of 1 Q. 2 the Pre July 1982 PGA. The results of my review are as follows: 3 Α. The volume of gas charged a monthly PGA rate through the Pre July 1982 4 5 PGA equals the volume of gas consumed by jurisdictional customers. Sheet 44 specified that the annual gas volumes used to calculate the 6 annualized current gas costs reflect volumes "purchased" for the most recent 7 twelve month period. 8 9 Although the determination of volume "purchased" and "consumed" varies 10 on a monthly basis, in the long run they are essentially the same on an annual 11 basis. 12 The volume "purchased" method did not provide up-front recovery of gas 13 purchased and injected into storage as alleged by Staff. The wholesale current rate was based on the most recent supplier invoices. 14 15 Because of the lag in implementation of the PGA and a trend of rising prices during the period of 1971 through 1982, the PGA had a general tendency to 16 undercollect current purchased gas costs. Therefore, during this period, the 17 18 sum of the base rate and PGA rate was somewhat less than the price per MCF 19 of purchase gas consumed by jurisdictional customers. The results of this review confirm that the application of the Pre July 1982 20

PGA produced a recovery of base and PGA revenues which was a representative

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1		level of the actual annual cost of purchased gas consumed by jurisdictional
2		customers. More importantly to this proceeding, the Pre July 1982 PGA did not
3		allow the recovery of storage gas which had not yet been consumed by
4		jurisdictional customers.
5		
6	Q.	The Report and Order in Case No. GR-96-227 stated " Staff argued that the
7		value of the pre-existing balance of gas in storage had already been recovered by
8		ANG prior to the inception of the ACA process." As of July 8, 1982, had the
9		operation of the Pre July 1982 PGA allowed ANG to previously recover the value
10		of the balance of gas in storage as of that date?
11	A.	No. ANG did not recover the cost of storage gas not yet consumed through the
12		application of the Pre July 1982 PGA.

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Determination of ANG Base Tariff Rates

2 Q. Can you explain how ANG has historically recovered its expenditures associated 3 with purchased gas and gas storage in customer rates? 4 A. Since October 1970, based on recommendations from ANG and the Staff, and 5 orders issued by the Commission, ANG has recovered the current actual annual cost of purchased gas consumed by its jurisdictional customers through a 6 7 combination of base rates set in general rate cases and the operation of the 8 purchase gas adjustment ("PGA") mechanism approved by the Commission for ANG. ANG's investment in storage gas, which has not yet been delivered to and 9 10 consumed by customers, has been included in jurisdictional rate base, examined in 11 general rate cases, and ANG has presumably earned a fair return on that 12 investment. 13 Earlier in your testimony you quoted a portion of the testimony of Staff witness 14 Q. 15 Mr. Michael Wallis as follows: "In addition, Staff would point out that it is 16 difficult to understand how ANG could have a booked capitalized (asset) inventory balance of \$835,859 as of September 1, 1982 (or \$827,927 as of November 30, 17 1995) when the Company has always expensed its storage costs, in an up-front 18 19 fashion, as the gas supplies are purchased from the supplier and injected into 20 storage." This basically says that ANG's financial accounting records (books) 21 reflect an asset in gas inventory that does not exist. It is also Staff's reasoning that

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1		it does not exist because ANG expensed the gas purchased and injected into
2		inventory and recovered the expense through Sheet 44 in an up-front fashion. Do
3		you agree with Mr. Wallis that ANG's books are incorrect?
4	A.	No. I definitely do not. ANG's books reflect the proper accounting for gas
5		inventory and are consistent with the application of Sheet 44.
6		
7	Q.	What do you mean by the gas inventory accounting being consistent with the
8		operation of Sheet 44?
9	A.	As demonstrated earlier in my testimony Sheet 44 does not recover gas purchased
10		and injected into storage in an up-front fashion as alleged by Staff but instead
11		recovers the inventory gas when it is withdrawn and consumed by customers. The
12		physical measurement of the gas in storage proves that it exists as storage. The
13		physical measurement of customer usage proves that they were billed for actual
14		consumption. The application of the actual consumption to the tariff rates proves
15		that they were billed by ANG for recoveries of the gas actually consumed. As
16		volumes were purchased and injected into storage, ANG appropriately recorded an
17		asset for gas inventory because the cost had not been recovered from customers.
18		When volumes are withdrawn from storage and sold to customers, recovery occurs
19		and ANG appropriately reduces the gas inventory asset.
20		
21	Q.	Do you have any hard evidence of that?

