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Reply to:
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August 18, 2003

Honorable Deborah Taylor Tate Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, Tennessee 37243

ANDY D. BENNETT

LUCY HONEY HAYNES
ASSOCIATE CHIEF DEPUTY
ATTORNEY GENERAL

CHIEF DEPUTY ATTORNEY GENERAL

RE: APPLICATION OF NASHVILLE GAS COMPANY, A DIVISION OF PIEDMONT NATURAL GAS COMPANY, INC. FOR AN ADJUSTMENT OF ITS RATES AND CHARGES, FOR APPROVAL OF REVISED TARIFFS AND APPROVAL OF REVISED SERVICE REGULATIONS, Docket 03-00313

Dear Chairman Tate:

Enclosed is an original and thirteen copies of the Consumer Advocate's Direct Testimony of Steve Brown. Kindly file same in this docket. Copies are being sent to all parties of record. If you have any questions, kindly contact me at (615) 741-8700. Thank you.

Sincerely

Tignothy C. Phillips

Assistant Attorney General

Enclosures

c: All Parties of Record

#67856

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1		a Rate Analyst. From 1979 to 1982 I worked
2		for Tri-State Generation and Transmission
3		Association as Power Requirements
4	•	Supervisor and Rate Specialist. Since 1979
5		
		my work spanned many issues including cost
6		of service studies, rate design issues,
7		telecommunications issues and matters
8		related to the disposal of nuclear waste.
9		
10	Q 5.	What is your educational background?
11		
12	A 5.	I have an M.S. in Regulatory Economics
13	n_ 0.	from the University of Wyoming, an M.A.
14		and Ph.D. in International Relations with
15		a specialty in International Economics
16		from the University of Denver, and a B.A.
17		from Colorado State University.
18		
19	Q_6.	Dr. Brown, have you authored any articles
20	-	relating to your profession?
21		
22	A 6.	Yes, my articles have appeared in Public
23	· <u>-</u>	Utilities Fortnightly and the Electricity
24		Journal.
2 4 25		Journal.
25 26		And train and have train been a member of anni
	Q_7.	Are you and have you been a member of any
27		professional organizations, Dr. Brown?
28		
29	A_7.	Yes, I am a past member of the NARUC Staff
30		Committee on Management Analysis, a past
31		trustee of and a member of the Board for
32		the Automatic Meter Reading Association,
33		and a current member of the National
34	100	Association of Business Economists.
35		TIBBOOTACTOR OF DUSTRESS ECORORITSCS.
36	Q 8.	Have you studied mathematics and
37	¥_0.	-
		statistics as part of your education?
38		Vaa
39 40	A_8.	Yes.

Page 3 of 75

Dr. Brown, do you use mathematics and statistics in combination with economics as part of your profession?

5

A 9. Yes.

Q_10. What were you asked to do with respect to this case?

I was asked to form opinions on: 1) the A_10. company's capital structure and the components of the company's capital structure; 2) the company's cost-ofcapital which includes determining the appropriate capital structure, the appropriate market-based common equity return, the cost of long-term-debt, the cost of short-term-debt; and 3) to assist in the evaluation of testimony offered by other witnesses in this docket.

II. Summary of Testimony

Q_11. Please summarize your testimony.

A 11.

Based on my review of relevant material and prevailing economic conditions, it is my opinion, within a reasonable degree of professional certainty, that the company's cost-of-capital will decrease almost immediately after this rate case is concluded. Consequently, I believe that the company strategically timed this rate request to be completed before the decrease is reflected in the company's financial records. Similarly, the

Page 4 of 75

company's ability to finance its operation with low-cost short-term debt is overlooked in the financial picture which the company presents in this case.

The remainder of my testimony is divided into four major sections: Capital structure, short-term debt cost, long-term debt cost and cost of equity.

II. A. - Capital Structure Summary

In my opinion the capital structure in this rate case proceeding is 43.8 percent equity, 44 percent long-term debt, and 12.2 percent short-term debt. Short-term debt refers to debt having a due date less than one year away from the debt's origination date. Therefore, short-term debt in the capital structure properly excludes the current portion of long-term debt.

My Schedule 3, pages 1 to 7, shows the steps I took to arrive at the capital structure. Its components include Short-Term Debt-Notes Due, Short-Term Debt-Current Portion of Long-Term Debt, Long-Term Debt and Common Equity.

The capital structure's source is the United States' Securities and Exchange Commission's data base, commonly known as "Edgar," which is publicly available over the Internet. More specifically, the capital structure is taken from each

Page 5 of 75

comparable company's SEC form 10-K for each comparable company's most recent fiscal year.

I use the SEC's data as a means of building in accountability and objectivity into the capital structure:

1. SEC data is reliable. As of 2002, the companies which file annual reports with the SEC must also provide the Chief Financial Officer's certification that the company's financial statements "fairly present in all material respects the financial condition" of the company.

2. SEC data is an independent means to verify the capital structure proposed in this case by the company's cost-ofcapital expert, Dr. Murry, who uses a publication named "Value Line" as the source of his capital structure data. Verification of Value Line's data is crucial because the publication disclaims responsibility for errors or omitted data and has this statement in its publication: "Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMMISSIONS HEREIN [Value Line's emphasis]."

By comparing the SEC data with Dr. Murry's data from Value Line I arrive at several opinions:

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My opinion is to disregard the company's proposed capital structure because it is not verified by SEC data. My opinion is to disregard the proposed capital structure's data sources, which are the company's workpapers and Value Line. My opinion is to disregard the company's overall cost-of-capital.

I discovered that the common equity ratios shown in Dr. Murry's Schedule DAM-4 are hugely overstated. For example, Dr. Murry's Schedule DAM-4 shows Nicor's 2002 common equity ratio as 65 percent, but my Schedule 3 page 4 shows the Nicor's 2002 common equity ratio as 47.2 percent. Dr. Murry's Schedule DAM-4 is not an appropriate basis for capital structure because his data is not verified by the certified data from the SEC.

I also discovered that the thirteen-month average equity ratio of 53.45 percent in Dr. Murry's Schedule DAM-1 is identical to the five-year average equity ratio of the comparable companies, which is displayed as 53.4 percent in the lower right-corner of Dr. Murry's Schedule DAM-4.

In Schedule DAM-4 I discovered that for the years 1999 to 2002, the equity ratios of the comparable companies, average to 53.4 percent. I discovered that the equity ratios in Schedule DAM-4 always average to 53.4 percent, whether I use just the years 1999 to 2002, just the year 2003, or all five years of data.

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The equivalency of 53.45 percent in Schedule DAM-1 with the figure of 53.4 percent in Schedule DAM-4 invites a favorable judgment on the accuracy of the company's proposed capital structure, as follows - "Dr. Murry and the company have verified the accuracy of DAM-1's source, which is 'Piedmont Natural Gas Company Workpapers,' since the workpapers yield a result no different from Dr. Murry's Value Line ratios."

However, my opinion is to disregard Piedmont workpapers because they are not verified by Schedule DAM-4, which itself is contradicted by the comparable companies' own reporting to the SEC. Therefore, Dr. Murry's Schedule DAM-1 is not verified and therefore unreliable.

 Because Piedmont's proposed capital structure is not verified, the CAPD's capital structure is the most recent average capital structure of the comparable companies in this case. The capital structure is 43.8 percent equity, 44 percent long-term debt, and 12.2 percent short-term debt.

II. B. - Short-Term Debt Cost Summary

The short-term debt cost is 1.3 percent, which is the average short-term debt monthly cost from July 2002 to June 2003. Short-term debt cost-data is provided by Federal Reserve Board. At the end of June

2003, the current prevailing short-term cost was one percent.

II. C. - Long-Term Debt Cost Summary

The long-term debt cost is 6.83 percent. This amount is the average long-term debt cost of the comparable companies. The long-term debt data is from each comparable company's most recent 10-K form filed with the SEC. The figure of 6.83 percent is high, in the sense that it does not anticipate refinancing efforts by the comparable companies responding to lower interest rates. One comparable company, Nicor, said in its 10-K that the company has "plans to refinance at least \$100 million of long-term debt in 2003."

The Federal Reserve Board policy of lowering interest rates and keeping them low is explicit and very visible to business, the media, and the public in general. Therefore, it is reasonable to expect utilities' long-term debt cost to embody the influences of a lower-interest rate economy. However, a utility is not "locked in" to a cost-of-capital if the interest rate environment changes because a regulated utility has the discretion to file its rate case as needed.

II. D. - Cost of Equity Summary

5

The equity cost is based on the applications of a Discounted Cash Flow (DCF) analysis and a Capital Asset Pricing Model (CAPM) to the comparable companies in this case. The DCF analysis yields an equity cost of 7.35 percent. The CAPM analysis yields an equity cost of 7.6 percent. The results are not appreciably different. In my opinion an equity return of 7.6 percent is just and reasonable.

My results are consistent with the mainstream of economic returns in the American economy. All forms of economic return have declined in the last few years. Equity returns in general have decreased and it is normal for Piedmont's equity return to decrease as well in the current conditions.

The remainder of my testimony explains my procedures and contrasts them with those employed by Piedmont's cost-of-capital witness, Dr. Murry.

III. Capital Structure

Q_12. What does the term "capital structure" refer to?

A 12.

In its broadest sense the term "capital structure" refers to capital funds a company uses to support and carry out its operations. These funds are categorized by the funds' source: borrowed funds are referred to as debt, and owners' funds are referred to as equity. In the context of setting the cost-of-capital for utility service, the term "capital structure" is a short-hand reference to debt and equity funds expressed as a percentage of total funds. Therefore, capital structure is derived from the dollar value of capital funds.

For example, if all of the company's capital funds were borrowed, the company's capital structure would be 100 percent debt. If the company's stockholders provided all the capital funds, the capital structure would be 100 percent equity. Continuing with this example, if a company has \$100 million of capital funds and \$60 million is borrowed, then the company has a capital structure of 60 percent debt and 40 percent equity. Other ways of conveying the same information are: "the company has a debt to equity ratio of 1.5[which is .6 divided by .4]", or "the company has a debt ratio of 60 percent and an equity ratio of 40 percent." In this situation the cost-of-capital would be equal to .60 multiplied by the debt cost plus .40 multiplied by the equity cost. Therefore, a utility's cost-of-capital depends on capital

		Page 11 01 /5
1		structure, and capital structure depends on the
2		dollar value of capital funds.
4 5	Q_13.	Does Piedmont's cost-of-capital witness, Dr. Murry, express capital structure in terms of
6 7		equity and debt ratios?
8	A_13.	Yes. Dr. Murry's Schedule DAM-1 shows that in
9	_	this rate case he defines a capital structure
10		of 53.45% equity and 46.55% debt. The debt
11		ratio is the sum of 1.74%, a short-term debt
12		ratio, and 44.81%, a long-term debt.
13 14	Q 14.	What is your opinion of Dr. Murry's classifying
15	X_**,	debt as short-term and long-term?
16		
17	A_14.	My opinion is that the classification is
18		reasonable because any capital structure's debt
19	• .	ratio is composed of all forms of debt that
20		comprise total indebtedness. If a certain class
21 22		of debt were left out of the capital structure, the market would not be fully informed about a
23		company's financial condition.
24		company b rimanorar conarcion.
25		For example, if a capital structure is based on
26		just part of the debt and all of the equity,
27		the capital structure will be inaccuraté. In
28		this case the equity ratio would be higher than
29 30		it really is, giving a company a financial
31		appearance of being more attractive to investors or lenders than otherwise.
32		investors of fenders than otherwise.
33		Therefore, Dr. Murry is correct to separate
34		debt into the two classes because a capital
35		structure must be based on full disclosure of
36 37		debt and equity.
38	Q 15.	What is short-term debt?

Page 12 of 75

Short-term debt is debt that must be repaid within one year from its incurrence. But just because the debt is repaid in one year does not mean short-term debt disappears. It is a permanent feature of utilities' capital structure, and short-term debt can be a significant part of capital structure.

Q 16. What is long-term debt?

A_16. Long-term debt is debt with a due date anywhere from 30 years into the future to just 367 days into the future. It takes the form of bonds and notes.

III. A. - Piedmont's Proposed Capital Structure Is Not Based On Comparable Companies

Q_17. What is your opinion on the values of the capital structure ratios in Dr. Murry's Schedule DAM-1?

A_17. My opinion is that the ratios are not appropriate because they are not verified nor even remotely based on Dr. Murry's comparable companies

For example, in his direct testimony from page 7 line 10 to page 8 line 8, Dr. Murry identifies seven companies that he believes are comparable to Piedmont. In his Schedule DAM-4, Dr. Murry shows the companies' equity ratios for 1999 to 2003. Data for 2003 is forecasted or estimated data. In his direct testimony at page 8 lines 13-14, Dr. Murry testifies that "I

Page 13 of 75 studied the comparable common equity ratios of Piedmont and the other companies."

The language and reasoning evident in Dr. Murry's information suggests that the comparable companies would be the basis of his capital structure. However, in his direct testimony at page 5 lines 18-21, Dr. Murry poses a question regarding "the appropriate capital structure ...in this proceeding" and he replies: "I used the capital structure of Piedmont.." Also, in his Schedule DAM-1, Dr. Murry indicates that his capital structure ratios are based on Piedmont's internally created data, as implied by the phrase at the top of DAM-1: "Thirteen Months Average for the

Period Ended December 31, 2002."

Therefore, Dr. Murry has not used the comparable companies as the source of his capital structure. His decision to use Piedmont's internally created data instead of the comparable companies' data leads to the question: Why would Dr. Murry put the comparable companies' equity ratios in Schedule DAM-4 if they were not going to be the basis of his capital structure? In his direct testimony, at page 8 lines 19-21 he uses the comparable companies ratios as a cross-check on Piedmont's equity ratio: "In general, however, as illustrated in Schedule DAM-4, the common equity set for Piedmont for ratemaking purposes is conservative."

What is your opinion of Dr. Murry's decision to use Piedmont's capital structure instead of a capital structure based on the comparable companies?

Page 14 of 75

My opinion is that Dr. Murry's decision is arbitrary and inconsistent with the impression given that the comparable companies were the across-the-board criteria for his opinion.

For example, Dr. Murry bases his Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) analyses on the comparable companies. Dr. Murry testifies at page 10 line 5 that "One should carefully select data used in the DCF analysis.." and then proceeds on the basis of the comparable companies. They show up in sixteen of the twenty-two schedules appended to Dr. Murry's testimony. The sixteen schedules include DAM-4 to DAM-16, DAM-19, DAM-20 and DAM-22.

Also, in his direct testimony at page 5 lines 4-10, Dr. Murry invokes the "comparable companies" principle of the Hope and Bluefield cases. The "comparable companies" standard is a long-standing regulatory principle which has the effect of reigning—in the arbitrary determination of the cost of capital.

If those seven companies he selected really are comparable to Piedmont, then their capital structures should properly be the basis for this proceeding's capital structure, not Piedmont's.

Because Dr. Murry bases his DCF and CAPM analyses on the comparable companies, while also invoking the "comparable companies" principle of the Hope and Bluefield cases, it is reasonable, fair and consistent for the capital structure in this case to be based on the capital structure of comparable companies.

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Using comparable companies has another major advantage, avoiding disputes over the accuracy of Piedmont's internally created capital structure data.

For example, in Dr. Murry's Schedule DAM-1, does the phrase "Thirteen Months Average for the Period Ended December 31, 2002" mean that the capital structure is result of thirteen 30-day months so that the averages are based on 390 days of account balances? Or does the phrase mean that the ratios are based on just 13 days of account balances, with the balance representing amounts booked on the last day of the month? Are there certain transactions that are not in the accounts but should be there?

It is standard regulatory practice to determine capital structure with comparable-company data. The procedure is efficient, bypassing the need to answer the accounting questions and avoiding an audit-like procedure to verify the balances and the judgments that created the balances. It is the comparable-company principle that allows a rate case proceeding to be streamlined and manageable from a regulatory standpoint, rather than stretching out the process by having to audit a particular company's own capital structure data.

 For example, Piedmont's "thirteen month average" is private information that can not be compared to comparable companies', unless they make a "thirteen month average" publicly available. Capital structure has to be developed from publicly available and verifiable information from comparable companies as a means of building in

38 companies as a mear

		Page 16 of 75
1 2		accountability and objectivity. They are the ones painting the financial picture.
3		
5	Q_19.	What is your opinion of Dr. Murry's choice of comparable companies?
7 8 9	A_19.	My opinion is that his selection is reasonable I am not disputing it.
10 11		
12	III.	B CAPD's Proposed Capital
13	:	Structure
14	· ;·····	
15 16 17	Q_20.	In your opinion, what is the basis for the capital structure in this case?
18 19 20 21 22 23 24	A_20.	In my opinion the capital structure in this case is based on the capital structure of comparable companies, not on Piedmont's data. This is consistent with the "comparable companies" principle.
25		
26 27	III.	B.1 Piedmont and Comparable
2 <i>1</i> 28	45.45.45.	Companies Mistakenly Appear To
20 29		Have Identical Capital Structures
30		
31		
32 33	Q_21.	What would your capital structure be if you used the comparable companies' common equity
34		ratios appearing in Dr. Murry's Schedule DAM-4
35 36	A 21.	If I used the comparable companies common
37 38	~_**.	equity ratios appearing in Dr. Murry's Schedule DAM-4, my capital structure would be the same
39		as Dr. Murry's because his data is like a map

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2 3

1

that always leads you to the same place, no matter from which direction you might start.

I have taken Schedule DAM-4's comparable company data and placed it in the table below so anyone reading this testimony can follow this discussion without having to go to Dr. Murry's tables.

Company	1999	2000	2001	2002	2003
AGL	49.2	48.3	38.7	40.0	42.0
Atmos	50.0	51.9	45.7	46.1	45.0
NJR	51.2	52.9	49.9	49.4	55.5
Nicor	64.0	66.7	61.7	65.0	68.0
NWNG	49.9	50.9	53.2	50.5	48.5
PGL	59.6	64.9	55.6	59.3	61.5
WGL	56.1	54.8	56.3	52.4	53.0
Average	54.3	55.8	51.6	51.8	53.4

10 11

12 13

14

For example, suppose I say that data from 2003 should not be used because it is estimated and therefore, I use data from 1999 to 2002. In this case the comparable companies' average common equity ratio would 53.4 percent.

19

20

Now, suppose I say that the data from 1999 to 2002 is questionable, and I use only the estimated data from 2003. Once again the comparable companies' average common equity ratio would be 53.4 percent.

21 22

Now, suppose I take all the data and average it. Once again the comparable companies' average common equity ratio would be 53.4 percent.

These results are identical to the 53.4 percent common equity ratio shown in Dr. Murry's Schedule DAM-1.

Schedule DAM-4 has the appearance of verifying Schedule DAM-1. In this situation it is arguable that there would be no harm in using Piedmont's very own internally created capital structure and dispensing with the comparable companies. The results achieved would be as if the comparable companies had been used. However, it would be a mistake and poor methodology to dispense with the comparable companies.

Q 22.

A 22.

Why would it be a mistake to dispense with the comparable companies?

It would be a mistake and poor methodology to ignore the comparable companies because in my opinion it is very unlikely that Piedmont's common equity ratio would just coincidentally be the same as the comparable companies average common equity ratio. The average common equity ratio of the comparable companies is supposedly the result of four to five years of financial operations by seven different gas companies throughout the United States, as reported by Value Line, according to Dr. Murry. But Piedmont's common equity ratio in Schedule DAM-1 is the result of a thirteen-month average ending Dec. 31, 2002, according to Piedmont's workpapers.