- A. Yes. Attached are Schedule BRL-7 through Schedule BRL-12 that demonstrate
 ANG's inventory accounting.
 Schedule BRL-7 is an LNG storage inventory worksheet that includes the
- disputed balance for July 8, 1982. The first page sets forth for each month end
 the measurement of the LNG tank level in feet, inches, gallons, and Mcf. Also
 shown on page 1 is the Mcf withdrawn and the unit price. The total cost of
 withdrawals is shown on page 2 followed by injections and net injections and
 withdrawals, that is, adjustments (both in Mcf, unit price, and total cost
 injected). Finally, on page 3 the inventory balance is set forth for the cost and
 Mcf with a calculation of the cost per Mcf (unit price).
 - Schedule BRL-8 is a copy of the LNG storage report for June 1982, which was prepared from daily readings made by ANG employees. The ending reading of 24' 2" agrees to Schedule BRL-7, page 1, line 6. The withdrawals of 3,371 Mcf are displayed on Schedule BRL-7, page 1. On Schedule 7, page 2 the injections of 694 Mcf are shown.
 - Schedule BRL-9 is a worksheet that includes the disputed July 8, 1982 NGPL storage inventory balance. The January 1, 1982 balance of Mcf and cost is set forth first, followed by monthly entries for injections and withdrawals.

20 Q. Please describe Schedule BRL-10.

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1 A. Schedule BRL-10 is a worksheet prepared by ANG personnel that summarizes the 2 1981 NGPL storage inventory. The January 1, 1981 balance of Mcf and cost is set forth first, followed by monthly entries for injections and withdrawals. 3 4 Please describe Schedule BRL-11. 5 Q. 6 Schedule BRL-11 is the July 1981 NGPL invoice which plainly shows that the A. 7 NGPL invoice supports the company prepared worksheet. Page 1 shows that 8 18,600 Mcf was injected into storage in July 1981. Schedule BRL-10 clearly 9 reflects the 18,600 Mcf injection as an increase to storage inventory. Schedule 10 BRL-11, page 1 plainly shows that ANG was billed for commodity charges on two 11 components: (1) mainline deliveries (i.e., deliveries to ANG's system) amounting 12 to 38,513 Mcf and (2) injections to storage of 18,600 Mcf. Both components were billed at 2.5327. Thus, the \$47,108.22 cost of injections into storage set forth on 13 14 Schedule BRL-10 was calculated by multiplying 18,600 Mcf by \$2.5327. 15 Please describe Schedule BRL-12. 16 Q. 17 Schedule BRL-12 is the NGPL invoice for November 1981, which was a month A. 18 that withdrawals from storage were made. The November commodity charge is 19 determined by first determining the amount of mainline deliveries purchased. 20 Thus, mainline deliveries of 62,046 Mcf (i.e., deliveries to ANG's system) are 21 reduced by the withdrawals from storage which were 7,640 Mcf to determine the

1		Mcf purchases of 54,406. The commodity rate of \$2.6606 is applied to purchases
2		of 54,406 to determine the purchase cost of \$144,752.60.
3		
4	Q.	Please explain the withdrawals referenced on Schedule BRL-12.
5	A.	The withdrawals of 7,640 Mcf had been purchased previously and injected into
6		storage. At that time the cost was reflected as an increase to storage inventory.
7		Now that the withdrawal has taken place, the \$17,499.06 cost of the 7,640 Mcf
8		withdrawn is removed from storage as shown on Schedule BRL-10.
9		
10	Q.	Do you have any further evidence?
11	A.	Yes. The international accounting firm of Deloitte, Haskins, and Sells (DH&S)
12		examined ANG's financial statements for a number of years from the early '70s
13		through 1987. As a part of their work, the NGPL inventory volumes were
14		confirmed directly with NGPL. I have attached a copy as Schedule BRL-13 for
15		December 31, 1982, which appears to have been sent first by ANG to NGPL, and
16		then from NGPL to DH&S. The last two columns appear to reflect DH&S
17		indications of ANG's (i.e., "Client") inventory balances and calculated differences
18		between NGPL's records and ANG's records.
19		
20	Q.	Why would ANG possess a DH&S workpaper?