This is a situation where two entirely different statistical methods and entirely different sources of data lead to the same result. The data in Schedules DAM-1 and DAM-4 may at first look reliable, but to verify the data I tested it against publicly available information.

8

6

7

9 10

Q_23. What is your opinion regarding the data in Schedules DAM-1 and DAM-4?

11 12

13

A 23.

III.

My opinion is that the data in Schedules DAM-1 and DAM-4 is inaccurate and unreliable.

15 16

14

17

18

19 20

21

22

23

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26 27

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33

34 35

36

37

Q_24.

28 A 24. 29 30 31

Q_25.

What did you do to verify your opinion?

B.2. - Securities and Exchange

Commission's Data Provides A

Capital Structure Completely

Different From Piedmont's

Proposed Capital Structure

To verify my opinion I utilized publicly available data from United States Securities and Exchange Commission (SEC). Since the SEC's data base is available to the public via the Internet, I studied the comparable companies' SEC filings, as well as Piedmont's SEC filings.

What facts did you discover by employing the data from the SEC?

38 A 25. 39

I discovered that:

1. Short-term debt is a significant portion of the comparable companies' capital structures.

 2. The comparable companies' commonequity ratios shown in DAM-4 and taken from Value Line are not calculated on the basis of the comparable companies total debt.

3. The common-equity ratios shown in DAM-4 are calculated by excluding short-term debt.

4. Value Line fails to report what a comparable company itself voluntarily reports to the SEC, but Value Line does not accept responsibility for errors or omissions because Value Line states in its publication: "Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMMISSIONS HEREIN."

23.

5. The comparable companies credit arrangements and loan covenants, whether short-term or long-term, are based on total debt.

6. When short-term debt is included in the comparable companies capital structure, their average common equity ratio is 43.8% for the fiscal year ending 2002 and 42.7% for the fiscal year ending 2001.

7. The comparable companies average short-term debt ratio is 12.2% for the fiscal year ending 2002 and 14.6% for the fiscal year ending 2001.

8. All Chief Financial Officers of companies filing SEC annual and quarterly reports, such as forms 10-K and 10-Q, after October 1, 2002, must comply with the Sarbanes-Oxley Act and certify those reports as promulgated in SEC Rules 13a-14 and 15d-14.

9. The SEC has administrative rules which specify the certification's contents to include this statement: "based on his or her knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition and results of operations of the issuer as of, and for, the periods presented in this report."

10. On January 23, 2003 Piedmont filed a 10-K stating at page 14 in the third paragraph: "At October 31, 2002, our capitalization consisted of 44% in long-term debt and 56% in common equity." The report is certified by Piedmont's Chief Financial Officer.

11. On March 28, 2003 Progress Energy and the Chief Financial Officer of Piedmont jointly filed a SEC form U-1/A stating from the bottom of page 5 to the middle of page 6, contrary to

the 10-K report of January 23, 2003 for an identical time frame:

C		consolidated at October 31, as follows:	
Common	CEOO EOO 000	E1 E00	
Equity	\$589,590,000	51.50%	
Preferred	\$0	. 0%	
Equity		,	
Long-term			
debt	\$462,000,000	40.30%	
Short-term			
debt*	\$93,500,000	8.20%	
*I	ncluding curre	ent portion of	
lo	long-term debt and sinking fund		
re	quirements"		

5

Have you provided information to support the statements you have just made?

7 8 9

6

Q_26.

A 26.

Yes, I have. My Schedules 1 through 7 appear in my Exhibit CAPD-SB and provide the detail to support my statements.

11 12 13

10

My Schedule 1 shows the opening computer-page to the SEC's data base which is accessed over the Internet.

15 16 17

18

19

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21

14

For example, typing in the words "Piedmont Natural Gas" in the "Company name" box brings up the information shown in Schedule 2 page 1, which is a copy of computer screen showing the SEC's list of forms filed by Piedmont Natural Gas. Regarding Schedule 2 page 1, clicking a computer mouse on the words "10-K" brings up Piedmont's 10-K which the company filed on January 23, 2003. Schedule 2 page 2 is a copy

22 23 24

25

		Page 23 of 75
1		of Piedmont's 10-K form, page 14. Schedule 2
2		pages 3 and 4 are copies of Piedmont's 10-K
3		form, pages 81-82, showing Piedmont's
4		certification of its 10-K.
5		Cercification of its to K.
6		Did Diedmont file its January 23 2003 10-K in
	Q_27.	Did Piedmont file its January 23, 2003 10-K in
7		this rate case proceeding?
8		
9	A_27.	Yes, Piedmont filed its January 23, 2003 10-K
10		as a part of its filing in TRA Docket 03-00313.
11		
12		
13	Q_28.	Why have you presented Schedules 1 and 2 even
14		though Piedmont filed its 10-K in the current
15		proceeding?
16		
17	A_28.	Even though Piedmont filed its 10-K in the
18	_	current proceeding, I have presented Schedules
19		1 and 2 to show how to access company
20		information from the SEC, to show that the
21		process is straight forward, and to show that
22		company information can be gathered and
23	•	
		verified directly without having to go through
24		either the company itself or an intermediary
25		such as Value Line.
26		
27	Q_29.	What is your opinion regarding the practice of
28		using SEC data to determine capital structure
29		rather than Value Line?
30		
3 1	A_29.	My opinion is the data from the SEC is sound
32		and reliable and that SEC data certified by a
33		company is especially reliable. In contrast the
34		information put forward by Value Line and used
35		by Dr. Murry is not reliable and not certified.
36		Value Line even disclaims responsibility for
37		errors and omissions.
38		CITOIS and Omissions.
39		My Schedule 3, pages 1 to 7, shows that Value
40		
70		Line often fails to report what a comparable CAPD Witness Brown - Direct: Docket 03-00313

Page 24 of 75 company itself voluntarily and openly reports to the SEC. How does Schedule 3 support your opinion regarding Value Line's failure to report what the companies themselves report? My Schedule 3 provides sufficient evidence to support my opinion. Schedule 3 lists each company's capital structure by components, such as: Short-Term Debt-Notes Due, Short-Term Debt -Current Portion of Long-Term Debt, Long-Term Debt and Common Equity. Schedule 3 page 1 is especially relevant because the company shown, AGL Resources, does business in Tennessee. The information shown in the lines numbered 3 through 9 and 12 through 17 are an exact copy of the information and format which AGL Resources presents in its 10-K filing. Line 22 displays a quote from AGL Resources, which explains that its financial covenants are based on total debt, not just long-term debt.

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Q 30.

A 30.

Schedule 3 page 2, line 22 displays a quote from Atmos, a company that does business in Tennessee and which explicitly includes short-term in the capital structure. Schedule 3 page 3, line 23 indicates that New Jersey Resources "financial covenants" depend on total debt and that debt was 56 percent of total capital." Page 4 lines 21 to 22 shows that Nicor's credit arrangements depend on total debt. Page 5 line 27 shows that Northwest Natural Gas explicitly includes short-term in its capital structure. Page 6 line 21 shows that Peoples Energy defines its capital structure as including short-term debt. Page 7 line 25 shows that WGL

	•	Page 25 of 75
1.		Holdings regards total debt as the basis for
2		capital structure ratios.
3		
4	Q_31.	In your opinion, what is the standard practice
5		to calculate equity ratios and capital
6		structure?
7		SCI UCCUIE:
. 8	A 31.	Based on my expertise and experience in the
9	M_31.	
		public utility field and my review of the
10		comparable companies' own reporting to the SEC,
11		my opinion is that the standard practice is to
12		include short-term debt in the calculation of
13		equity ratios and capital structure. The SEC
-14		data proves this, and that anyone interested in
15		finding supporting information can do so.
16		
17		
18	Q 32.	In your opinion is the SEC data available to
19		knowledgeable investors?
20	•	
21	A 32.	Yes.
. 22		
23	Q 33.	In your opinion are knowledgeable investors
24		fully aware of the SEC's data?
25		rurry andre or one one of accu.
26	A 33.	Yes, but I qualify my answer. Knowledgeable
27	A_33 .	investors are well aware of the 10-K, which is
28		•
		the report in which the companies present
29		themselves to the public. It is widely known
30		that 10-K reports are audited and certified,
31		which explains why investors and the public in
32		general trust the information in a 10-K report.
33		I would not expect all investors to look for
34		other filings, such as the U-1, as a source of
35		data.
36		
37	Q 34.	In your opinion, what is the value of data from
38		federal government sources, such as the SEC?

Page 20 01 /	e 26 of 7	15
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In my opinion data from federal agencies has an 1 A 34. informative value for investors, consumers and 2 regulatory agencies. Federal data gives them an 3 opportunity to cross-check and verify a utility's public statements and its data filed 5 in state regulatory proceedings, whether that 6 7 data is about the company itself or other 8 companies.

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The federal government's data has brought the short-term debt issue to the surface in this particular rate case. Had it not been for this data, there would have be no way to identify the comparable companies' short-term debt ratios and place them into the record within the brief time allowed for a rate case proceeding.

17 18 19

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Q 35.

Does Dr. Murry identify the short-term debt components of the comparable companies' capital structures?

21 22

23 A 35. No. Dr. Murry does not identify the short-term 24 debt components of the comparable companies' 25 capital structures.

26 27

28 How does the data in your Schedules 3 compare Q_36. to the data shown in Dr. Murry's Schedule DAM-29 30 4?

31 32

A 36. There are enormous differences between my Schedule 3 and his Schedule DAM-4.

33 34 35

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For example, Dr. Murry's shows Nicor's 2002 common equity ratio as 65 percent, but my Schedule 3 page 4 shows the common equity ratio as 47.2 percent. No matter which equity ratio is chosen, Dr. Murry's ratio is always higher, because it is not calculated on the firm's

		Page 27 of 75
1 2 3	· .	total debt, despite the company's own reporting to the SEC.
4 5 6		My Schedules 4 and 5 are summaries of the comparable companies common equity and short-term debt ratios. These schedules prove that
7 8 9		Piedmont's 53.45 percent common equity ratio is not substantiated, and excessive in comparison to the equity ratios of the comparable
10 11		companies. Dr. Murry's opinion expressed in his direct testimony at page 8 lines 20-21, that
12		"the common equity set for Piedmont for
13		ratemaking purposes is conservative," is
14		inaccurate and unsubstantiated.
15		
16	Q_37.	Is there any reason to believe that your
17		results are different from Dr. Murry's because
18		the capital structures in Value Line have dates
19 20		different from the dates shown in the SEC data?
21	A_37.	No. The results are not different because of
22		the dates.
23.		
24 25	Q_38.	Does Dr. Murry, in his analysis, use any data from the SEC?
26		
27	A_38.	The answer is both "yes" and "no" in the sense
28		that Dr. Murry does not use any data directly
29		from the SEC. However, Value Line uses some
30		information from SEC data. In that sense Dr.
31		Murry does use SEC data because he used Value
32		Line's information.
33		
34		For example, I have already pointed out in my
35 36		Schedule 2 that Piedmont represents (in its 10- K filed with the SEC) that it had a 56 percent
-0.0		- 0 1 EG WILLI RE 366.3 (DB) 1 1 180 8 30 DECENT

common equity ratio as of October 31, 2002. The amount, "56.1%," appears in Value Line's data

for Piedmont, which is available in Piedmont's

37 38 39

Page 28 of 75

response to CAPD's Discovery Request 30. Value Line's data sheet for Piedmont shows the phrase "CAPITAL STRUCTURE as of 10/31/02" appearing at the left-hand side data sheet. The figure of "56.1" and the date of "10/31/02" are drawn from Piedmont's 10-K. The figure "56.1%" also appears in Dr. Murry's Schedule DAM-4, under the "2002" column for Piedmont. Therefore, Value Line and Dr. Murry use SEC data.

However, Value Line does not necessarily report what a comparable company itself voluntarily and openly reports to the SEC, especially with regard to the impact of short-term debt on equity ratios.

III.

31 <u>A_39</u>.

Q 39.

In your opinion do you have any conclusive proof that Value Line's capital structure excludes short-term debt?

B.3. - Comparable Companies'

Calculated Without Including

Short-Term Debt

Equity Ratios In Value Line Are

Piedmont's own SEC filings provide the best proof. Based on Piedmont's 10-K of October 31, 2002, Value Line reports a 56.1 percent equity ratio for Piedmont. Value Line's data sheet for Piedmont is attached to my testimony as CAPD Schedule 7.

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Comparing my Schedule 6 with my Schedule 7 proves that Value Line's data does not include short-term debt. Schedule 6 pages 1 and 2 are screen copies of the SEC's opening data page for Progress Energy, the company that is selling North Carolina Natural Gas to Piedmont. Schedule 6 pages 3 and 4 are screen copies of a joint SEC form U-1/A filing made by Progress and Piedmont to comply with the Public Utility Holding Company Act. In that filing Piedmont says that "at October 31, 2002" its equity ratio is 51.5% and that short-term debt is 8.2%. Clearly the common equity ratio of 56.1 percent in Value Line and Schedule DAM-4 does not reflect short-term debt.

However, there is a peculiar aspect in this discovery. Schedule 7, which is Value Line's data sheet on Piedmont, has the following quote: "The proposed purchase of North Carolina Natural Gas (NCNG) is moving along. The \$425 million acquisition... will largely be financed with short-term debt."

Despite Value Line's own recognition of an impending surge in Piedmont's short-term debt, Value Line forecasts Piedmont's equity ratio in 2004 as 59.5 percent in 2004, which comprises most of the attrition year used in this rate case proceeding. This conclusively establishes that Value Line does not follow standard practice in the calculation of equity ratios and capital structure.

Q_40. Did Piedmont file its U-1/A in this rate case proceeding?

-36

38 A_40. No, Piedmont did not file its U-1/A in this rate case.

1		Fage 50 01 75
2 3 4	Q_41.	In your opinion are knowledgeable investors familiar with the U-1/A filing?
5 6 7 8 9	A_41.	No. In my opinion the U-1/A would not draw investors' attention because the form is not filed periodically. The report appears only at the time there is a pending transaction involving a holding company.
11 12 13 14 15 16 17	Q_42.	In the form U-1/A which you discovered, are the dollar values of Piedmont's common equity, \$589.596 million, and long-term debt, \$462 million, the same amounts which appear in Piedmont's 10-K, regarding common equity and long-term debt?
18 19 20 21	A_42.	Yes, the figures in the U-1/A for common equity and long-term debt also appear at page 33 in Piedmont's 10-K for 2002.
22 23 24 25 26	Q_43.	Do you know of any regulation by the SEC that compelled Piedmont to announce in its 10-K or to represent in its 10-K that the company had "56% in common equity" as of October 31, 2002?
27 28 29 30 31	A_43.	No. I do not know of any SEC regulation that compelled Piedmont to represent the company's financial condition as embodying a 56 percent equity ratio as of October 31, 2002.
32 33 34 35 36	Q_44.	Do you know of any TRA regulation that compelled Dr. Murry to introduce Piedmont's 56 percent common equity ratio as evidence in this rate case?
37 38 39 40	A_44.	No. I do not know of any TRA regulation that compelled Dr. Murry to introduce Piedmont's "56% common equity" ratio as evidence in this rate case.

1		
2 3 4 5	Q_45.	In your opinion do Piedmont and Dr. Murry have similar approaches to defining capital structure?
6 7 8 9 10 11	A_45.	Yes. Piedmont and Dr. Murry have similar approaches to defining capital structure. Each of them excludes short-term debt in the calculation of equity ratios, and each of them represents such ratios as a basis for setting prices in this rate case.
13 14 15 16	Q_46.	In its 10-K of January 23, 2003, does Piedmont state or represent that short-tem debt will be a part of its capital structure in the future?
17 18 19 20 21 22 23	A_46.	No, in its 10-K Piedmont does not represent that short-tem debt will be a part of its capital structure in the future. For example, at page 14 of its 10-K Piedmont states, "Our long-term targeted capitalization ratio is 45% in long-term debt and 55% in common equity."
24 25 26 27	Q_47.	Do the comparable companies represent their future capital structure as including short-term debt?
28 29 30 31 32 33 34 35 36	A_47.	Yes, the comparable companies represent their future capital structure as including short-term debt. For example, Northwest Natural Gas states in its most recent 10-K, "The Company's goal is to maintain a capital structure comprised of 45 to 50 percent common stock equity, up to 10 percent preferred stock and 45 to 50 percent short-term and long-term debt."
37 38 39	Q_48.	In its 10-K, does Piedmont state or represent that it will use short-tem debt in the future?

		Page 32 of 75
1	A_48.	Yes. In its 10-K at page 12 Piedmont states
2.	_	with regard to its impending acquisition, "The
3		purchase price of \$425 million will initially
4		be funded with short-term debt that will be
5		refinanced within six to nine months through
6		the issuance of long-term debt and equity
7		securities."
8 9		
		The did Disducet Sile its II 1/2 with the OHOO
10	Q_49.	When did Piedmont file its U-1/A with the SEC?
11	•	
12	A_49.	Piedmont filed its U-1/A with the SEC on March
13		28, 2003.
14		
15	Ω_50.	When did Piedmont file the current rate case
16		with the TRA?
17		
18	A_50.	Piedmont filed its case approximately April 29,
19		2003.
20		
21	Q_51.	Is there any statement in Dr. Murry's direct
22		testimony where he says, implies or suggests
.23		that Value Line's equity ratios do not include
24		the effect of include short-term debt?
25		
26	A 51.	No, there is no statement in Dr. Murry's
27		testimony indicating that Value Line's equity
28		ratios do not include the effect of short-term
29		debt.
30		
31	Q 52.	In your opinion what is Piedmont's strategy in
32	W_25.	
33		this case regarding short-term debt?
34	A 52.	My opinion based on the facts I have
35	A_52.	My opinion, based on the facts I have
		discovered, is that Piedmont's strategy is to
36		minimize the role of short-term debt in the
37		capital structure which will result from this
38	1.	rate case proceeding.
39		

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For example, in his direct testimony at page 16 lines 14-16 Dr. Murry testifies: "The long-term securities are more likely to be substitutes in Piedmont's permanent capital structure than are short-term securities." However, Dr. Murry's opinion is unsubstantiated because, as I have already testified, he makes no effort whatsoever to identify the short-term debt ratios of the comparable companies.

Furthermore, because Dr. Murry is presenting a case where the short-term debt ratio is just a tiny 1.74 percent of capital structure, the substitution of short-term debt for long-term debt should be a *de minimus* issue to him, hardly worthy of notice.

Q 53.

A 53.

In your opinion, why did Piedmont file its rate-case petition in April, 2003 with a capital structure as of December 31, 2002?

In my opinion Piedmont filed its rate-case petition in April 2003 with a capital structure as of December 31, 2002, to avoid the inclusion of a large amount of very low-cost short-term debt in this proceeding's capital structure, even though the short-term debt will be a part of the company's capital structure in the attrition year, which extends from November 1, 2003 to October 31, 2004.

32 Q_54. In your opinion, what are the economic effects 33 of minimizing short-term debt in this 34 proceeding?

36 A_54. Short-term debt is currently the least
27 expensive source of capital funds. Therefore,
28 my opinion is that by minimizing short-term
29 debt the company's cost-of-capital would be

		Page 34 of 75
1 2 3 4 5		higher, therefore its revenues would be higher because consumers in Nashville, such as small businesses, schools, hospitals and homes, would be paying higher prices.
6 7 8 9 10 11 12		Also, prospectively Piedmont would be in a strong position to seek even more short-term financing for its projects, essentially operating at capital costs which will be significantly lower than what Dr. Murry has presented in his testimony.
13 14 15	Q_55.	Isn't it true that utility rate cases have a prospective component to them?
16 17 18 19	A_55.	Yes, it is true that prospective components are part of a rate case, but it is an open question how "prospective" is implemented.
20 21 22 23 24 25 26 27		For example, one way to predict economic events in 2004 is to take 2003's data and just add five percent. Another way is to predict a reduction in the economy's oil supply in 2004 and add twenty percent to 2003 energy prices and food prices while reducing wages by ten percent and employment by five percent.
28 29 30	Q_56.	In your opinion what capital structure should be used in this rate case proceeding?
31 32 33 34 35	A_56.	In my opinion the capital structure used in this proceeding is a 43.8 percent common equity ratio, a 12.2 percent short-term debt ratio, and a 44 percent long-term debt ratio.
36 37	Q_57.	What is the basis for your opinion?
38	A 57	My opinion is based on the real true and

accurate data reported by the comparable

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companies to the SEC for the companies' fiscal year ending 2002.

I chose 2002 because it is current data filed in that fiscal year and certified by the company CFOs.

Q_58. Are Piedmont's equity and short-term debt ratios an accurate measure for the purposes of this rate case proceeding?

A_58.

No. Piedmont's filings with the SEC have already demonstrated the company's flexibility with regard to how it presents an equity ratio and short-term debt ratio. In addition, my capital structure is based on the comparable companies chosen by Dr. Murry and accepted by Piedmont. Also, on a prospective basis Piedmont has already said, at page 12 of its 10-K, that it will add \$425 million dollars in short-term capital to the company's capitalization by November, about 90 days from now, thus tilting its capital structure toward the comparable companies' configuration.

III. B.4. - Short-Term Debt's Current Cost Is Just One Percent Annually

Q_59. Isn't it true that the company has said it will turn that short-term debt into equity and long-term debt within six to nine months?

A_59. Yes, that is true but that does not make economic sense for the time being. The company itself has already set a short-term debt of just 2 percent, but a long-term rate of 7.71 percent, giving an interest rate spread of 5.71 CAPD Witness Brown - Direct: Docket 03-00313

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percent. Put another way, Dr. Murry and Piedmont are presenting a case where long-term debt is nearly 4 times more costly than short-term debt. Given this situation it would be normal for Piedmont to increase short-term, debt, just as the comparable companies are doing.

. 1

My Schedule 8 provides a history of short-term rates from September 1997 to June 2003. As of June 2003, short term rates have declined to just 1 percent -- short-term debt is almost free.

Q_60. But isn't it true that short-term debt can vary throughout the year?

 A_60. Yes, short-term debt can vary throughout the year. However, whether all the short-term debt varies or just a small portion of it, or whether the variation is tiny or large, depends on interest rates, on the size of short-term debt within the capital structure, and on the use the funds will be put to.

For example, Piedmont says in its 10-K, page 12, "the purchase of \$425 million will initially be funded with short-term debt that will be refinanced within six to nine months."

Piedmont's capitalization is now about \$1 billion, but by November 15, the capitalization will approach \$1.425 billion, with 30 percent being short-term debt.

At a cost of 1 percent, short-term debt should be used for as long as possible. To do so makes perfect economic sense.

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1 Q_61. How does Piedmont's proposed long-term2 cost/short-term-cost ratio in this case compare
3 to that ratio in past cases before the TRA?

Piedmont's ratio in this case is very high compared to the findings in the TRA's final order dated February 19, 1997 in Docket No. 96-00977. That was the most recent time the TRA deliberated over a Piedmont rate case. In the final order at page 20, the TRA Directors commented: "There is no disagreement between the parties concerning the cost of long-term and short-term debt; therefore it is appropriate to use the cost rates put forth by both parties: 8.32% for long-term debt and 5.92% for short-term debt."

Therefore, in the 1996 case the long-term-cost/short-term-cost ratio was just 1.41. In the current case the company itself proposes a ratio close to 4. There is plenty of financial room and reason for Piedmont to expand its short-term ratio.

III. B.5. - Capital Structure Must Be Based on Current And Verifiable Information

Q_62. Did you testify in Docket No. 96-00977?

A_62. Yes, I testified in Docket No. 96-00977.

Was capital structure a disputed issue in that case?

1 A_63. Yes, capital structure was a disputed issue in that case.

3

Q_64.

Why was capital structure a disputed issue in that case?

5 6

7 Capital structure was a disputed issue because A 64. 8 I did not agree with the capital structure proposed by Piedmont. There were eight 9 10 comparable companies in that case: Bay State Gas, Laclede Gas, Northwest Natural Gas, 11 Indiana Energy, Washington Gas, AGL Resources, 12 Peoples Energy, And Brooklyn Union Gas. The 13 CAPD discovered three facts about Piedmont's 14 financial policy: The company was raising its 15 dividends at an annual rate of nearly 6 16 17 percent, a rate two to three time faster than 18 2.2 percent dividend growth rate of the 19 comparables; the company raised its dividends faster than company was earning profit; the 20 company's policy of raising dividends faster 21 than earnings had caused the company's equity 22 ratio to decline, like someone who dips into 23 their savings to spend more money than they 24 25 actually make.

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Piedmont's own dividend policy pulled down its equity ratio in the early to mid 1990s, as shown in my Charts One and Two, which are attached to my direct testimony in this docket, 03-00313. Those charts were also filed as attachments to my direct testimony in Docket 96-00977 as Chart 5 and Chart 6.

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Piedmont's cost-of-capital witness, Dr. Murry, argued that Piedmont was a substantially higher risk company because Piedmont's equity ratio had declined over time, and that the company should be compensated for that risk by using a

Page 39 of 75

capital structure where the equity ratio was the result of a proforma adjustment that did not reflect any known, measurable and impending change. The proforma adjustment substantially raised the equity ratio in the company's proposed capital structure.

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In Docket 96-0977, Dr. Murry, in his direct testimony, at page 7 lines 11-13, testified that Piedmont's "lower common equity ratio means that the financial risk of Piedmont is greater than the risk of the" of the comparables.

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The CAPD argued that Piedmont's declining equity ratio was the result of Piedmont's very own practice, where the company sent money out faster than it was coming in. The CAPD further argued that the company wanted to be treated as if it were raising its dividends at only 2.2 percent, instead of the nearly 6 percent growth rate the company had established by its own policy. CAPD also argued that a proforma adjustment would give the company incentive to continue raising dividends faster than earnings, continuing its cycle of lowering its equity ratio to finance dividend growth in anticipation of future proforma adjustments, which would be financed by consumers paying higher prices.

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Therefore, in Docket 96-00977, beginning at pages 41 line 30 of my direct testimony I testified: "I use the most recent [equity] ratio because it represents the cumulative and on-going effect of Piedmont's dividend policy. The company's board has allowed dividend growth to outpace earnings growth, which I show in Chart 5. The adverse consequence is a declining CAPD Witness Brown - Direct: Docket 03-00313

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		Page 40 of 75
1		equity ratio. If I were to use an equity ratio
2		of 51.8%, the amount Dr. Murry uses in his
3		analysis, or if I used the company's five-year
4		average ratio of 50.9%, the overall cost of
5		capital would increase and prices for natural
6		gas would be higher than they would otherwise
7		be. In effect, such an increase makes consumers
8		bear any adverse consequence of the company's
9		declining equity ratio. I do not believe this
10		is fair to consumers because they have nothing
11		to do with determining Piedmont's dividends."
12		to do with determining freemont s dividends.
13		
14	Q 65.	Do you know if the TRA agreed with the CAPD's
15		argument?
16		
17	A 65.	No, I do not know if the TRA agreed with CAD's
18		argument.
19		
20	Q_66.	What capital structure did the Authority order
21		in that case?
22		
23	A_66.	The Authority ordered a capital structure of
24		49.6 percent equity, 1.6 percent short-term
25		debt, and 48.8 percent long-term debt.
26		
27	Q_67.	What did the Authority say in its Final Order
28		regarding its capital-structure decision?
29		
30	A_67.	The Authority said at page 19 of the Order: "We
31		find that the capital structure proffered by
32		the Advocate is appropriate in this case. The
33		Advocate's recommendation is based on
34		verifiable and reasonably current data.
35		Conversely, the suggested capital structure by
36		company witness Dr. Murry is based on
37		speculation for which he provides no convincing
38		foundation."

		Page 41 of 75
1	Q_68.	Do you know what Piedmont's witness Mr. Morris
2		has testified to, in the current docket, Docket
3		No. 03-00313, regarding the Authority's capital
4		structure decision in Docket No. 96-00977?
5		
6	A_68.	Yes. In his direct testimony at page 5, lines
7		20-22, Mr. Morris testifies: "In Docket No. 96-
8		00977, the Authority adopted the use of an
. 9		historical capital structure, thus, as I have
10		previously explained, we have recognized the
11		
12		Authority's policy in this filing."
13	Q_69.	Do you agree with Mr. Morris's testimony, that
14	<u>2</u> _03.	the Authority established a policy that a
15		"historical capital structure" has to be used
16		in a rate case?
17		In a rate case:
18	A_69.	No, I disagree with Mr. Morris.
19	A_09.	NO, I disagree with Mr. Morris.
20	Q_70.	Why do you disagree with Mr. Morris?
21		mil at lea and described when the state of
22	A 70.	In my opinion there is nothing in the
23		Authority's order regarding "historical capital
24		structure." The Authority wrote that "The
25		Advocate's recommendation is based on
26		verifiable and reasonably current data." In my
27		opinion the words "current and verifiable" do
28		not mean historical.
29	;	not mean miscoricar.
30 .	Q_71.	In your opinion is Dr. Murry's capital
31	_	structure "current and verifiable?"
32		
33	A 71.	No. In my opinion, which is based on the
34		evidence I have presented, Dr. Murry's capital
35		structure is not "current and verifiable."
36		The state of the s
37	Q_72.	Is your capital structure "current and
38	_	verifiable?"
20		

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Yes, in my opinion the capital structure I use A 72. is "current and verifiable" because it is based on the comparable companies' certified financial statements filed with the SEC. The capital structure of 43.8 percent equity, 12.2 percent short-term debt and 44 percent long-term debt is nothing more than the most recent average capital structure of the comparable companies.

III. B.6. - The Capital Structure Issue In Docket 03-00313 Is Different Than The Capital Structure Issue In Docket 9600977

Q_73. What is the difference between the capital structure issue in this case and the capital structure issue in Docket 96-00977?

A 73.

In Docket 96-00977, Piedmont's capital structure was verified and its equity ratio was consistent with the equity ratios of the comparable companies. For example, my Schedule 9 shows Piedmont's equity ratio was between the maximum and minimum equity ratios of the comparable companies for the years 1990 to 1995. Also, Piedmont's short-term debt ratio was not at issue because short-term debt cost was close to long-term debt cost.

In the current case Piedmont's capital structure is not verified, its proposed equity

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ratio excludes the impact of short-term debt, its proposed equity ratio vastly exceeds the equity ratios of the comparable companies, the company has filed inconsistent equity-ratio information with the Securities and Exchange Commission of the United States, and the company's short-term debt ratio is tiny and inconsistent with the short-term debt ratios of the comparables.

5.

Consequently, rather than using Piedmont's unverified, inconsistent and contradictory information, in this case I use a capital structure based on the most recent information filed with the SEC by the comparable companies.

III. B.7. - Average Capital Structure Does Not Change Piedmont's Risk

Q_74. Would an equity ratio of 43.8 percent make Piedmont a riskier company than the comparable companies?

A 74.

No. An equity ratio of 43.8 percent would not make Piedmont a riskier company than the comparable companies. In his direct testimony at page 8 lines 1-2, Dr. Murry testifies: "I included only companies...that had a capital structure with common stock equity of at least 40 percent in the year 2002." A 43.8 percent equity ratio is above his threshold of 40 percent.

Would an equity ratio of 43.8 percent violate any credit or loan covenants that Piedmont may have?

Q_75.

2 A_75. No, based on the evidence I have accumulated 43.8 percent is well above any covenants I 3 found. 5 6 For example, my Schedule 3 page 1, line 22 7 shows that AGL has to maintain an equity ratio of 30 percent. Page 4 line 21 shows that NICOR 8 9 has to maintain a 35 percent equity ratio. Page 10 3 line 23 shows New Jersey Resources must maintain a 35 percent equity ratio. Page 7 line 11 25 shows that WGL must maintain a 35 percent 12 13 ratio. 14 15 Furthermore, at page 12 of its 10-K Piedmont states, "We are well within the debt default 16 17 provisions established for our senior notes, 18 medium-term notes, short-term bank lines of 19 credit and accounts receivable financings." 20 21 Furthermore, an equity ratio of 43.8 percent in 22 this case only means that Piedmont's prices in 23 Tennessee are calculated on that ratio. The 24 company's real equity ratio will be affected by 25 sales in its other service territories and the 26 savings the company is enjoying from its 27 acquisition of North Carolina Natural Gas from 28 Progress Energy. 29 30 Q_76. Are those savings factored into costs that 31 Piedmont has included in its attrition 32 year expenses filed by the company in this 33 rate case proceeding? 34 35 A_76. No. Those savings are not factored in. 36 37 Q_77. Does the 43.8 percent equity ratio capture 38

any portion of those savings?

39

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No. The 43.8 percent equity ratio does not capture any of those savings nor is it intended to. The equity ratio is based strictly on the comparable companies chosen by Dr. Murry and accepted by the company.

 However, Piedmont is likely to improve its equity by enjoying savings from its acquisition from Progress Energy. Piedmont also improves its equity through the "Nashville Gas Company Performance Incentive Plan," which provided Piedmont with approximately \$1.4 million in savings Tennessee for the year ending June 2002.

IV. Cost of Short-Term Debt

Q_78. What is your opinion on short-term debt cost?

A_78.

My opinion is that the short-term debt cost is 1.3 percent, which is the average of commercial paper interest rates from July 2002 to June 2003.

Q_79. What is your opinion on the company's shortterm debt cost?

 A_79. My opinion is that company's short-term debt cost is too high. In Dr. Murry's Schedule DAM1, short-term debt cost is shown as 2 percent.
According to my Schedule 8 page 2, short-term debt cost has not been 2 percent since November 2001.

V.	Page 46 of 75 Cost of Long-Term Debt
Q_80.	What is your opinion on the company's long-term debt cost?
A_80.	My opinion is that company's long-term debt cost is too high. In Dr. Murry's Schedule DAM-1, long-term debt cost is shown as 7.71 percent. According to my Schedule 10, the comparable companies have an average long-term debt cost of 6.83 percent for the fiscal years ending 2002.
Q_81.	What is the purpose of using comparable companies' data?
A_81.	My Schedule 10 shows the comparable companies have a wide range of interest rates and financing methods. Using the comparable companies' data avoids disputes over a specific company's specific embedded cost and its financing methods.
	For example, using a company-specific embedded cost would mean that the company with the highest debt cost would always suggest that its equity return be higher than debt cost, therefore, the higher the debt cost the higher the return to equity. Conversely, the company with the lowest debt cost would receive the lowest return to equity. The markets do not work that way. A company's return to equity is not guaranteed to be a certain amount higher or
O 82.	lower than the company's debt cost. Isn't true that 6.83 percent is not equal to

the 7.71 percent which Piedmont filed in this

37 38

39

case?

Yes. However, there is ample reason to believe that 6.83 percent will more than cover Piedmont's long-term debt cost in the attrition year and beyond, even if the short-term debt cost is left out of the analysis.

Consider the \$425 million that Piedmont is paying Progress Energy for the acquisition of NCNG. According to Progress Energy's SEC form 10-Q for the quarter ending March 31, 2003, Progress issued \$425 million of First Mortgage Bonds at a rate of just 4.80%. These bonds are not due until March 1, 2013. These are longterm bonds. Furthermore, Progress did this on an equity ratio of only 39 percent, as of March 1, 2003. Progress Energy's SEC form 10-Q for the quarter ending March 31, 2003 is not attached to my testimony but can be copied from the SEC's online data base.

Ω₈₃. Are you suggesting that Progress Energy is comparable to Piedmont?

No, I am not suggesting that Progress should be one of the comparable companies. I am pointing out that long-term rates are very low. If one North Carolina-based utility with a 38 percent equity ratio can get 4.8 percent long-term rate on \$425 million, then Piedmont can probably get the same or better treatment for any refinancing or new debt funded from the financial community that served Progress.

Q_84. How do you know that the \$425 million you are referring to is the same \$425 million that Piedmont is paying Progress?

38 A_84. My Schedule 11 is the entire U-1/A form I described earlier. I know from the form that

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Progress regarded the \$425 million as "in the bank" by March 2003. In the U/1-A filed with the SEC, the parties say "Even if the Commission takes into account the capitalization of and earnings...in which Progress Energy has an interest, there would be no basis for withholding approval of the proposed transaction," where the "Commission" means the SEC and the "transaction" means the transfer of assets to Piedmont. The financial community appears to have already passed \$425 million to Progress, and Progress appears to have booked the transaction while turning that amount into 4.8 percent mortgage bonds.

 Therefore, the \$425 million sale is not a "prospective" transaction as Piedmont suggests. Progress Energy's issuance of \$425 million of bonds in March suggests Progress received payment in full for the assets approximately two months before Piedmont filed its case with the TRA, even though the transaction's scheduled closing date has not yet been reached.

VI.	Cost of Equity
Q_85.	Is the company's requested return a just and reasonable cost-of-equity?
A_85.	No. In my opinion the requested return of 12.6 percent is not a just and reasonable cost-of-equity because the recommended rate for equity overstates the prevailing return on equity in the American economy.
Ω_86.	What is the prevailing equity return in the market?
A_86.	My Schedule 12 displays the prevailing return on equity in our economy. The schedule shows a range of equity returns for approximately 5600 companies for the twelve months ending July 2003. The information is compiled by MorningStar, a data base firm that maintains a data base on stocks, mutual funds and tracks their performance. Its information can be accessed through the internet.
	Nearly one-half of the stocks achieved equity returns of less than 7%. Less than one-quarter achieved returns higher than 12.6 percent, which is the company's requested return.

1 A. - Dr. Murry's Support For A VI. 2 12.6 Percent Return 3 4 5 How does Dr. Murry support his recommended 6 Q_87. 7 return? 8 9 10 Dr. Murry supports his return with three A_87. 11 basic arguments. 12 13 14 1. An equity-return must exceed the return to debt, any other result is not credible. 15 16 17 For example, in his direct testimony at 18 page 12 lines 12-15: "In general these DCF 19 results are so low that they are 20 comparable to yields on debt instruments, 21 and this is not commensurate with the risk 22 differentials between common stock 23 ownership and ownership of a quality debt instrument. This is not a credible 24 25 result." Dr. Murry makes a similar point 26 at page 13 lines 10 to 12: "ranges between 27 7.2 percent and 7.9 percent ... given 28 current bond yields, these results cannot 29 represent the expectations and 30 requirements of common stock investors..." 31 32 2. Rates should be based primarily on the 33 future. 34 35 For example, Dr. Murry states in his 36 direct testimony at page 10 lines 14-16 37 and lines 20-21: "Since rates are being 38 set for the future, a sharp division 39 between prospective and historical data

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diminishes the usefulness of historical data for analytical purposes...However, given current market circumstances, I focused my analysis principally on forecasted earnings and dividends." Dr. Murry makes a similar point at page 19 lines 18-21: "As indicated...I relied primarily upon the results from the DCF analyses using the projected earnings growth rates."