1	A.	There are several good reasons. One reason is that in the event ANG later came to
2		believe that a discrepancy had occurred, it would help to have a confirmed balance
3		at the end of the most recent year end. Another, and perhaps the more likely
4		reason is that DH&S was obligated to advise ANG of the discrepancy so that ANG
5		could take action if deemed necessary.
6		
7	Q.	Do you have any evidence that DH&S personnel gave any thought to the existence
8		of the LNG inventory balance?
9	A.	The LNG inventory was maintained by ANG personnel, so there wouldn't be a
10		confirmation from a third party as there was for NGPL. However, it is quite likely
11		that DH&S personnel would have performed audit procedures on the LNG
12		inventory.
13		
14	Q.	Why do you consider it quite likely that DH&S personnel would have performed
15		audit procedures on the LNG inventory?
16	A.	I have a DH&S publication titled "Introduction to Accounting and Auditing -
17		Public Utility Industry," (copyright 1980) which addresses the steps that should be
18		taken for gas stored by a client on pages 36 and 37. I have attached these pages as
19		Schedule BRL-14.
20		
21	Q.	What do you conclude from the foregoing?

1 I conclude that not only does ANG have its storage inventory records supporting A. 2 the recoverable inventory balance, but that these records were subject to 3 examination by DH&S. I have examined the storage workpapers and find that there 4 is no indication that DH&S had proposed any adjustments aside from bringing 5 minor items such as the 91 Mcf discrepancy to ANG's attention. And, as I said 6 above, the gas storage inventories have been maintained in a manner consistent 7 with the operation of Sheet 44. I have demonstrated that fact and conclude that it 8 is true. I further conclude that this demonstrates that the volume in storage 9 inventory as of July 8, 1982, was not recovered prior to that date. Sheet 44 10 accomplishes recovery from customers based on billed consumption. The volumes 11 in storage inventory as of July 8, 1982, had not passed through a customer meter and therefore they had not ever been consumed. 12

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Q. Why was ANG's investment in storage gas included in jurisdictional rate base?
A. The cost at issue in this proceeding is referred to as an asset, specifically gas storage inventory. The American Institute of Certified Public Accountants has defined assets as "... economic resources devoted to business purposes within a specific accounting entity; they are aggregates of service-potentials available for or beneficial to expected operations." The service potential which is inherent in this instance is the provision of gas in winter periods. Wherever possible, the

measurable. For example, a car is purchased by a company and the accounting records for assets will reflect the cost of that item as long as it exists and is owned by the company.

In the case at issue, ANG recorded as an asset on its books the cost of gas stored in inventory as it was injected, and ANG removed the asset cost from its books as the storage gas was taken out (withdrawn) from storage. The physical existence of this was tracked monthly by ANG. Additionally, ANG has evidence that the existence of the NGPL inventory was confirmed by ANG's auditors, which at the time were Deloitte, Haskins and Sells. The physical existence of the storage gas inventory was evident from contemporaneous records maintained by ANG's employees and was subject to observation by ANG's auditors. It is very clear that ANG recorded increases and decreases in the cost of its storage inventory as gas flowed into and out of storage inventory. That is, as purchased gas flowed into inventory, the cost of gas storage inventory was increased and as stored gas flowed out of gas storage inventory, the cost of the gas storage inventory was decreased.