3. "Interpretation" is the path to credible and proper rates.

For example, Dr. Murry states in his direct testimony at page 7 lines 6-9:
"...market conditions are important when interpreting the results ... Putting the results of these analyses in the context of current market conditions aids in their interpretation." He makes the same point from page 9 line 26 to page 10 line 6: "A second [limitation] is the analyst's interpretation of those data...One should carefully select data...and interpret the results just as carefully...", and again page 18 lines 21-22: "You indicated that interpretation of ...results was important."

1 2

VI. B. - 7.2 Percent Return Is Above Debt Cost And What Investors Expect

Q_88. What is your opinion of Dr. Murry's arguments?

A_88. My opinion is that the arguments are not substantiated. Therefore, I disagree with them.

Consider the argument that equity return must exceed debt return. Dr. Murry's first step, that equity returns must exceed the returns to a "quality debt instrument," merges into a second step, that equity returns must exceed "current bond yields," implying that "quality debt instruments" are limited to bonds. But there are plenty of bonds. A 7.2 percent DCF yield is higher than a 6 percent return from a corporate triple-A bond, higher than a 5 percent return from a thirty-year government bond, and higher than the return on the tenyear U.S. Treasury Notes. So which sector is the basis of comparison? Public sector debt or private sector debt? What time horizon is the basis of comparison? Thirty years or ten?

Dr. Murry's argument does not specify a sector or a "holding time" or the investor's time horizon. Does the investor plan to hold the stock for 30 years, ten years, or two years? Dr. Murry implies the investor has a thirty year horizon, judging from his Schedule DAM-17, which he describes in his testimony at page 16 lines 7 to 8. However, he provides no evidence to support his interpretation that thirty-years is a shareholder's holding period. In fact,

		Page 53 of 75
1 2 3		investors have a very short horizon of no more than three years.
4 5 6 7 8	Q_89.	What is the basis of your opinion, that an investor's time-horizon is no more than three years?
9 10 11 12	A_89.	My opinion is based on the turnover rates of stock ownership for Piedmont and for each comparable company.
13 14 15		I gathered daily trading history for each stock going back several years.
16 17 18 19 20		For example, Yahoo's web site on internet, http://chart.yahoo.com/d , has historical trading data, as does America Online, which uses Standard & Poor's data.
21 22 23 24 25		My Schedule 13 shows my analysis. At page 1 of Schedule 13, AGL is shown to have 63,343,000 shares outstanding as of July 31, 2003. In my analysis I assumed there would be little
26 27 28		difference in stock outstanding on July 31 versus May 30. At page 2 of Schedule 13, for example, 486,300 shares of AGL Resources were traded on May 27, 2003. I added up the shares
29 30 31		traded, starting from May 30, to May 29 to May 28 and so on, until I reached a date where the total number of shares traded was equal to or
32 33		greater than the number of shares outstanding. That date is shown on page 1, in the column
34 35 36		titled "100% TurnOver Since." For every company, 100 percent of the shares
37 38		turn over within three years.
39 40		Therefore, the appropriate time-horizon in this case is short, and short-term bonds are much

		Page 54 of 75
1 2		better benchmarks than a thirty year note. A
3		7.2 percent equity return is very credible because the short-term bonds have much lower
<i>3</i>		returns.
5		recurns.
6	Q 90.	Do you have other information which suggests a
7	_	7.2 percent return is credible?
8		
9	A_90.	Yes, my Schedule 14 supports my opinion that a
10		7.2 percent return is credible. In May 2001 the
11		DRI-WEFA group, an economic and financial
12		forecasting company formed from DRI (formerly
13 14	•	Data Resources Inc. owned by Standard & Poor's) and WEFA (Wharton Econometric Forecasting
15		Associates) issued a report named "25-Year
16		Focus, Summer 2001 - The Four Scenarios: The
17		Trend Projection." At page 17 of the report the
18		firm projects stock market prices to rise at
19		just 5.3 percent annually. That page is my
20	5	Schedule 14 and is attached to my testimony.
21		
22		A respected economics consulting firm is
23		suggesting that a rapidly rising stock market
24 25		with high levels of growth and high equity risk is over.
26		is over.
27	Q_91.	Do you have any evidence suggesting that DRI-
28		WEFA's forecast is accurate?
29		
30	A_91.	Yes. My Schedule 12, which displays
31		MorningStar's compilation of recent equity
32	:	returns in the American economy, confirms that
33 34		DRI-WEFA is accurate thus far. My Schedules 12,
3 4 35		13 and 14 confirm that historical levels of risk premiums and equity returns will not be
36		attained When establishing a return on equity

for a utility, the Authority should consider this information as primary, rather than the historical information that Dr. Murry displays

		Page 55 of 75
1		in his Schedule DAM-7, especially in view of
2		Dr. Murry's claim that Value Line's equity
3		returns and forecasts represents an appropriate
4		view of investor expectations
5		
6	Q 92.	How is Dr. Murry claiming that Value Line's
7		equity returns and forecasts represent an
8		appropriate view of investor expectations?
9		
10	A 92.	Dr. Murry makes that claim because his only
11	-	source of returns and forecast data is Value
12		Line. For example, in his testimony at page 10
13		line 21 he states, "I focused my analysis
14		principally on forecasted earnings and
15		dividends." At page 11 line 6-7 he says the
16		data is in Schedule DAM-5. At the bottom of
17		that schedule the source is listed as "Value
18		Line."
19		DILIG.
20		But despite his supposed focus on the future,
21		he lays out what appears to be historical and
22		high equity returns in his Schedule DAM-7,
23		which supposedly shows equity returns in the
24		range of 12 percent for Piedmont and the
25		comparable companies. In his direct testimony
26		at page 11 lines 21 to 22, Dr. Murry concludes:
27		
28		"As Schedule DAM-7 shows, the returns on common
		equity of Piedmont have been less than the
29		average of the group of comparable companies
30 31		since 2000."
32		What is wown eminion of the forester and
33	Q_93.	What is your opinion of the forecasts and
33 34		equity returns shown in Dr. Murry's schedules
3 4 35		DAM-5 and DAM-7?
36		My opinion is that they are not smadible. T
30 37	A_93.	My opinion is that they are not credible. I
3 <i>1</i>		have already shown that Value Line calculates
30 30		common equity ratios by excluding short-term

		Page 56 of 75
1		Murry's statement that "the common equity set
2		for Piedmont for ratemaking purposes is
3		conservative," is not right. Therefore, I do
4		not believe the equity returns shown in
5		Schedule DAM-7 are accurate.
6		
7		Those returns are likely to be inflated, just
8		as the common equity ratios are inflated.
9		Therefore, my opinion is to disregard Dr.
10		Murry's testimony that "the returns on common
11		equity of Piedmont have been less than the
12		average of the group of comparable companies
13		since 2000."
14		
15	Q_94.	Do you have additional evidence demonstrating
16		Value Line's lack of credibility.
17		
18	A_94.	Yes. Consider Dr. Murry's CAPM analysis, which
19		uses Value Line's betas.
20 21		
22		
23		
24	VI.	C Dr. Murry's CAPM Analysis
25		Overestimates Equity Return
		Overescringces Edutch Vecaru
26 27		
28	Q_95.	Why did Dr. Murry perform a CAPM analysis?
29	- \	
30	A_95.	Dr. Murry performed a CAPM analysis to
31		validate his recommended return of 12.6
32		percent. In his direct testimony at page
33		15 lines 1-2, he states that his CAPM
34		analysis "serves as a good check on the
35		results of the DCF calculation."
36		
37		

What is the role of Value Line betas in

Dr. Murry's CAPM analysis?

Q_96.

38 39

40

		Page 57 of 75
1	A_96.	Value Line betas play a central role in
2		Dr. Murry's CAPM analysis.
3		
4	Q_97.	What is a beta?
5		
6	A_97.	It is a ratio of the change in a stock
7		price to the change in the overall market
8		price or index, and there are three
9		possibilities. For example, if a market
10		index increases by 10 percent and a stock
11		price increases 5 percent, then the
12		stock's beta is .5 or one-half. On the
13		other hand, if a market index increases by
14		10 percent and a stock price decreases 5
15		percent, then the stock's beta is a
16		negative one-half. Finally, if a market
17		index changes and the stock price does not
18		change, the stock's beta is zero.
19		ondigo, one boom b boom is boom.
20	Q 98.	What economic meaning is normally assigned
21		to the beta?
22		
23	A 98.	It is regarded as a measure of risk, the
24	-	higher the beta, the higher the risk.
25		
26	Q_99.	Where are the Value Line betas in Dr.
27		Murry's cost-of-capital analysis?
28		
29	A_99.	Value Line betas appear in Dr. Murry's
30		analysis in his Schedules DAM-15 and DAM-
31		16.
32		
33	Q_100.	What are values of the betas in Dr.
34		Murry's Schedules DAM-15 and DAM-16?
35		
36		
37	A_100.	The betas' values range from a high of .9
38		to .6, the lowest value.
39 40		
-+17		

VI.

D. - Dr. Murry's CAPM Analysis Relies On Value Line Betas, Which Are Not Standard Practice and Which Inflate Returns

0_101. Do you agree that Value Line betas measure
risk?

 A_101. No. I disagree because Value Line's betas inflate the measure of risk and are not standard practice in the financial industry.

My Schedule 15 provides a comparison of Value Line betas with other betas. The far left column lists the companies, and columns 1 through 2 list betas from the financial sources on the internet. Column 3 lists my calculation of the beta and column 4 lists Value Line's beta.

Value Line's betas are substantially higher than all others. Clearly, Value Line's betas are not standard practice. My calculations give results consistent with standard practice.

Q_102. What is the effect of Value Line's betas on the estimated cost-of-capital?

A_102. Value Line's betas lead to an overestimate of risk and an overestimate of capital cost.

Page 59 of 75 How does Value Line calculate its betas? Q 103. 2 3 Value Line reduces the calculated beta by A_103. one-third and then adds .35 to produce an 4 "adjusted" beta. This adjustment to the 5 6 calculated beta makes low betas look higher than they really are. Therefore, Value Line's betas do not capture or 8 9 embody changes in economic conditions. 10 11 My Schedule 16 shows the relationship 12 between a calculated beta and the Value 13 Line Beta. 14 15 Do you know the economic basis for Value Q_104. 16 Line's procedure to calculate betas? 17 18 A_104. Yes. Value Line bases its procedure on an 19 article titled "On The Assessment Of Risk" 20 which was authored by Marshall Blume of 21 the University of Pennsylvania. Professor 22 Blume's article was published in the March 23 1971 issue of the Journal of Finance. 24 Blume believed that all betas tend towards 25 one, which is overall market average beta 26 of the thousands of companies that compose 27 the stock market. 28 Blume performed a calculation to raise the 29 30 value of betas that are low and lower the 31 value of betas that are high. This 32 procedure was adopted by Value Line. The 33 portfolios in Blume's article were formed 34 between the years 1926 and 1968. His most 35 recent portfolio is almost forty years 36 old. His inquiry has not been updated, and 37 there is no evidence that his portfolio 38 included gas distribution companies. 39

Page 60 of 75 Has the issue of adjusted betas versus Q_105. calculated betas been studied? 2 3 Yes. The issue of adjusted versus calculated A_105. betas has been addressed in several forums. 5 6 Financial Markets and Corporate Strategy, (1st Edition, 1998), a standard 8 college financial textbook used worldwide 9 and authored by Professor Mark Grinblatt 10 of UCLA and Professor Sheridan Titman of 11 the University of Texas, addresses the 12 issue of Value Line adjusting a beta's 13 value towards one. At page 175 of the book 14 15 its authors advise students of finance: "better beta estimates might result by 16 shrinking the unadjusted estimates towards 17 an industry average rather than toward the 18 market average [of one]." 19 20 Another standard but older financial 21 22 textbook, Financial Management and Policy by James C. VanHorne of Stanford 23 University, says at page 69 of the 7th 24 edition: "Adjusting historical betas is 25. difficult business because the process is 26 seldom clear and consistent." 27 28 29 In 2002 the Australian government 30 commissioned a study to examine the use of 31 adjusted betas versus calculated betas. The relevant report is: "Final Report, 32 33 Empirical Evidence on Proxy Beta Values 34 for Regulated Gas Transmission Activities: 35 July 2002 Report for the Australian 36 Competition and Consumer Commission," 37 prepared by the Allen Consulting Group of 38 Melbourne, Australia.

39

Page 61 of 75 The following conclusion appears at page 30 of the report: "Accordingly this report uses the raw betas estimates produced by 3 each of the beta estimation services." The report can be acquired over the internet 5 at: http://www.accc.gov.au/gas/br reg iss/empi 8 9 ricalA.pdf, 10 11 and 12 http://www.accc.gov.au/gas/br reg_iss/empi 13 14 ricalB.pdf. 15 16 Also in 1998 Professor Martin Lally of the 17 Victoria University of Wellington, 18 19 authored an article, with the technical 20 and esoteric title of "An examination of Blume and Vasicek Betas." The article was 21 22 published in the economic journal, The 23 Financial Review. Professor Lally 24 concludes at page 192 of his article: "The 25 result is a dramatic overestimate by Blume, because a singularly relevant fact 26 27 is ignored, i.e., membership [in] an 28 industry whose average estimated, and 29 therefore presumably also true beta is 30 well below one." 31 32 These sources are not attached to my 33 testimony but they are available in CAPD's 34 workpapers. 35 36 Isn't it true that The Financial Review is Q 106. 37 just an obscure economics journal? 38 39 No. The journal may be obscure to A 106. 40 regulatory agencies but The Financial CAPD Witness Brown - Direct: Docket 03-00313

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1 2		Review is the property of and published by the Eastern Finance Association.
3 4 5 6 7		My Schedule 17 is a display of the Association's officers, who represent a cross-section of the economics profession in 2003.
8 9 10 11	Q_107.	What is your opinion of Dr. Murry's statement that "betas are sometimes unstable?"
11 12 13 14 15 16 17 18 19	A_107.	Dr. Murry's statement, which appears in his direct testimony at page 15 line 9, is mistaken. In my opinion betas are not unstable, or said another way, betas do not swing wildly from month to month because they are generally calculated by using five years of data. They change gradually over time.
20 21 22 23 24 25 26		My Schedule 18 is a table of betas that I calculated going back to January 1998. The table clearly shows betas declining from 1998 forward. The table's values are shown more conveniently in the "Chart Of Betas" following my Schedule 18.
27 28 29 30 31 32		My table and chart show that real betas have not been in the .6 to .8 range since early 1998. Therefore, Dr. Murry's CAPM analysis is predicated on betas that are not even close to being current.
33 34 35 36	Q_108.	Why do financial reporting services, such as those you reference in your Schedule 15, not follow Value Line's example?
37 38 39 40	A_108.	Financial reporting services do not follow Value Line's example because, in my opinion, it is common knowledge that Value Line's betas are overestimates. CARD Witness Proum Direct Docket 03 00313

1		
2 3 4	Q_109.	Do you consider your calculated beta to be accurate?
5 6 7 8 9	A_109.	Yes, I consider it accurate, and the proof is in my Schedule 15, where my calculated beta is shown to be consistent with the betas published by Standard & Poor's and Yahoo.
10 11 12 13	Q_110.	What is your opinion with regard to Value Line's betas?
14 15 16 17	A_110.	My opinion is that they be disregarded because they are inaccurate, leading to a higher risk assessment than otherwise.
17 18 19 20 21	Q_111.	What is your opinion regarding Dr. Murry's CAPM analysis as a "good check" on his DCF result of 12.6 percent?
22 23 24 25 26 27	A_111.	My opinion is that Dr. Murry's CAPM analysis is not a "good check" because it relies on Value Line's betas, which are vast overestimates and not standard practice.
28 29 30 31	Q_112.	What are the value of the comparable companies' equity returns in Dr. Murry's CAPM analyses?
32 33 34 35 36 37	A_112.	In Dr. Murry's Schedule DAM-15 the comparable companies' equity return is 11.74%. In his Schedule DAM-16 the comparable companies' equity return is 11.02%.

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VI.	E Using Standard & Poor's Beta in Dr. Murry's CAPM Analysis
	Gives A Return of 7.2 Percent
Q_113.	If the betas from Standard & Poor's or Yahoo were used in Dr. Murry's CAPM
	analysis, what would the overall equity returns be?
A_113.	If the betas from Standard & Poor's or
	Yahoo were used in Dr. Murry's CAPM analysis, the equity returns would be
٠	about 7.2 percent, the same number that
	Dr. Murry has already described as "not
	credible" at page 13 of his direct testimony.
Q 114.	Are there other aspects of Dr. Murry's CAPM
2_114.	analysis which are not standard practice?
A_114.	Yes. In his Schedule DAM-15, Dr. Murry has a
	column titled "Market Total Returns" which
	displays a figure of "14.55%." That amount is the basis of the 8.35% "risk premium,"
	supposedly an amount of return over and above
	the amount which investors expect to get from debt investments.
	debe investments.
	Dr. Murry's testimony provides no evidence about how he derived the figure of "14.55%,"
	nor state exactly what the source is, nor sho
	the calculations that lead to "14.55%," a
	return not in the mainstream of equity return Also, the number is so large that it could be
	an "arithmetic" mean of returns rather than a
	real return

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2	
3	

Q 115.

A 115.

What is an "arithmetic" mean of returns?

An "arithmetic" mean is an inappropriate way to express returns to equity.

For example, if I bought a stock two years ago for \$1000 and the market price declined to \$500, I would have a loss of 50% in that year. If by a miracle the stock climbed back to \$1000 the next year, I would have a 100% gain even though I have the same amount of money I started with. The average gain over two years is the "arithmetic" mean, which is 25%, i.e., (-50% + 100%)/2. Any historical record where stock gains and losses are expressed in terms of percentages, without comparing the actual dollar values of investment, always overestimates the true gain.

Because Dr. Murry has not shown how he got to "14.55% and because that figure looks like an inappropriate return, my opinion is to disregard the risk premiums he displays in Schedules DAM-15 and Schedule DAM-16.

However, my CAPM analysis shows how historical records should be employed.

VI. F. - CAPD's CAPM Analysis

Q 116. What is the CAPM model?

A_116. The model defines the cost-of-equity as the market's risk-free rate of return plus

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Page 66 of 75 an estimated risk premium which is multiplied by a beta. The risk premium is 2 the difference between the overall market 3 return and the risk-free return. The model 4 is often expressed by the following 5 general formula: 6 7 $K_e = R_f + (R_m - R_f) * B_e$ (1)8 9 10 where 11 12 K_e is the cost-of-equity 13 14 R_m is the overall market rate of return 15 16 R_f is the risk-free rate of return 17 18 B_e is the beta for common stock 19 20 There is an exact correspondence between this formula and the formulas shown in Dr. 21 22 Murry's testimony at page 14. 23 24 But I use the next formula: 25 26 $K_e = K_d + (R_m - R_f) * B_e$ (2)27 28 The formula's terms have the same meanings 29 as already discussed: 30 31 K_e is the cost-of-equity 32 33 R_m is the market rate of return 34 35 R_f is the risk-free rate of return 36 37 Be is the beta for common stock 38 39 The only difference is that K_d is the debt 40 cost and substitutes for Rf. 41

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             I arrived at my formula by using the
1
2
             following equation:
3
4
             K_d = R_f + (R_m - R_f) * B_d (3)
5
6
             where Bd is the beta for debt capital.
7
8
             There is a market for debt capital just
             like there is a market for equity capital.
9
10
             I derived equation (2) by subtracting
11
             equation (3) from equation (1) and the
12
             result is equation (1):
13
14
             K_e = K_d + (R_m - R_f) * (B_e - B_d) (1).
15
16
             I've assumed that B_d is zero, so that
             equation (2) reduces to equation (1) but Kd
17
18
             substitutes for R<sub>f</sub>
19
20
             What is the procedure for deriving the
    Q 117.
21
             cost-of-equity from this risk premium
22
             model?
23
24
             The procedure has six steps:
    A_117.
25
26
             1. Estimate the market's current
27
             cost of debt - Kd.
28
29
             Estimate market-wide rate of
30
             return for common equity - Rm.
31
32
             3. Estimate the market-wide risk-
33
             free investment - Rf.
34
35
             4. Calculate the difference
36
             between steps 2 and 3
37
38
             5. Multiply the difference by a
39
             "Beta" - Be.
40
```

	3	Page 68 of 75
1		6. Add the result of step 5 to the
2		debt cost in step 1. The result is
3		the estimated cost-of-equity from
4		the risk premium model.
5		
6		
7 8	Q_118.	What do you use as the current cost of debt - K _d ?
9		
10	A_118.	I use the comparable companies' average cost of
11		long-term debt, 6.83 percent.
12		Tong term debe, o. o. percene.
13	Q 119.	What do you use to estimate Rm, market-wide
14		rate of return for common equity?
15		
16	A 119.	My Schedule 19 displays the data I used,
17	_	which is 10.20 percent and which is
18		displayed in the lower right corner of the
19		schedule. The entire schedule displays the
20		compound annual growth rate for Standard &
21		Poor's 500 Company stock index from the
22		period 1925 through 2002. The data is
23		taken from Ibbotson Associates 2003
24		Yearbook - Stocks Bonds, Bills and
25		· · · · · · · · · · · · · · · · · · ·
26		Inflation, Tables A-1 and B-1.
27		In my Schedule 19 columns 2 and 5 display
28		the index's annual value. Columns 3 and 6
29		display the percentage change from year to
30		year in the index. In the lower right
31		
32		corner there is a figure of 12.2 percent. This amount is the "arithmetic" average -
33		· · · · · · · · · · · · · · · · · · ·
<i>33</i>		an overstatement of the real return, which
35		is greater than 10.2 percent.
36	Q 120.	Why are you using Ibbotson's Tables A-1
37	A_150.	and B-1?
38		and b-1:
20		

		Page 69 01 /5
1 2 3 4 5 6 7 8	A_120.	I use the tables because they comprise Standard & Poor's 500 Stock Composite Index, according to the definition at page 352 of Ibbotson's 2003 yearbook. Also, Standard & Poor's 500 Stock Composite Index is a standard measure of performance.
9 10 11	Q_121.	Why are you using historical data to estimate the risk premium?
12 13 14 15 16 17	A_121.	Historical data provides a way to smooth out the wild fluctuations in the risk premium, which is the difference between the risk-free return and market return to common equity.
18 19 20	Q_122.	Why are you using the years from 1925 through 2002 to measure the risk premium?
21 22 23 24 25 26 27 28	A_122.	Ibbotson provides historical information on the risk premium from 1925 through 2002, and these years represent the entire term for which information is available. Using the entire data avoids any element of subjectivity that may influence the selection of only a portion of the data.
29 30 31	Q_123.	What represents the market-wide risk-free investment, R_f ?
32 33 34 35 36 37 38 39	A_123.	My Schedule 20 displays the data I use for the risk-free investment, which is Ibbotson's data on three-month U.S. Treasury bill. It is risk-free because there has never been a loss. Columns 3 and 6 display the percentage change from year to year, and there is not a single negative number in the columns. My

		Page 70 of 75
1 2 3 4		Schedule 20 also displays the arithmetic mean, which is virtually identical to the actual average.
5 6 7 8		Also, the risk-free rate covers the same years as the market-wide return to common equity
9 10 11	Q_124.	What is the market-wide risk-free rate of return, R_f , based on three-month bills?
11 12 13 14 15 16	A_124.	The risk-free rate is 3.79 percent, which is the compound annual growth rate in the value of the three-month treasury bills from 1926 to 2002.
17 18	Q_125.	What betas do you use in your CAPM analysis?
19 20 21	A_125.	I use Standard & Poor's betas shown in my Schedule 15.
22 23 24	Q_126.	What return does the CAPM analysis suggest?
25 26 27	A_126.	My Schedule 21 displays my CAPM analysis and suggests a return of 7.6 percent.
28 29 30	Q_127.	Where would a 7.6 percent return be placed in your Schedule 12?
31 32 33	A_127.	A return of 7.6 percent would place the return in the top 40% of company returns.
34 35 36	Q_128.	In your opinion is that a reasonable return?
37 38 39	A_128.	Yes, in my opinion they are reasonable returns, performing well ahead of long-term-debt cost and well above the

39

40

Q 133.

CAPD Witness Brown - Direct: Docket 03-00313

		Page 72 of 75
1	A 133.	The results of my DCF analysis are shown in my
2		Schedule 22. The suggested DCF return is 7.35%
3		bonodale la. ine baggebaca bel letali la mete
4	Q_134.	Where would a 7.35% return be placed in
5	8_134.	your Schedule 12?
6	. ,	Your schedule 12:
7		A maturn of 7 25 % would place the return
	A_134.	A return of 7.35 % would place the return
8		in the top 40% of company returns.
9		To
10	Q_135.	In your opinion is that a reasonable
11		return?
12		
13	A_135.	Yes, in my opinion they are reasonable
14		returns, performing well ahead of long-
15		term-debt cost and well above the
16		performance of approximately 60 percent of
17		the companies in the past year.
18		
19	Q_136.	What is the difference in procedures between
20		your DCF analysis and Dr. Murry's?
21		
22	A_136.	My DCF analysis relies on dividends only. My
23		source is the MorningStar online data base, and
24		the growth rate is based on 5 years of dividend
25		history and the current dividend yield.
26		
27		Dr. Murry's DCF analysis is summarized in his
28		Schedule DAM-14. However, his DCF analysis
29		treats earnings as if they are dividends.
30		creats earnings as it they are dividends.
	0.407	Did was agree with Dr. Marry was of corrings
31	Q_137.	Did you agree with Dr. Murry' use of earnings
32		growth in his DCF model?
33		No. 2 second por solution in head on the
34	A_137.	No. A correct DCF analysis is based on the
35		investor's real-world cash flow from dividends
36		and their growth. Thus investors' expectations
37		are clearly formed on dividend growth, not
38		earnings. Even Value Line, in my Schedule 7,
39	• . •	says of Piedmont: "Relatively rapid dividend
40		growth continues to be this equity's primary
		CARD Witness Brown Direct: Dealest 02 00212

		Page 73 of 75
1		appeal." However, Dr. Murry relies on earnings
2		in his DCF analysis.
3		
4	Q_138.	How does Dr. Murry rely on earnings in his DCF
5		analysis?
6		
7	A_138.	Dr. Murry relies on Value Line's earnings
8		forecasts to raise his maximum DCF return to
9		14.07 percent. Value Line's earnings forecasts
10		are central to Dr. Murry's results. The
11		earnings growth rate is 8 percent for Piedmont
12		and 6.64 percent for the comparable companies
13		and their personne for one comparable companies
14	•	For example, in his Schedule DAM-10 there is a
15		column titled "EPS Forecasts - Value Line." In
16	•	the same schedule and to the immediate left of
17		the Value Line data there is a column titled
18		"2003 Yields - High." Dr. Murry adds the two
19		columns together and places the results in the
20		far right column under the heading "Cost-of-
21		capital - High." Those results are transferred
22		
23		to his Schedule DAM-14. He applies the same
23 24		procedures to his Schedule DAM-13 and transfers
2 4 25		the results to DAM-14.
26	Q 139.	Is there any overlap or similarity between your
27	Q_139.	
28		DCF analysis and Dr. Murry's?
29	A 139.	Yes, there is overlap. Dr. Murry's Schedule
30	A_139.	DAM-11 is based on dividends. His result is
31		
32		approximately 7.2 percent, but he does not
33		place these results in Schedule DAM-14.
34	Q 140.	Do you know why Dr. Murry excludes those
35	Z_140.	results from his Schedule DAM-14?
36		reserve from HTP Schedule DWM-14;
37	A 140.	Yes, I know. Based on my reading of his
38	- <u>-</u>	testimony, his opinion is that a 7.2 percent
39		return is not credible. However, he does not
40		say the numbers in his Schedule DAM-11 are
		CAPD Witness Proum Direct Docket 02 00212

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wrong or misleading. Also, his inclusion of the results in his analysis contradicts his opinion that such results are not credible, otherwise such results would not be in his analysis.

Q_141. In your opinion is his recommended return credible?

No. In my opinion his recommended return is not credible because it relies on Value Line's long-term earnings growth rates, which are untested and unlikely to be achieved in the future.

16

In April 2003, an article, titled "The Federal Reserve Board and the Stock Market Bubble" was published in the economic journal, Business Economics. The author, Mr. Spencer England, concludes at page 35 of his article: "Finally, we just had the most severe earnings decline since the depression. Put simply, there is no evidence that the economy has entered a new era of permanently higher earnings growth, even though Wall Street analysts still forecast double-digit growth. But from current depressed levels it would take years of double-digit earnings growth just to return earnings growth to the seven percent long-term trend."

Therefore, Value Line's long-term forecasts, 8 percent for Piedmont and 6.64 percent for the other companies, are not credible. They are nothing more than historical growth rates that are over and finished.

The author also says: "if 2002 was the first year of a recovery, it was among the weakest on record." The article is not attached to my testimony but is a part of CAPD's workpapers.

CAPD Witness Brown - Direct: Docket 03-00313

The article I have just referenced makes it 3 clear that Dr. Murry's suggested return of 12.6 percent does not reflect mainstream economic conditions nor the changes that have occurred 6 in the economy. All forms of economic return 7 have declined in the last few years. Equity 8 returns in general have decreased and it is 9 normal for Piedmont's equity return to decrease 10 as well in the current conditions.

11

12 Isn't it true that Piedmont has recently been Q_142. 13 granted a return substantially higher than 7.6 14 percent in North Carolina?

15

16 Yes. Piedmont has informed CAPD that the A 142. 17 company was granted a substantially higher 18 return in North Carolina and that Dr. Murry was 19 the company's cost-of-capital witness. My 20 Schedule 23 is a copy of common equity ratios 21 filed as Dr. Murry's "Exhibit 1 Schedule 4" in 22 the North Carolina Commission's Docket No. G-23 21, SUB 442. This confirms that Dr. Murry's 24 methods in TRA Docket 03-00313 are no different 25 than his practice in the North Carolina docket. 26 Therefore, my opinion is to disregard the North 27 Carolina case as a measure of a just and 28 reasonable return.

29 30

In your opinion what is a just and reasonable Q 143. equity return in this rate case proceeding?

31 32

33 A_143. In my opinion 7.6% is a just and reasonable 34 equity return, consistent with current returns 35 in the American economy.

36 37

This concludes my testimony at this time.

CAPD Witness Brown - Direct: Docket 03-00313

Before the TENNESSEE REGULATORY AUTHORITY

IN RE:

APPLICATION OF NASHVILLE GAS COMPANY, A DIVISION OF PIEDMONT NATURAL GAS COMPANY,

INC., FOR AN ADJUSTMENT OF ITS RATES AND

CHARGES, THE APPROVAL OF REVISED TARIFFS AND THE APPROVAL OF REVISED SERVICE REGULATIONS

DOCKET NO. 03-00313

AFFIDAVIT

I, Steve Brown, for the Consumer Advocate and Protection Division of the Attorney General's Office, hereby certify that the attached Direct Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate and Protection Division.

STEVE BROWN

Sworn to and subscribed before me this **B** day of **August**, 2003.

NOTARY PUBLIC

My commission expires: Sept 24, 2005

67859

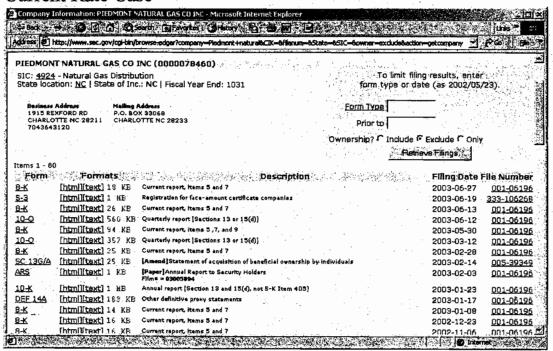
Docket No. 03-00313
Exhibit CAPD-SB__
Direct Testimony_
Schedule 1_
Page 1 of 1____

Screen Copy Of Opening Page of SEC Data Base

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Direct Testimony
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Page 1 of 4

Screen Copy Of Piedmont's Opening Page in SEC Data Base And Screen Location of Form 10-K Filed With SEC and With TRA in Current Rate Case



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Direct Testimony	
Schedule 2	
Page 2 of 4	

Screen Copy Of Piedmont's 10-K Filed Jan. 23, 2003. At Page 14, the Company States Its Common Equity Ratio Is 56% At Oct. 31, 2002.

Piedmont Natural Gas I	Company, Inc Microsoft	Internet Explorer					88
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	ting leases		14	4	7 1	2	1.1

At October 31, 2002, our capitalization consisted of 44% in long-term debt and 56% in common equity. Our long-term targeted capitalization ratio is 45% in long-term debt and 55% in common equity. The embedded cost of long-term debt at October 31, 2002, was 7.71%. The return on average common equity for 2002 was 10.82%.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America. We make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods reported. Actual results may differ significantly from these estimates and assumptions. We base our estimates on historical experience, where applicable, and other relevant factors that we believe are reasonable under the circumstances. On an ongoing basis, we evaluate estimates and assumptions and make adjustments in subsequent periods to reflect more current information if we determine that modifications in assumptions and estimates are warranted.

Our domestic natural gas distribution segment is subject to regulation by certain state and federal authorities. We have accounting policies that conform to Statement of Financial Accounting Standards (SFAS) No. 71, "Accounting for the Effect of Certain Types of Regulation" (Statement 71), and are in accordance with accounting requirements and ratemaking practices prescribed by the regulatory authorities. The application of these accounting policies allows us to defer expenses and income on the balance sheet as regulatory assets and liabilities when it is

14