Customers simply paid a base and PGA rate for gas as consumed throughout the year and gas storage inventory mirrored that consumption. Where gas was purchased for injection the inventory cost was increased accordingly. Where gas was withdrawn for consumption, the inventory cost was decreased accordingly. Because customers were paying only for the volume of gas consumed there could not have been recovery of storage gas not yet consumed. In

1		conclusion, the gas in storage was not previously recovered from customers.
2		Therefore, gas storage is a necessary utility investment and should be included in
3		jurisdictional rate base.
4		
5	Q.	In the last twenty years, have the Staff, ANG, and other Missouri gas utilities
6		generally included the investment in storage gas in rate base?
7	A.	Yes, even though all Missouri gas utilities have at one time had a "standard" PGA,
8		the investment in storage gas has been consistently included in rate base.
9		
10	Q.	How many general rate proceedings have occurred since the implementation of the
11		Pre July 1982 PGA in October 1970?
12	A.	It appears that there have been at least nine general rate proceedings since October
13		1970, which have involved ANG or its predecessor in interest, Arkansas-Missouri
14		Power Company. The docket numbers of these proceedings are as follows:
15		• Case No. 18,101 & 18,103
16		• Case No. 18,600 & 18,601
17		• Case No. 18,651 & 18,652
18		• Case No. GR-79-126
19		• Case No. GR-82-126
20		• Case No. GR-83-205
21		• Case No. GR-86-86

1		• Case No. GR-90-152
2		• Case No. GR-97-272
3		
4	Q.	Did the Staff and ANG include the Missouri jurisdictional portion of the
5		investment in storage gas in rate base in all of these general rate proceedings?
6	A.	Yes, both the Staff and ANG generally included the Missouri jurisdictional portion
7		of the investment in storage gas in rate base in all of these general rate proceedings
8		I have included exerpts from a few of the direct testimonies submitted by ANG and
9		the Staff in these proceedings as follows:
0		• Schedule BRL-15 - Case No. GR-79-126
11		• Schedule BRL-16 - Case No. GR-82-108
12		• Schedule BRL-17 - Case No. GR-83-205
13		The Staff did oppose the inclusion of storage gas in rate base in Case No.
14		GR-90-152. However, for the same reasons discussed at length in this testimony,
15		ANG disagreed with Staff's position then just as it does now.

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Other Independent Reviews

2	Q.	Can you summarize what you believe to be the essence of the Staff's position, as
3		reflected in the Staff memorandum and its testimony from Case No. GR-96-227?
4	A.	The essence of the Staff's position is that for ratemaking purposes, a net asset
5		shown on ANG's books since 1982 of approximately \$800,000 isn't really there,
6		and hasn't been there since sometime prior to 1982. The Staff asserts that ANG
7		has previously recovered the gas cost associated with the LNG and NGPL non-S2
8		storage volumes.
9		
10	Q.	Do you have any concerns that the Staff is recommending that the balance of gas in
11		storage be treated differently for ratemaking purposes than the accounting method
12		used for financial reporting?
13	A.	Yes. Although, in certain cases it is appropriate to have a difference in the amount
14		or in the timing between what a utility places on its books for financial reporting
15		purposes and recovery for ratemaking, in this instance Staff's position of treating
16		this inventory as nonexistant is clearly wrong.
17		However, in regard to this proceeding, I believe that financial statements,
18		regulatory filings, Securities and Exchange Commission ("SEC") data submittals,
19		presentations to financial analysts, Commission Orders, and accounting records
20		produced and reviewed by probably scores of regulatory and utility experts from
21		ANG, the Staff, the Commission, and independent agencies over the last twenty

years all categorically contradict the Staff's assertion that the investment in 1 2 storage gas has already been recovered through the PGA. All of this past documentation indicates instead that storage gas costs have not yet been collected 3 from ANG's jurisdictional customers. 4 It appears to me from a review of material from Case No. GR-96-227 that 5 6 the Staff was in the somewhat awkward position of attempting to conduct its investigation 15 to 20 years after the fact. Mr. Wallis testified that he did not look 7 8 at the filings made under Sheet 44; he was just relying on his reading of it. In 9 contrast, these previously mentioned examinations were based on a timely and contemporaneous review of the data submitted at the time, with ready access to all 10 11 pertinent information.