probable that those expenses and income will be allowed in the rate-setting process in a period different from the period in which they would have been reflected in the income statement by an unregulated company. We then recognize these deferred regulatory assets and liabilities through the income statement in the period in which the same amounts are reflected in rates. At October 31, 2002, we had \$19.7 million of regulatory assets and \$28.6 million of regulatory liabilities, including deferred income tax liabilities of \$13 million. If, for any reason, we cease to meet the criteria for application of regulatory accounting treatment for all or part of our operations, we would eliminate from the balance sheet the regulatory assets and liabilities related to these portions ceasing to meet such criteria and include them in the income statement for the period in which the discontinuance of regulatory accounting treatment occurs. Such an event could have a material effect on our results of operations in the period

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Copy Of Certification By Piedmont's Chief Financial Officer At Pages 81-82 of 10-K Filed with SEC Jan. 23, 2003

CERTIFICATIONS

I, David J. Dzuricky, certify that:

- I have reviewed this annual report on Form 10-K of Piedmont Natural Gas Company, Inc.;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or
 omit to state a material fact necessary to make the statements made, in light of the circumstances
 under which such statements were made, not misleading with respect to the period covered by
 this report;
- Based on my knowledge, the financial statements, and other financial information included in
 this report, fairly present in all material respects the financial condition, results of operations and
 cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures and internal controls and procedures for financial reporting (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have;
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal controls and procedures for financial reporting, or caused such internal controls and procedures for financial reporting to be designed under their supervision, to provide reasonable assurances that the registrant's financial statements are fairly presented in conformity with generally accepted accounting principles;
 - Evaluated the effectiveness of the registrant's disclosure controls and procedures and internal controls and procedures for financial reporting as of the end of the period covered by this report ("Evaluation Date");
 - d) Presented in this report our conclusions about the effectiveness of the disclosure controls and procedures and internal controls and procedures for financial reporting based on our evaluation as of the Evaluation Date;
 - e) Disclosed to the registrant's auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function):

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Page 4 of 4

Copy Of Certification By Piedmont's Chief Financial Officer At Pages 81-82 of 10-K Filed with SEC Jan. 23, 2003

- (i) All significant deficiencies and material weaknesses in the design or operation of internal controls and procedures for financial reporting which could adversely affect the registrant's ability to record, process, summarize and report financial information required to be disclosed by the registrant in the reports that it files or submits under the Act (15 U.S.C. 78a et seq.), within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms; and
- (ii) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls and procedures for financial reporting; and
- Indicated in this report any significant changes in the registrant's internal controls and procedures for financial reporting or in other factors that could significantly affect internal controls and procedures for financial reporting made during the period covered by this report, including any actions taken to correct significant deficiencies and material weaknesses in the registrant's internal controls and procedures for financial reporting.

Date: January 23, 2003

/s/ David J. Dzuricky

David J. Dzuricky
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

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Exhibit CAPD-SB
Direct Testimony
Schedule 3
Page 1 of 7

Category 1: Companies Doing Business in Tennessee and Regulated by the Tennessee Regulatory Authority

	100.078	100.076	100.0%	Co	 **
	400.000	400.002	100.002	7 Total	: :
	32.2%	31.6%	33.4%	6 Common Equity	1
	10.5%	10.0%	10.7%	5 Trust Preferred Securities	1.
	40.5%	36.5%	36.1%	4 Long-Term Debt	7
	2.2%	4.3%	1.4%	3 Short-Term Debt: Current Portion of Long-Term Debt	. 1:
	14.6%	17.6%	18.3%	2 Short-Term Debt: Notes Due	#
			RATIOS:		1
					10
	\$2,085	\$2,183	\$2,123	9 Total	
	\$671	\$690	\$710	8 Common Equity	
	\$220	\$218	\$227	7 Trust Preferred Securities	_
.,	\$845	\$797	\$767	6 Long-Term Debt	_
	\$45	\$93	\$30	5 Short-Term Debt: Current Portion of Long-Term Debt	
	\$303	\$385	\$389	4 Short-Term Debt: Notes Due	
	2001: Sep 30	2001 Dec 31	2002: Dec 31	3 Capital Structure Components As Of:	•
			(In Millions of \$)	2 (In	
		alization	าsolidated Capit	1 AGL Resources: Consolidated Capitalization	_

Source:AGL FORM 10-K. For the fiscal year ended December 31, 2002: Exhibit 13, In Section Titled "Liquidity and Capital Resources" Subsection Titled "Financing"

20 Internet Address For AGL's 10-K Exhibit 13: http://www.sec.gov/Archives/edgar/data/1004155/000100415503000046/exhibit13.htm

21 Date Filed With SEC: 2003-03-19

19

22 Quote From Exhibit 13: *AGL Resources is required by financial covenants in its Credit Facility, customer contracts and PUHCA requirements to maintain a ratio of total debt to total capitalization of no greater than 70.0%. As of December 31, 2002, AGL Resources is in compliance with this leverage ratio requirement."

Category 1: Companies Doing Business In Tennessee and Regulated by the Tennessee

Atmos: Consolidated Capitalization (In Thousands of \$) 3 Capital Structure Components As Of: A Short-Term Debt: Notes Due 5 Short-Term Debt: Current Portion of Long-Term Debt 5 Short-Term Debt: Current Portion of Long-Term Debt 6 Long-Term Debt: \$145,791 7 Common Equity 7 Common Equity 8 Preferred 9 Total 10 FATIOS: 11 FATIOS: 12 Short-Term Debt: Current Portion of Long-Term Debt 1.6% 1.6% 1.6% 1.6% 1.4% 1.4% 1.4% 1.5% 1.6% 1.6% 1.6% 1.6% 1.6% 1.6% 1.6% 1.6	21	20	19	18	17	16	15	7.0	1 2	11	10		7	Gi	or A	ω N	. ~
Atmos: Consolidated Capitalization (In Thousands of \$) As Of: \$145,791 \$201: Sep 30 \$001: Sep 30 \$145,791 \$21,980 \$21,980 \$670,463 \$692,399 \$573,235 \$0 \$1,411,469 \$1,498,205 RATIOS: 10.3% 1.6% 40.6% 39.0% 50.0% 50.0% 100.0%	21 Date Filed With SEC: 2002-11-21		Internet Address For Atmos 2002 10-	Source: For 2002 and 2001 - Atm	Total	16 Preferred		Long-Term Debt	Short-Term Debt: Notes Due		O E	Preferred	Common Equity	Long-Term Debt	Short-Term Debt: Notes Due Short-Term Debt: Current Pon	Capital Structure Components	
lated Capitalization housands of \$) 2002: Sep 30 2001: Sep 30 \$145,791 \$201,247 \$21,980 \$20,695 \$670,463 \$692,399 \$573,235 \$583,864 \$0 \$1,411,469 \$1,498,205 RATIOS: 10.3% 13.4% 1.6% 46.2% 40.6% 39.0% 0.0% 0.0% year ended September 30, 2002: Page 26 bdgar/deta/73180200008501340201492000001			K: http://www.sec.gov/Archives/	os FORM 10-K. For the fiscal				non or cong-renn pept							don of Long-Term Debt		Atmos : Consolic
tion 2001: Sep 30 \$201,247 \$20,695 \$692,399 \$583,864 \$0 \$1,498,205 11.4% 46.2% 39.0% 100.0% 100.0% 100.0% 150134020149200000			bdgar/deta/731802/00008	year ended Septembe	100.0%	0.0%	40.6%	47.5%	10.3%	RATIOS:	\$1,411,408	\$0	\$573,235	\$670,463	\$145,791 \$21,980	2002: Sep 30	tated Capitaliza
			15013402014920/0000	r 30, 2002: Page 26	100.0%	0.0%	39.0%	46.2%	13.4%		\$1,480,200	\$0	\$583,864	\$692,399	\$201,247 \$20,695	2001: Sep 30	tion

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Docket No. 03-00313
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Direct Testimony

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apital Structure Components As Of:			
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L	Capital Structure Components As Of:	2002: Sep 30	2001: Sep 30
4	Short-Term Debt: Notes Due	\$60	\$86
Ċ	Short-Term Debt: Current Portion of Long-Term Debt	\$27	\$1
6	Long-Term Debt	\$371	\$354
7	Common Equity	\$361	\$352
00	Preferred	0.295	0.298
9	Total .	\$819	\$792
70		RATIOS:	
2	Short-Term Debt: Notes Due	7.3%	10.8%
2 2	13 Short-Term Debt: Current Portion of Long-Term Debt	3.3%	0.1%
i i	Common Facility	44.4%	44.50/
5	15 Common Equity	44.1%	44.5%

19	18	17	16
Source: For Lon		17 Total	16 Preferred
ng-Term Debt, Com		47 4 3	
mon Equity and Prefi			
19 Source: For Long-Term Debt, Common Equity and Preferred - All Years: New Jerse) enried Sen 30 2002 at page 30 of Annual Report which is Appended to 10-K as "Doc	(· · · :	100.0%	0.0%

0.0%

Source: For Long-Term Debt, Common Equity and Preferred - All Years: New Jersey Resources 2002 FORM 10-K. For the fiscal year anded Sep 30,2002, at page 30 of Annual Report which is Appended to 10-K as "Document 3 - file; ye8677exv13w1.txt."

20 Source: For Short-Term Debt and Current Portion of Long Term Debt - 2002 and 2001; Same source at Page 41 Section Titled "Consolidated Balance Sheets" SubSection titled "Current Liabilities"

21 Internet Address for New Jersey Resources 2002 Form 10-K: http://www.sec.gov/Archives/edgar/dats/d56309/000065012302012107/y66677sxv13w1.bxt

22 Dates filed With SEC: 10-K 2002-12-20

Quote From the 10-K Report: "Financial covenants contained in these credit facilities include a maximum debt to total capitalization of 25 65 percent and a minimum interest coverage of 2.5 times. At September 30, 2002, the debt to total capitalization was 56 percent..."

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Direct Testimony
Schedule 3
Page 3 of 7

DETERMINATION OF COMMON EQUITY RATIOS AND CAPITAL STRUCTURE

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2002: Dec 31	2001; Dec 31	
\$315	\$277	
\$100	0	
\$396	\$446	
\$728	\$704	•
r	\$6	
\$1,544	\$1,434	
TIOS:		
20.4%	19.3%	
6.5%	0.0%	
25.7%	31.1%	-
47.2%	49.1%	
0.3%	0.4%	
100.0%	100.0%	
r ended Dec 31,		tion Titled "Cons
	2002: Page 34 Sec	
	2002: Dec 31 \$315 \$100 \$396 \$728 \$4 \$1,544 RATIOS: 20.4% 6.5% 25.7% 47.2%	Dec 31 115 115 116 196 198 128 144 1544 15% 15% 17% 10%

Quote From the 10-K Report - Continued: "each bank may at its option declare any amounts due immediately payable and/or terminate 22 its commitment to make advances to the company."

36.8%	43.4%	4 Long-Term Debt
3.9%	1.9%	Short-Term Debt: Current Portion of Long-Term Debt
10.5%	6.8%	Short-Term Debt: Notes Due
	RATIOS:	
\$1,028,829	\$1,027,100	Total
\$34,000	\$8,250	Preferred
\$468,161	\$483,103	Common Equity
\$378,377	\$445,945	6 Long-Term Debt
\$40,000	\$20,000	Short-Term Debt: Current Portion of Long-Term Debt
\$108,291	\$69,802	Short-Term Debt: Notes Due
2001: Dec 31	2002: Dec 31	Capital Structure Components As Of:
	(In Thousands of \$)	(In
apitalization	Consolidated Co	Northwest Natural Gas : Consolidated Capitalization

20	19	18	17	16	15
	Source: 2002 FORM 10-K. For the fiscal year ended Sep 30,2002, at page 47 Section Titled " Company Consolidated Balance Sheets"		17 Total	16 Preferred	15 Common Equity
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	47		100.0%	0.8%	47.0%
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	8		100.0%	3.3%	45.5%
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Internet Address for Northwest Natural Gas 2002 Form 10-K: 23 http://www.sec.gov/Archives/edgar/data/73020/000985012003000141/form10k.txt

27 Quote From 2002 10-K Report: "The Company's goal is to maintain a capital structure comprised of 45 to 50 percent common stock equity, up to 10 percent preferred stock and 45 to 50 percent short-term and long-term debt. The Company's primary source of short-term funds is commercial paper notes payable."

28 Quote From the 2002 10-K Report: "Short-term liquidity is provided by cash from operations and from the sale of the Company's commercial paper notes, which are supported by commercial bank lines of credit."

Docket No. 03-00313
Exhibit CAPD-SB
Direct Testimony
Schedule 3 Page 5 of 7

Category 2: Companies Not Doing Business in Tennessee

100.0% 2002: Consolic		
00.0%	ended September 30, 2	Source: For 2002 and 2001 - Peoples 2002 10-K. For the fiscal year ended September 30, 2002: Consolidated Balance Shhets and 18 Consolodated Capitalization Sheet
0.0%	0.0% 100.0%	16 Preferred 17 Total
38.9%	46.4% 3	15 Common Equity
24.7% 4.9% 31.4%	16.6% 5.2% 31.9%	12 Short-Term Debt: Notes Due 13 Short-Term Debt: Current Pordon of Long-Term Debt 14 Long-Term Debt
		RATIOS:
\$0 \$2,050,376	\$0 \$1,738,209 \$2	Preferred Total
\$798,614	\$806,324 \$	Common Equity
\$100,000 \$644,308	\$90,000 \$: \$554,014 \$1	Short-Term Debt: Current Portion of Long-Term Debt Long-Term Debt
2001: Sep 30 \$507,454	2002: Sep 30 200 \$287,871 \$1	Capital Structure Components As Of: Short-Term Debt: Notes Due
	(In Thousands of \$)	(In Thous

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15 Common Equity
14 Long-Term Debt
13 Short-Term Debt: Current Portion of Long-Term Debt
Short-Term Debt: Notes Due
Total
Preferred
Common Equity
Long-Term Debt
Short-Term Debt: Current Portion of Long-Term Debt
Short-Term Debt: Notes Due
Capital Structure Components As Of:
5

16 Preferred 17 Total 1.8% 100.0% 1.8%

100.0%

19 Source: For 2002 and 2001: 2002 FORM 10-K. At page 51 Section Titled " Company Consolidated Balance Sheets"

Internet Address for WGL Holdings 2002 Form 10-K:
21 http://www.sec.gov/Archives/edgar/datu/1103601/500083013302004208/w68936e10vk.htm

Quote From the 2002 10-K Report: At Page 33 "The \$6.2 million decrease in interest expense on short-term debt during fiscal year 1002 reflects a \$64.9 million decrease in the everge balance outstanding and a 3.5 percentige point decrease in the weighted-

Quote From 2003 10-K Report: At Page 27 "During fiscal year 2002, interest expense decreased by \$4.1 million due to lower short-ferm borrowings stemming from lower accounts receivable, unrecovered gas costs and storage gas inventory balances, coupled with algorificantly lower short-term interest rates"

Dates filed With SEC: 2002 10-K 2002-12-14

SUMMARY OF COMMON EQUITY RATIOS FOR COMPANIES COMPARABLE TO PIEDMONT

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Schedule 4____

Category 1: Companies Doing Business in Tennessee and Regulated by the Tennessee Regulatory Authority

AGL Resources:	2002: Dec 31 2001: Sep 30
Common Equity	33.4% 32.2%
Atmos:	2002: Sep 30 2001: Sep 30
Common Equity	40.6% 39.0%
Category 1 - Average	37.0% 35.6%

Category 2: Companies Not Doing Business in Tennessee

New Jersey Resources : Common Equity	2002: Sep 30 44.1 %	2001: Sep 30 44.5%
NICOR:	2002: Dec 31	2001: Dec 31
Common Equity	47.2%	49.1%
Northwest Natural Gas :	2002: Dec 31	2001: Dec 31
Common Equity	47.0%	45.5%
Peoples Energy Corporation :	2002: Sep 30	2001: Sep 30
Common Equity	46.4%	38.9%
WGL Holdings :	2002: Sep 30	2001: Sep 30
Common Equity	48.0%	49.8%
Category 2 - Average	46.6%	45.6%

Fiscal Year Ending: 2002 2001

All Comparable Companies Average Common Equity Ratio 43.8% 42.7%

SUMMARY OF SHORT-TERM DEBT: NOTES DUE RATIOS FOR COMPANIES COMPARABLE TO PIEDMONT

Docket No. 03-00313
Exhibit CAPD-SB___
Direct Testimony__
Schedule 5 ___
Page 1 of 1 ____

Category 1: Companies Doing Business In Tennessee and Regulated by the Tennessee Regulatory Authority

AGL Resources:

2002: Dec 31 2001: Sep 30

Short-Term: Notes Due 18.3% 14.6%

Atmos:

2002: Sep 30 2001: Sep 30 Short-Term: Notes Due 10.3% 13.4%

Category 1 - Average 14.3% 28.0%

Category 2: Companies Not Doing Business in Tennessee

Peoples Energy Corporation:

2002: Sep 30 2001: Sep 30

Short-Term: Notes Due 16.6% 24.7%

NICOR :

2002: Dec 31 2001: Dec 31

Short-Term: Notes Due 20.4% 19.3%

New Jersey Resources :

2002: Sep 30 2001: Sep 30

Short-Term: Notes Due 7.3% 10.8%

7.5% 10.6%

Northwest Natural Gas :

2002: Dec 31 2001: Dec 31

Short-Term: Notes Due 6.8% 10.5%

WGL Holdings:

2002: Sep 30 2001: Sep 30

Short-Term: Notes Due 5.7% 8.5%

Category 2 - Average 11.4% 14.8%

Fiscal Year Ending:

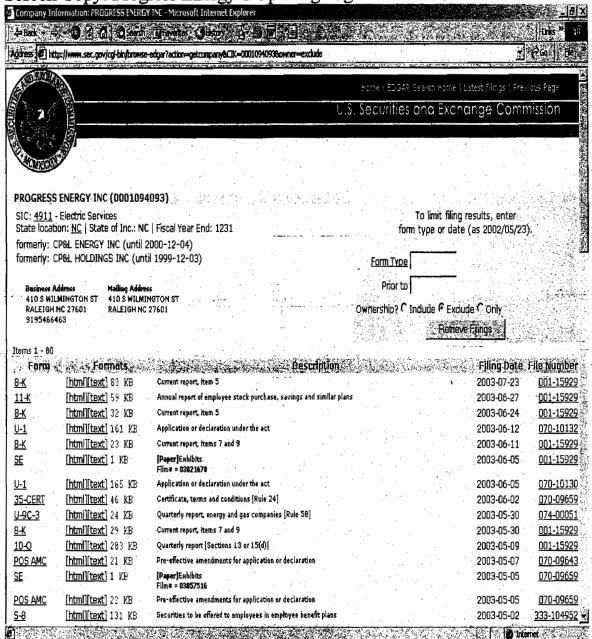
2002 2001

All Comparable Companies - Average Short-Term: Notes

Due 12.2% 14.6%

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Direct Testimony_
Schedule 6___
Page 1 of 4___

Screen Copy: Progress Energy's Opening Page in SEC Data Base



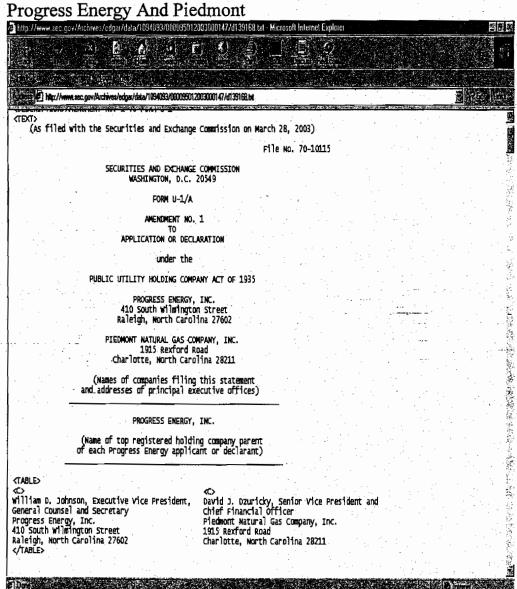
Docket No. 03-00313
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Screen Copy: Progress Energy's Opening Page in SEC Data Base Showing Location of Form U-1/A

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Form	Formats	Description	Filing Date	File Numbe
3-K	[html][text] 83 KB	Current report, item 5	2003-07-23	001-1592
11-K	[html][text] 59 KB	Annual report of employee stock purchase, sevings and similar plans	2003-06-27	001-1592
3-K	[html][text] 32 KB	Current report, item 5	2003-06-24	001-1592
J-1	[html][text] 161 KB	Application or declaration under the act	2003-06-12	070-101
3-K	[html][text] 23 KB	Current report, items 7 and 9	2003-06-11	001-1592
SE.	[html][text] 1 KB	[Paper]Exhibits Films = 03821678	2003-06-05	001-1592
J-1	[html][text] 165 KB	Application or declaration under the act	2003-06-05	070-101
35-CERT	[htmi][text] 46 KB	Certificate, terms and conditions [Rule 24]	2003-06-02	070-096
J-9C-3	[html][text] 24 KB	Quarterly report, energy and gas companies [Rule 58]	2003-05-30	074-000
3 <u>-K</u>	[htm]][text] 29 KB	Current report, items 7 and 9	2003-05-30	001-159
	[html][text] 283 KB	Quarterly report [Sections 13 or 15(d)]	2003-05-09	001-159
OS AMC	[htm][ftext] 21 KB	Pre-effective amendments for application or declaration	2003-05-07	070-096
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OS AMC	[html][text] 22 KB	Pre-effective amendments for application or declaration	2003-05-05	070-096
3-8	[html][text] 131 KB	Securities to be offered to employees in employee benefit plans	2003-05-02	333-1049
i-8	[html][text] i14 KB	Securities to be offered to employees in employee benefit plans	2003-05-02	333-1049
J5S	[html][text] 83 KB	Annual report for holding companies [Section 5]	2003-05-02	030-003
3-K	[html][text] 13 KB	Current report, items 7 and 9	2003-04-30	001-159
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5-CERT	[html][text] 43 KB	Certificate, terms and conditions [Rule 24]	2003-04-14	070-096
J-9C-3	[html][text] 22 KB	Quarterly report, energy and gas companies [Rule 58]	2003-04-10	074-000
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EF 14A	[htm]][text] 160 KB	Other definitive proxy statements	2003-03-31	901-159
J-1/A	[html][text] 52 KB	[Amend]Application or declaration under the act	2003-03-28	070-101
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<u>-1</u>	[html][text] 35 KB	Application or declaration under the act	2003-03-17	070-101
5-CERT	[html][text] 3 KB	Certificate, terms and conditions [Rule 24]	2003-02-19	070-096
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I-K	[html][text] 403 KB	Current report, item 5	2003-02-18	001-159
C 13G/A	[html][text] 16 KB	[Amend] Statement of acquisition of beneficial ownership by individuals	2003-02-14	005-600
C 13G/A	[html][text] 9 KB	[Amend]Statement of acquisition of beneficial ownership by individuals	2003-02-13	005-600
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C 13G	[html][text] 7 KB	Statement of acquisition of beneficial ownership by individuals	2003-02-07	005-600

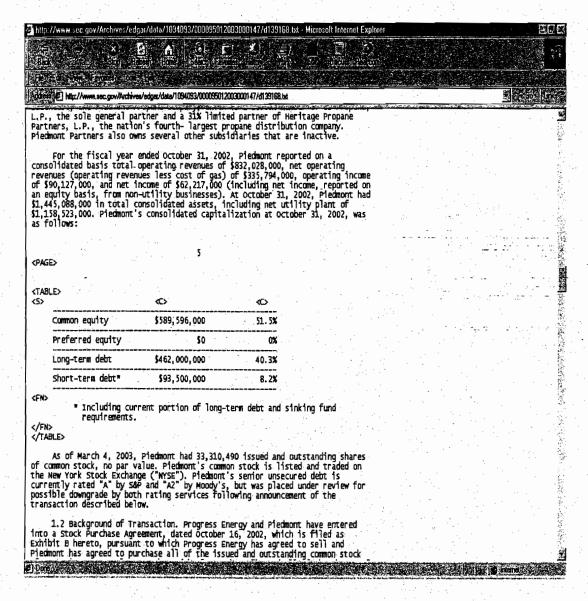
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Screen Copy: Opening Page of SEC Form U-1/A Jointly Filed By



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Page 4 of 4	_

Screen Copy: SEC Form U-1/A Jointly Filed By Progress Energy And Piedmont. From Bottom Of Page 5 to Top of Page 6, Piedmont States Its Common Equity Ratio Is 51.5% At Oct. 31, 2002



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Sep-97	. :	5.49	5.48	5.48	5.51	5.51	5.51
Oct-97	<u>-</u>	5.49	5.48	5.51	5.50	5.50	5.55
Nov-97		5.53	5.59	5.60	5.55	5.65	5.64
Dec-97 Jan-98		5.78	5.71	5.67	5.80	5.72	5.70
Feb-98	· .	5.46 5.47	5.44 5.44	5.42 5.42	5.48 5.49	5.46 5.47	5.44
Mar-98		5.51	5.49	5.46	5.53	5.51	5.45 5.49
Apr-98		5.49	5.48	5.46	5.51	5.49	5.48
May-98	11.	5.49	5.49	5.48	5.50	5.50	5.50
Jun-98		5.51	5.50	5.48	5.53	5.52	5.50
Jul-98		5.51	5.50	5.48	5.52	5.51	5.50
Aug-98	<u> </u>	5.50	5.50	5.48	5.51	5.51	5.50
Sep-98		5.44	5.37	5.31	5.45	5.38	5.32
Oct-98		5.14	5.08	5.04	5.18	5.12	5.09
Nov-98 Dec-98		5.00	5.14	5.06	5.04	5.19	5.15
Jan-99		5.24 4.80	5.12 4.78	5.00 4.77	5.31 4.83	5.13 4.81	5.04 4.81
Feb-99		4.80	4.80	4.79	4.82	4.82	4.82
Mar-99		4.82	4.82	4.81	4.84	4.83	4.84
Apr-99		4.79	4.78	4.79	4.80	4.80	4.80
May-99		4.79	4.80	4.81	4.80	4.82	4.83
Jun-99	Assert Control	4.95	4.98	4.98	4.96	5.00	5.04
Jul-99		5.06	5.08	5.11	5.08	5.10	5.14
Aug-99		5.18	5.23	5.25	5.20	5.24	5.28
Sep-99 Oct-99		5.28 5.28	5.29	5.32	5.29	5.31	5.32
Nov-99	· · · · · · · · · · · · · · · · · · ·	5.28	5.30 5.82	5.88 5.81	5.29 5.38	5.32	5.93
Dec-99		5.97	5.91	5.87	6.02	5.85 5.95	5.85 5.93
Jan-00		5.59	5.67	5.74	5.62	5.72	5.81
Feb-00		5.76	5.81	5.87	5.78	5.84	5.90
Маг-00		5.93	5.96	6.00	5.94	5.98	6.03
Apr-00		6.02	6.06	6.11	6.03	6.07	6.15
May-00		6.40	6.47	6.54	6.41	6.50	6.57
Jun-00		6.53	6.55	6.57	6.53	6.56	6.59
Jul-00 Aug-00		6.49	6.50	6.52	6.50	6.51	6.54
Sep-00		6.47 6.48	6.48 6.47	6.49 6.47	6.49 6.49	6.49 6.48	6.49 6.47
Oct-00		6.48	6.48	6.51	6.48	6.47	6.52
Nov-00		6.49	6.52	6.50	6.49	6.54	6.52
Dec-00		6.51	6.42	6.34	6.52	6.42	6.33

CURRENT SHORT-TERM DEBT RATES

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Feb-01		5.39	5.25	5.14	5.41	5.29	5.19
Mar-01		5.02	4.87	4.78	5.06	4.93	4.81
Apr-01		4.71	4.54	4.44	4.74	4.57	4.47
May-01		4.06	3.98	3.93	4.08	4.00	3.96
Jun-01	· · · · · · · · · · · · · · · · · · ·	3.82	3.73	3.67	3.84	3.75	3.69
Jul-01		3.71	3.63	3.59	3.73	3.66	3.62
Aug-01		3.54	3.47	3.42	3.57	3.48	3.44
Sep-01		2.96	2.87	2.81	2.97	2.87	2.84
Oct-01		2.40	2.30	2.28	2.42	2.31	2.29
Nov-01		2.03	2.00	1.97	2.04	2.02	2.00
Dec-01	<u> </u>	1.84	1.79	1.78	1.83	1.81	1.81
Jan-02		1.70	1.69	1.70	1.72	1.71	1.72
Feb-02		1.76	1.76	1.79	1.77	1.78	
Mar-02		1.78	1.82	1.79	1.80	1.82	1.80
Apr-02		1.76	1.77	1.81	1.76	1.79	1.87
May-02		1.75	1.76	1.78	1.76	1.79	
Jun-02		1.74	1.74				1.80
Jul-02		1.74	1.74	1.76	1.75 1.74	1.77	1.78
Aug-02		1.72	1.74	1.75		1.75	1.76
Sep-02		1.73	1.72	1.70	1.72	1.72	1.71
Oct-02	<u> </u>	1.73	1.72	1.72	1.74	1.74	1.74
Nov-02		1.72		1.70	1.73	1.72	1.71
Dec-02			1.35	1.36	1.34	1.37	1.37
Jan-03		1.31 1.25	1.32	1.31	1.31	1.32	1.32
Feb-03			1.26	1.26	1.26	1.27	
Mar-03		1.24 1.21	1.25	1.26	1.25	1.25	1.25
Apr-03		1.22	1.20	1.19	1.23	1.22	1.21
May-03	<u> </u>	1.22	1.21 1.20	1.20	1.24	1.23	1.23
Jun-03		1.06	1.03	1.19	1.24		1.20
Average: July (1.29	1.29	1.01	1.08	1.04	1.02

ANNUAL GROWTH RATE OF DIVIDENDS, EARNINGS, AND EQUITY PIEDMONT NAT GAS INC RATIO:

1991-1995

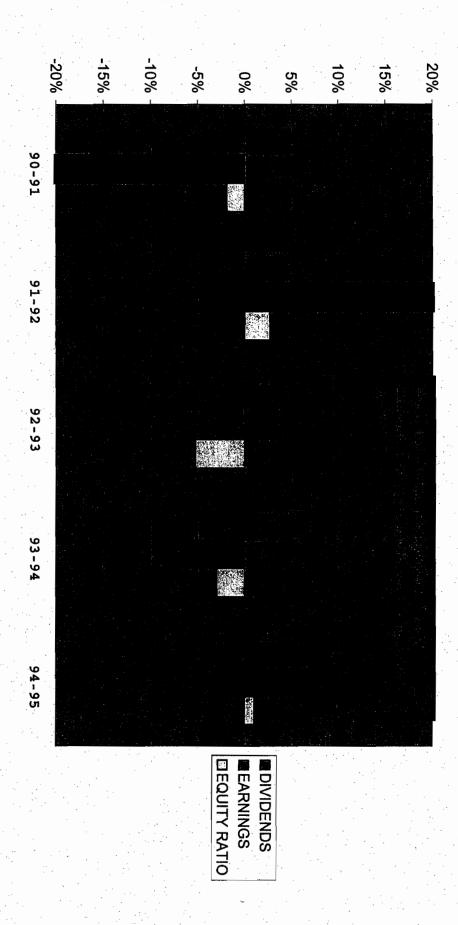
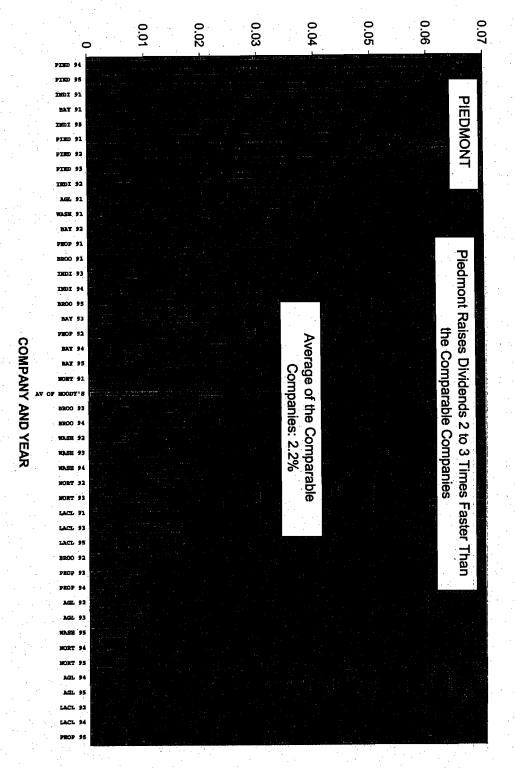


Chart 1 of 3_

Chart 2 of 3





2	Direc	Exhibi	Docket
	Direct Testimony_	whibit CAPD-SB	Docket No. 03-00313
	₹ 		0313

		•	Ţ	RATIOS : TRA DOCKE		Š
	1990	1991	1992	1993	1994	1995
NDIANA ENERGY INC	62.10%	53.20%	55.50%	61.10%	63.10%	61.40%
LACLEDE GAS CO	58.10%	52.50%	55.30%	53.10%	55.50%	59.30%
WASHINGTON GAS LT CO	56.40%	56.90%	57.30%	54.90%	56.70%	58.90%
AV OF COMPARABLE COMPANIES	52.86%	50.01%	53.63%	53.03%	52.66%	53.81%
BROOKLYN UN GAS CO	46.80%	45.40%	47.80%	50.80%	52.20%	53.20%
BAY ST GAS CO	53.70%	48.00%	57.00%	51.90%	52.30%	51.80%
PEOPLES ENERGY CORP	51.00%	52.10%	55.10%	54.30%	50.60%	50.80%
AGL RESOURCES INC (HLDG CO)	47.80%	48.80%	57.10%	53.10%	45.80%	47.60%
NORTHWEST NAT GAS CO	47.00%	43.20%	43.90%	45.00%	45.10%	47.50%
PIEDMONT NAT GAS INC	53.00%	52.00%	53.40%	50.60%	49.10%	49.60%

SUMMARY OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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	Summary of Comparable Co	mpanies Long-Term Debt C	ost
Company	Line Reference In Schedule 9	Cost of Long	-Term Debt:
		Most Recent Fiscal Year -2002	Prior Fiscal Year -2001
			1
AGL	31	9.63%	11.09%
Atmos	79	7.65%	7.71%
New Jersey Resources	31	3.80%	4.33%
NICOR	55	6.35%	6.29%
Northwest Natural Gas	e e e	7.04%	7.10%
Peoples Energy Corporation	49	6.62%	6.58%
WGL	7	6.70%	6.80%
Average: All Con	parable Companies	6.83%	7.13%

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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1			AGL	
2	Source: Interest Expense - h	http://www.sec.gov/Arc	hives/edgar/data/10041	55/000100415503000046/exhibit12
3	Source: Debt Value - http://w	ww.sec.gov/Archives	/edgar/data/1004155/00	00100415503000046/exhibit13.htm
. 4				Millions of \$
. 5			LT Debt At	LT Debt At
6			2002, Dec 31	2001, Sep 30
7	Due	Rate		
8	2021	9.10%	30	30
. 9	2004-2023 (1)	8.03%	167	167
10	2005-2027 (2)	6.60%	270	300
11	2011	7.13%	300	300
12			767	797
13				
14	(1) Floating Rate: Between M	Max of 8.7% and Min o	of 7.35%	
15	(2) Floating Rate: Between M	Max of 7.3% and Min o	of 5.9%	
16			· · · ·	
17	Interest Expense:			
18	Long-term		62.40	57.40
	Amortized premiums, discounts	and capitalized		
19	expenses related to indebtedne		11.50	31.00
20	Total Interest		73.90	88.40
21				
22	Total LT Debt		767.00	797.00
23				
24	·			
25				
26				
27				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
28				
29				The second secon
30				
31	Weighted Long-Term Cost		9.63%	11.09%

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

3	Source; http://www.sec.gov//	Archives/edgar/data//3	1802/000095013402014920 In Milli	ions of \$
4			LT Debt At	LT Debt At
5	Due	Rate	2002, Sep 30	2001, Sep 30
6 -	2002	44 200		
8	2002	11.20% 9.76%	9	
. 9	2004	11.32%	4.3	6.
10	2006	9.57%	8	
11	2006	7.95%	4	
12	2006	8.07%	20	
13	2007	7.50%	10	
14	2010	6.27%	10	•
15	2011	10.00%	2.303	2.3
16	2011	7.38%	350	
17	2013	8.80%	3.59	10.6
18	2014	8.26% 10.43%	20 16.25	. 18
20	2020	9,75%	18	. 10
21	2021	9.40%	17	-
22	2021	9.32%	18	
23	2022	8.77%	20	
24	2025	6.77%	10	·
25	2028	6.75%	150	- T
26			692.443	713.
27		·		
28	Less Current Maturitites		-21.98	-20.0
29				:
30	Totlai LT Debt		670.463	692.
31				
32	Express LT Debt as a Perce	ntage of All LT Debt	·	
33				
35	2002	11.20%	0.30%	0.5
36	2002	9.76%	1,34%	1.7
37	2004	11.32%	0.64%	0.9
38	2004	9.57%	1,19%	1.4
39	2006	7.95%	0.60%	0.7
40	2006	8.07%	2.98%	2.8
41	2007	7.50%	1,49%	1.4
42	2010	6.27%	1.49%	1.4
43	2011	10.00%	0.34%	0.3
44 .	2011	7.38%	52.20%	50.5
45	2013	8.80%	0.54%	1.5
46	2014	8.26%	2.98%	2.8
47	2017	10.43%	2.42%	2.7
48	2020	9.75%	2.68%	2.7
49	2021	9.40%	2.54%	2.4
50	2021	9.32%	2.68%	2.6
51	2022	8.77%	2.98%	2.8
52	2025 2028	6.77% 6.75%	1.49% 22.37%	1.4
54	2028	0./5%	103.28%	21.6
55	-		103.20%	103.0
56				
57	Weighted Long Term Debt C	ost		
58				
59				the second second
60	2002	11,20%	0.03%	0.0
61	2004	9.76%	0.13%	0,1
62	2004	11.32%	0.28%	0.2
63	2006	9.57%	0.06%	0.0
64	2006	7.95%	0.09%	0.1
65 66	2006	8.07%	0.12%	0.1
67	2007	7.50%	0.11% 3.17%	0.1
68	2010	6.27% 10.00%		3.0
69	2011	7.38%	0.06%	0.0
70	2013	8.54%	1.85%	
71	2013	8.26%	0.12%	0.1
72	2017	10.43%	0.12%	0.1
73	2020	9.75%	0.25%	0.2
74	2021	9.40%	0.27%	0.2
75	2021	9.32%	0.24%	0.2
76	2022	8.77%	0.25%	0.2
77	2025	6.77%	0.02%	0.0
78	2028	6.75%	0.03%	0.1
			7.55%	7.58

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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. 1			Jersey Resources	·
2	Source: http://www.sec.g	gov/Archives/edgar/data	3/356309/000095012302012	107/y66677exv13w1.txt
3				fillions of \$
4			LT Debt At	LT Debt At
5	Due	Rate	2002, Sep 30	2001, Sep 30
6				<u> </u>
7	2002	7.50%	25	
8	2004	8.25%	25	25
9	2008	6.27%	30	30
10	2010	6.88%	20	20
11	2023	5.38%	10.3	10.3
12	2024	6.25%	10.5	10.5
. 13	2012	Capital Lease	19.396	·0
14	2021	Capital Lease	30.054	30.583
. 15	2004	Floating	25	25
. 16	2027	Floating	13.5	13.5
17	2028	Floating	9.545	9.545
18	2028	Floating	15	15
19	2030	Floating	25	50
20	2030	Floating	16	16
21	2033	Floating	18	18
22	2004	Floating	105.275	55.9
23			397.57	354.328
24	Less current portion of L	ong-Term Debt	-26.942	-0.529
25			370.628	353.799
26				
27				
- 28	Long-Term Debt Interes	t Charges:		
29	Page 39 of 2002 10-K		14.095	15.314
30				The state of the s
31	Weighted Long-Term Co	ost:	3.80%	4.33%
			•	
			1 147 1	

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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<u>1</u>	Source: http://www.sec.gov//		NICOR 2020/000095013703001832	/c75779e10vk.htm
3		,, <u>ougui</u> ,,uu		ons of \$
4			LT Debt At	LT Debt At
5	Due	Rate	2002, Dec 31	2001, Dec 31
6				
7	Current in 2003	5.75%	50	50
8	2006	5.55%	50	50
9	2008	5.88%	75	7:
10	2009	5.37%	50	50
11	2011	6.63%	75	7
12	2016	7.20%	50	50
. 13	2027	7.38%	50	50
14	2028	6.58%	50	50
15			450	450
16				
17		-		
18	Excluding Current Portion Of	Long-Term Due in 20	03 and Unamortized Discou	int
19				
20	Current in 2003	5.75%	0	50
21	2006	5.55%	50	50
22	2008	5.88%	75	7:
23	2009	5.37%	50	50
24	2011	6.63%	75	7:
25	2016	7.20%	50	50
26	2027	7.38%	50	50
27	2028	6.58%	50	50
28		0.0070	400	450
29	Unamortized Discount		-3.8	-3.6
30	Ondinorazoa Biocodin		396.2	446.4
31		· · · · · · · · · · · · · · · · · · ·	330.2	
32	Express LT Debt as a Percer	tage of All I T Debt		<u> </u>
33	ZAPIOSO ET BOST GO GT CIOCI	lage of All ET Debt		
34	Current in 2003	5.75%	0.00%	11.11%
35	2006	5.55%	12.50%	11.11%
36	2008	5.88%	18.75%	
37	2009	5.37%	12.50%	16.67% 11.11%
38	2011	6.63%	18.75%	16.67%
39	2016	7.20%	12.50%	
40	2027	7.38%	12.50%	11.11%
41	2028	6.58%	12.50%	11.11%
42	2020	0.36%	100.00%	11.11% 100.00%
43			100.00%	100.00%
44				
45	Weighted Long-Term Cost			
46	Weighted Long-Term Cost			
47	Current in 2003	E 7E0/	0.000	
48	2006	5.75%	0.00%	0.64%
49	2008	5.55%	0.69%	0.62%
50	2009	5.88% 5.37%	1.10% 0.67%	0.98%
51	2009	6.63%		0.60%
52	2016	7.20%	1.24% 0.90%	1.10%
53	2027	7.20%	0.92%	0.80% 0.82%
54	2028	6.58%	0.82%	0.73%
	2020	0.00 /6		
55			6.35%	6.29%

	٠.															•							;									_								_
41	40	39	38	37	36	35	22	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	1	10	9	8	7	6	5	4	ω	2	_
-	2032	2030	2030	2028	2027	2027	2026	2025	2025	2023	2023	2023	2021	2019	2019	2018	2017	2014	2012	2012	2011	2010	2008	2007	2007	2006	2005	2005	2005	2003	2002	2002	2002	Due					Source:htt	-
Total	ll	7.85%	H	1	_					7.52%		1		7.63%		6.60%								6.80%			-	6.38%		6.40%		6.75%		Rate					p://www.se	∑
465.945	30	10	20	10	20	20	20	10	20	===	4	20	10	20	10	22	40	10	6.445	40	10	25	5	9.5	20	8	5	5	5	20	0	. 0	0		:	2002, Dec 31	LT Debt At	in Millions of \$	c.gov/Archives/edga	Northwest Natural Gas
418.377	0	10	20	10	28	20	20	10	28	11	4	20	10	20	10	22	40			\ \		25					5	5	ۍ.		20					2001, Dec 31	LT Debt At	ns of \$	Source:http://www.sec.gov/Archives/edgar/data/73020/000095012003000141/form10k.bd	-
		-																										-											12003000141/form	
77	76	75	74	. 73	72	71	70	89	68	67	66	65	64	83	62	61	80	59	58	57	88	æ	22	జ	52	51	50	49	4 8	47	46	45	4	43	42)10k.txt	
7	203	2030	2030	2028	202	202	2026	202	202	202	202	202	202	2019	201	201	201	201	201;	201:	201	201	200	200	200	2006	2000	2005	200	2003	200;	200	2002		Express L					
		7.85%	Γ				6 7.05%			3 7.52%						8 6.60%				:		0 7.45%						5 6.38%		3 6.40%			2 8.05%		T Debt as					
100.00%	6.44%	2.15%			6 4.29%		,					Г			F	6 4.72%		Γ.		_		-						6 1.07%		4.29%	,		1		a Percentag					
⇒		Γ	4.78%	Г	Γ.			7.	Γ	Γ		Ť		Γ	Γ	٦.	Γ			Γ	,									Г					Express LT Debt as a Percentage of All LT Debt					
			ļ. 																									_						-	*					
113	112	111	110	109	108	107	1 66	105	1 02	103	102	101	100	99	98	97	96	95	94	83	92	91	8	88	88	87	86	85	84	83	82	81	8							
	2032	2030	2030	2028	2027	2027	2026	2025	2025	2023	2023	2023	2021	2019	2019	2018	2017	2014	2012	2012	2011	2010	2008	2007	2007	2006	2005	2005	2005	2003	2002	2002	2002		Weighted Long-Term Cost	:				
	5.82%	7.85%	7.74%	6.65%	6.65%	7.00%	7.05%	6.52%	7.72%	7.52%	7.50%	7.25%	9.05%	7.63%	8.31%	6.60%	7.00%	8.26%	7.25%	7.13%	6.65%	7.45%	6.50%	6.80%	6.31%	6.05%	6.45%	6.38%	6.34%	6.40%	5.55%	6.75%	8.05%		ong-Term C					
	0.37%	0.17%	0.33%	0.14%	0.29%	0.30%	0.30%	0:14%	0.33%	0.18%	0.06%	0.31%	0.19%	0.33%	0.18%	0.31%	0.60%	0.18%	0.10%	0.61%	0.14%	0.40%	0.07%	0.14%	0.27%	0.10%	0.07%	0.07%	0.07%	0.27%	0.00%	0.00%	0.00%		ost					
7.10%	0.00%	0.19%	0.37%	0.16%	0.32%	0.33%	0.34%	0.16%	0.37%	0.20%	0.07%	0.35%	0.22%	0.36%	0.20%	0.35%	0.67%	0.20%	0.15%	0.00%	0.16%	0.45%	0.08%	0.16%	0.00%	0.12%	0.08%	0.08%	0.08%	0.31%	0.27%	0.16%	0.19%			-				

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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. 1			es Energy Corporation	
2	Source: http://www.sec.gov	Archives/edgar/dat	a/77385/00000773850200005	
3				llions of \$
- 4			LT Debt At	LT Debt At
5	Due	Rate	2002, Sep 30	2001, Sep 30
6	Current in 2003	6.37%	75	7
7	Current in 2003	6.37%	15	1
8 .	2011	6.90%	325	32
9	2015	6.88%	50	
10	2020	8.00%	24.554	24.56
11	2023	5.75%	75	7
12	2025	6.10%	50	5
. 13	2028	5.00%	29.46	29.47
14			644.014	644.03
15				
16	Exclude Current Portion Of	Long-Term Due in	2003	
17		ty skiller skiller		
18	2003	6.37%	0	7:
19	2003	6.37%	0	1:
20	2011	6.90%	325	32
21	2015	6.88%	50	5
. 22	2020	8.00%	24.554	24.56
23	2023	5.75%	75	7:
- 24	2025	6.10%	50	50
- 25	2028	5.00%	29.46	29.47
26			554.014	644.03