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Fallacy of Key Staff Assumption

2 Q. What does Staff's assertion that "ANG has previously recovered the volumes of 3 gas injected into gas storage but not yet consumed by jurisdictional customers" imply? 4 5 The detailed review of the application of the Pre July 1982 PGA discussed earlier A. 6 in my testimony makes it very clear that customers provided gas cost recovery 7 only as their usage was billed. Where gas was purchased to meet current month 8 customer requirements and to meet the need for storage injections, then the 9 recovery from the customer would only reflect the portion consumed currently by 10 the customer. This is because the customer billing is a function of consumption. 11 Where customers were supplied with gas purchased as well as gas that was 12 withdrawn from storage, the recovery of gas cost would be based on the volume 13 of gas consumed, which would include purchases and withdrawals from storage. 14 No where on Sheet 44 are customers required to also pay for volumes in storage 15 but not yet consumed by jurisdictional customers. Such an assertion does not 16 comport with the intended purpose or actual operation of the PGA clause.

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Retroactive ratemaking

2	Q.	Since you have said the Pre July 1982 PGA had a two-month lag and
3		undercollected gas costs, was there a transition adjustment required when the
4		ACA process was implemented?
5	A.	It is very clear that the Pre July 1982 PGA mechanism provided the only means
6		for gas cost recovery. Under recoveries could not be recovered in the future and
7		over recoveries could not be refunded in the future. The recovery is what the
8		recovery is. It is much like the situation pertaining to base rates now and then.
9		As long as recovery is within a tolerable range over or under actual cost, then
10		recovery is reckoned as sufficient. If recovery is outside of a range tolerable to
11		any of the affected parties, then a rate proceeding will be instituted to address
12		future recoveries. Past recoveries cannot be addressed because to do so would
13		constitute retroactive ratemaking.
14		Therefore, ANG was not entitled to record a transition adjustment to
15		attempt to fully recover incurred but not fully recovered purchase gas costs when
16		the switch to the ACA process began in July 1982. An entry of this nature would
17		require a retroactive ratemaking adjustment. Neither the Staff nor ANG
18		recommended a retroactive transition adjustment during the transition from the
19		Pre July 1982 PGA to the ACA.

1	Q.	Earlier, you stated that the Statt has reached back into history over 17 years to
2		make the unsupported assertion that ANG previously recovered gas in storage
3		when it did not even totally recover the cost of purchased gas consumed by
4		jurisdictional customers. Is the Staff's proposed adjustment an example of
5		retroactive ratemaking?
6	A.	Yes. The Staff is proposing to reduce the current recovery of the actual annual
7		cost of purchased gas consumed by jurisdictional customers for the year-ended
8		August 31, 1997 to prevent an alleged "double recovery" because Staff alleges
9		current gas in inventory was recovered sometime before July 1982. Just as it was
0		inappropriate to record a transition adjustment in 1982 to reflect the
1		implementation of the ACA, Staff's proposed adjustment should not be approved
2		because it also represents an inappropriate retroactive ratemaking adjustment.
13		Sheet 44 by design and actual operation only provided for recovery of the cost of
14		gas actually consumed. The tariff simply did not allow for recovery of gas
15		storage inventory.

1

2	Q.	Did the Commission address the impact of FERC Order 636 in its Report and
3		Order in Case No. GR-96-227?
4	A.	Yes. As I mentioned earlier, the Commission's order stated the following:
5 6 7 8 9 10 11 12 13 14 15 16 17		"Before the Federal Energy Regulatory Commission (FERC) issued Order 636, interstate natural gas pipeline companies provided local distribution companies with a bundled gas supply, transportation and storage. FERC Order 636 required interstate natural gas pipelines to unbundle their gas supply service from their transportation and storage services. Prior to FERC Order 636, components of gas supply service included fixed and variable storage charges, fixed and variable transportation charges and all gas supply costs, irrespective of whether that gas supply flowed directly to the city gate or was injected into storage. Thus, fixed and variable storage charges would have been included on pipeline supplier invoices in the pre-Order 636 environment in which tariff sheet 44 operated."
19	Q.	Based on your understanding of Order 636, does it have any direct impact on this
20		proceeding?
21	A.	No. There is no dispute that the wholesale current rate in the Pre July 1982 PGA
22		monthly rate computation was based on the most recent supplier invoices. There
23		is no dispute that the 1978 through 1982 period predates FERC Order 636. There
24		is also no dispute that invoices ANG received from interstate pipelines in 1978
25		through 1982 were "bundled" in the sense that they contained all of the pipeline
26		services. The fact that all of the costs were bundled on one invoice, as opposed to

FERC Order 636

1	being "unbundled" into two or three invoices in a Post Order 636 environment,
2	has no impact on any issue being discussed in this proceeding.
3	The relevant issue of whether ANG has previously recovered the gas cost
4	associated with the LNG and NGPL non-S2 storage volumes has been addressed
5	at length in this testimony.

1		Summary			
2	Q.	Please summarize your testimony.			
3	A.	Staff argued in GR-96-227 that it could evaluate Sheet 44 and reach a conclusion.			
4		However, Staff failed to understand Sheet 44 and, accordingly Staff failed to reach			
5		a logical and correct conclusion. It is very clear that the inventory balance as of July			
6		8, 1982, had not been recovered prior to that date.			
7		A summary of some of the major reasons why the Commission should			
8		reject the Staff's proposed adjustment which are addressed in my testimony are as			
9		follows:			
10		ANG's sole objective in this proceeding is to recover the annual cost of			
11		purchased gas consumed by jurisdictional customers for the year ended			
12		August 31, 1997 as allowed by its PGA tariff.			
13		ANG's recommendation in this proceeding is based on sound ratemaking			
14		principles which have been successfully and consistently utilized by both the			
15		Commission and ANG for the last thirty years and is consistent with the			
16		fundamental ratemaking assumptions which have been incorporated in both			
17		the ACA and the Pre July 1982 PGA.			
18		• The logical result of accepting Staff's conclusion is that the Commission has			
19		inappropriately granted ANG millions of dollars of base rate recovery over the			
20		last 20 years and that is completely inaccurate and contra-intuitive given the			
21		number of times ANG's books have been reviewed during that time.			

- In Case No. GR-96-227, the Staff did not demonstrate an understanding of Sheet 44 and the purpose and operation of the Pre July 1982 PGA, and that lack of understanding is carried over to this case.
 - The overall purpose of the Pre July 1982 purchased gas adjustments is to
 provide a reasonable opportunity to recover the current actual annual cost of
 purchased gas consumed by jurisdictional customers which is administratively
 practical given the inherent nature of the gas utility business. Purchased gas
 adjustments are not intentionally designed to recover storage gas not yet
 consumed.
 - The Pre July 1982 PGA was not a "dollar tracker". Sheet 44 did not provide for the collection of an "exact amount" of purchased gas costs, but rather provided for the application of a current PGA rate to all units of jurisdictional sales. This, in combination with the level of purchased gas per MCF included in base rates, provided the opportunity over an annual period to collect a "representative level" of the current actual annual cost of purchased gas actually delivered and sold to jurisdictional customers; not the amount that was put in storage and not delivered to customers.
 - The computation of the monthly PGA rate in the Pre July 1982 PGA in accordance with Sheet 44 produced a PGA rate that was reflective of the current actual annual cost of purchased gas consumed by ANG's jurisdictional customers.

1		•	The fact that the Pre July 1982 PGA predates FERC Order 636 has no impact
2			on any issue being discussed in this proceeding.
3		•	ANG generally undercollected purchased gas costs under the Pre July 1982
4			PGA due to the two month billing lag and rapidly increasing wholesale gas
5			prices. Therefore, the Staff is making the unsupported assertion that ANG
6			previously recovered gas in storage when in reality ANG did not even totally
7			recover the cost of gas consumed by jurisdictional customers.
8		•	Staff's implication that jurisdictional customers have paid for more gas than
9			they have consumed is unsupported, totally inaccurate, and in conflict with the
10			way Sheet 44 was worded, and the way it worked.
11		•	Staff's proposed adjustment should not be approved because it represents an
12			inappropriate retroactive ratemaking adjustment.
13		•	ANG's books regarding gas storage inventories have been maintained in a
14			manner consistent with the operation of Sheet 44.
15		•	The pre-1982 storage balance which has been reflected on ANG's books for
16			all these years is not some "phantom" entry.
17		•	Rejecting the Staff's adjustment in this proceeding will not provide ANG with
18			an opportunity to "double recover" the cost of storage gas not yet consumed.
19			
20	Q.	Do	oes this conclude your direct testimony at this time?
21	A.	Ye	es, it does.