27		3		
28	Express LT Debt as a Perce	entage of All LT Del	ot	<u> Profiles de la companya de la comp</u>
29				
30	2003	6.37%	0	11.6%
31	2003	6.37%	0	2.3%
32	2011	6.90%	58.7%	50.5%
33	2015	6.88%	9.0%	7.89
34	2020	8.00%	4.4%	3.89
35	2023	5.75%	13.5%	11.6%
36	2025	6.10%	9.0%	7.8%
37	2028	5.00%	5.3%	4.69
38 39			100.0%	100.0%
40	Weighted Long-Term Cost			
41	2003	6.37%	0.000	0.70
42	2003	6.37%	0.0%	0.7%
43	2003	6.90%	0.0% 4.0%	0.19
44	2015	6.88%	0.6%	3.5% 0.5%
45	2020	8.00%	0.6%	0.39
46	2023	5.75%	0.4%	0.79
47	2025	6.10%	0.6%	0.7%
48	2028	5.00%	0.3%	0.2%
49			6.62%	6.58%
	11 1		0.02 /0	0.0070

DETERMINATION OF LONG-TERM DEBT COST FOR COMPANIES COMPARABLE TO PIEDMONT

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1	<u> </u>	/GL Holdings	
2	Source:http://www.sec.gov/Archives/edgar/data/1	1103601/0000950133020	004208/w66936e10vk.htm
3		LT Debt At	LT Debt At
4		2002, Sep 30	2001, Sep 30
5			
6	Source:WGL Statement at		
7	Page 32 of 2002 10k	6.70%	6.80%

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<DOCUMENT>
<TYPE>U-1/A
<SEQUENCE>1
<FILENAME>d139168.txt
<DESCRIPTION>AMENDMENT NO. 1 TO FORM U-1
<TEXT>

(As filed with the Securities and Exchange Commission on March 28, 2003)

File No. 70-10115

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM U-1/A

AMENDMENT NO. 1
TO
APPLICATION OR DECLARATION

under the

PUBLIC UTILITY HOLDING COMPANY ACT OF 1935

PROGRESS ENERGY, INC. 410 South Wilmington Street Raleigh, North Carolina 27602

PIEDMONT NATURAL GAS COMPANY, INC. 1915 Rexford Road Charlotte, North Carolina 28211

(Names of companies filing this statement and addresses of principal executive offices)

PROGRESS ENERGY, INC.

(Name of top registered holding company parent of each Progress Energy applicant or declarant)

<TABLE>
<C>
William D. Johnson, Executive Vice President,
General Counsel and Secretary
Progress Energy, Inc.
410 South Wilmington Street
Raleigh, North Carolina 27602
</TABLE>

<C>David J. Dzuricky, Senior Vice Pres Chief Financial Officer Piedmont Natural Gas Company, Inc. 1915 Rexford Road Charlotte, North Carolina 28211

(Names and addresses of agents for service)

<PAGE>

The Commission is requested to mail copies of all orders, notices and other communications to:

<TABLE>

<Ċ>

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Christopher Cox, Esq. Associate General Counsel Progress Energy Service Company, LLC 410 South Wilmington Street Raleigh, North Carolina 27602 William T. Bal Page 2 of 12_ Thelen Reid & 875 Third Avenue New York, New York 10022

Barry L. Guy, Vice President and Controller Piedmont Natural Gas Company, Inc. 1915 Rexford Road Charlotte, North Carolina 28211

Jerry W. Amos, Esq.
Nelson Mullins Riley & Scarborough, I
Bank of America Corporate Center
Suite 2400
100 N. Tryon Street
Charlotte, North Carolina 28202

</TABLE>

<PAGE>

The Application/Declaration filed in this proceeding on January 29, 2003 is hereby amended and restated in its entirety to read as follows:

ITEM 1. DESCRIPTION OF PROPOSED TRANSACTION.

1.1 Description of Applicants.

A. Progress Energy and Subsidiaries. Progress Energy, Inc. ("Progress Energy"), a registered holding company,/1/ owns, directly or indirectly, all of the issued and outstanding common stock of two electric utility subsidiary companies: Carolina Power & Light Company ("CP&L"), which generates, transmits, purchases and sells electricity in parts of North Carolina and South Carolina; and Florida Power Corporation ("FPC"), which generates, transmits, purchases and sells electricity in parts of Florida. Together, CP&L and FPC provide electric utility service to approximately 2.7 million retail, commercial and industrial customers in an area having a population of more than 9 million people, including Raleigh, Asheville, and Wilmington, North Carolina, Florence, South Carolina, and metropolitan St. Petersburg, Clearwater and the greater Orlando area in Florida.

In addition to its primary integrated electric utility system, Progress Energy owns all of the issued and outstanding common stock of North Carolina Natural Gas Corporation ("NCNG"), a gas utility company that serves approximately 176,000 residential, commercial, industrial and municipal customers in 33 south-central and eastern North Carolina counties. NCNG's facilities include more than 1,000 miles of transmission pipeline and more than 2,900 miles of distribution mains. NCNG is supplied with natural gas that is delivered by Transcontinental Gas Pipe Line Company ("Transco") and Columbia Gas Transmission Corporation ("Columbia Gas"). NCNG was acquired by CP&L in July 1999, and became a direct subsidiary of Progress Energy (then known as CP&L Energy, Inc.) in July 2000./2/

NCNG has three direct, wholly-owned, non-utility subsidiaries: Cape Fear Energy Corporation ("Cape Fear"), which was previously engaged in purchasing natural gas for resale to large industrial and commercial users and the municipalities served by NCNG, as well as the business of providing energy management services, but is now inactive; NCNG Cardinal Pipeline Investment Corporation, which holds a 5% membership interest in Cardinal Pipeline Company, LLC, an intrastate pipeline; and NCNG Pine Needle Investment Corporation, which holds a 5% membership interest in Pine Needle LNG Company, LLC, which owns a liquefied natural gas project in North Carolina./3/

^{/1/} See CP&L Energy, Inc., et al., Holding Co. Act Release No. 27284 (Nov. 27,

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2000) (the "Merger Order").

/2/ Under the Merger Order, the Commission held that NCNG was retainable by Progress Energy as an additional integrated public-utility system under the "A-B-C" clauses of Section 11(b)(1) of the Act.

/3/ Prior to the closing of the proposed transaction that is described below in Item 1.2, the common stock of Cape Fear will be transferred by NCNG to Progress Energy or another non-utility subsidiary of Progress Energy. The other two companies will remain as subsidiaries of NCNG.

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For the twelve months ended December 31, 2002, NCNG had total operating revenues of \$301,120,000, of which \$301,062,000 (more than 99.9%) were derived from natural gas sales, and net operating revenues (gross margin) of \$83,580,000. At December 31, 2002, NCNG had total consolidated assets of \$522,150,000, including net utility plant of \$393,779,000.

Progress Energy also owns 50% of the issued and outstanding shares of common stock of Eastern North Carolina Natural Gas Company ("Eastern NCNG"), a North Carolina company that has been granted a certificate of public convenience and necessity by the North Carolina Utilities Commission ("NCUC") to construct a new natural gas distribution system and provide gas service to customers in 14 counties in eastern North Carolina. The remaining 50% of Eastern NCNG's issued and outstanding common stock is owned by the Albemarle Pamlico Economic Development Corporation ("APEC"), a North Carolina nonprofit corporation created to encourage infrastructure and economic development in the 14 eastern North Carolina counties. Eastern NCNG's service territory in North Carolina is adjacent to NCNG's./4/

Through its other direct and indirect non-utility subsidiaries, Progress Energy is engaged in development, construction, ownership and operation of "exempt wholesale generators" ("EWGs"), coal mining and coal transportation and handling, synthetic fuels production from coal, natural gas exploration, production, gathering and processing, energy management services, and other energy-related or exempt activities.

For the twelve months ended December 31, 2002, Progress Energy had total operating revenues of \$7,945,120,000, of which \$6,600,689,000 (83.08%) were derived from electric utility operations and \$1,344,431,000 (16.92%) from other, unregulated, businesses, including sales of electricity by Progress Energy's EWG subsidiaries. At December 31, 2002, Progress Energy had total consolidated assets of \$21,352,704,000, including net utility plant of \$10,656,234,000. (As of December 31, 2002, NCNG's results of operations and assets and liabilities were reported as "discontinued operations" and, therefore, are not included in Progress Energy's year-end consolidated operating revenues and utility plant accounts.) Progress Energy's consolidated capitalization (including short-term debt) at December 31, 2002 was as follows:

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Common equity	\$6,67	7,009,000	38.2%
Preferred equity	\$9	2,831,000	.5%
Long-term debt	\$9,74	7,293,000	 55.7%
Short-term debt*	\$97	0,247,000	5.6%

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<FN>

* Including current portion of long-term debt.

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</TABLE>

/4/ As noted in the Merger Order (see Appendix A to Merger Order, fn. 18), Progress Energy committed to file a separate application to acquire and retain Eastern NCNG as an additional gas utility subsidiary. Progress Energy filed an application with respect to Eastern NCNG on January 15, 2002 (see File No. 70-10035), in which it is asserting that Eastern NCNG and NCNG together constitute an integrated gas utility system within the meaning of Section 2(a)(29)(B) of the Act. The Commission issued a notice of the proposed transaction on May 24, 2002. (Holding Co. Act Release No. 27531).

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Progress Energy's unsecured senior debt is currently rated "BBB" by Standard & Poor's Inc. ("S&P") and "Baa2" by Moody's Investor Service ("Moody's").

B. Piedmont Natural Gas Company, Inc. and Subsidiaries. Piedmont Natural Gas Company, Inc. ("Piedmont"), a North Carolina corporation, is a gas utility company that is engaged in the distribution of natural gas to 740,000 residential, commercial and industrial customers in parts of North Carolina, South Carolina and Tennessee that include Charlotte, Salisbury, Greensboro, Winston-Salem, High Point, Burlington, Hickory, Reidsville and Spruce Pine in North Carolina, Anderson, Greenville, Spartanburg and Gaffney in South Carolina, and the metropolitan Nashville area in Tennessee. Piedmont is not a "holding company" or "subsidiary company" of a "holding company" as those terms are defined under the Act.

Piedmont's utility properties include approximately 670 miles of lateral pipelines of up to sixteen inches in diameter that connect Piedmont's distribution systems with the transmission systems of its pipeline suppliers, and approximately 20,500 miles of distribution mains. Piedmont holds firm transportation capacity on the Transco system, which delivers most of the gas Piedmont requires, as well as on the Columbia Gas, Tennessee Gas Pipeline Co., Texas Eastern Transmission Corp., and Columbia Gulf Transmission systems. Piedmont is subject to regulation as to rates, service and safety standards, accounting and other matters by the NCUC, the Public Service Commission of South Carolina and the Tennessee Regulatory Authority.

Piedmont has three direct, wholly-owned, non-utility subsidiaries:
Tennessee Gas Company, which is inactive; Piedmont Greenbrier Pipeline Company,
LLC, a 33% member of Greenbrier Pipeline Company, LLC, which is currently
seeking approval from the Federal Energy Regulatory Commission ("FERC") to
construct and operate a 280-mile interstate pipeline linking multiple gas supply
basins and storage facilities in the Southeast; and Piedmont Energy Partners,
Inc. ("Piedmont Partners"), a non-utility holding company for several other
non-utility subsidiaries of Piedmont. Piedmont Partners has four direct
wholly-owned subsidiaries: Piedmont Intrastate Pipeline Company, which is a
16.45% member of Cardinal Pipeline Company, L.L.C., an intrastate pipeline that
is regulated by the NCUC; Piedmont Interstate Pipeline Company, which is a 35%
member of Pine Needle LNG Company, an interstate pipeline company that is
regulated by the FERC; Piedmont Energy Company, which is a 30% member of
SouthStar Energy Services LLC, a non-regulated retail gas marketer in the
Southeast; and Piedmont Propane Company, which is a 20.69% member of US Propane,
L.P., the sole general partner and a 31% limited partner of Heritage Propane
Partners, L.P., the nation's fourth-largest propane distribution company.

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Piedmont Partners also owns several other subsidiaries that

For the fiscal year ended October 31, 2002, Piedmont reported on a consolidated basis total operating revenues of \$832,028,000, net operating revenues (operating revenues less cost of gas) of \$335,794,000, operating income of \$90,127,000, and net income of \$62,217,000 (including net income, reported on an equity basis, from non-utility businesses). At October 31, 2002, Piedmont had \$1,445,088,000 in total consolidated assets, including net utility plant of \$1,158,523,000. Piedmont's consolidated capitalization at October 31, 2002, was as follows:

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	Common equity	\$589,596,000	51.5%
	Preferred equity	\$0	0%
	Long-term debt	\$462,000,000	40.3%
	Short-term debt*	\$93,500,000	8.2%

<FN>

* Including current portion of long-term debt and sinking fund requirements.

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As of March 4, 2003, Piedmont had 33,310,490 issued and outstanding shares of common stock, no par value. Piedmont's common stock is listed and traded on the New York Stock Exchange ("NYSE"). Piedmont's senior unsecured debt is currently rated "A" by S&P and "A2" by Moody's, but was placed under review for possible downgrade by both rating services following announcement of the transaction described below.

1.2 Background of Transaction. Progress Energy and Piedmont have entered into a Stock Purchase Agreement, dated October 16, 2002, which is filed as Exhibit B hereto, pursuant to which Progress Energy has agreed to sell and Piedmont has agreed to purchase all of the issued and outstanding common stock of NCNG, \$0.10 par value per share (the "NCNG Shares"), and all of the shares of common stock and Series A preferred stock of Eastern NCNG that are held by Progress Energy, representing, respectively, 50% and 100% of the total number of shares of common stock and Series A preferred stock that are issued and outstanding (together, the "ENCNG Shares"). In addition, Piedmont will assume all of Progress Energy's rights and obligations under a subscription letter, dated January 5, 2001, pursuant to which Progress Energy is committed to purchase from Eastern NCNG the remaining authorized but unissued shares of Series A preferred stock, and a shareholders' agreement, dated as of January 5, 2001, by and among Eastern NCNG, Progress Energy and APEC (the "ENCNG Rights and Obligations").

In this Application/Declaration, Progress Energy is requesting approval under Section 12(d) of the Act for the sale and transfer of the NCNG Shares, the ENCNG Shares and the ENCNG Rights and Obligations to Piedmont (the "Transaction"). The Transaction is subject to approval by the NCUC and filing with the Department of Justice and the Federal Trade Commission of pre-merger notification forms under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "H-S-R Act"), and expiration or early termination of the statutory waiting period thereunder. The Transaction has been approved by the

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boards of directors of Progress Energy and Piedmont; it does approval by the shareholders of either company. Subject to receipt of regulatory approvals, the Transaction is expected to close by mid-2003.

Progress Energy has decided to sell NCNG, which was acquired by CP&L in July 1999, as well as its 50% interest in Eastern NCNG, in response to changes in its business brought about by its November 2000 acquisition of Florida Progress Corporation. The divestiture of NCNG and Eastern NCNG will enable Progress Energy to strengthen its balance sheet and focus itself on its core electric utility business. The net proceeds of the Transaction will be used by Progress Energy to pay down debt, thereby lowering Progress Energy's debt to equity ratio.

Immediately following the purchase of the NCNG Shares, Piedmont will cause NCNG to be merged with and into Piedmont, with Piedmont as the surviving corporation. By operation of law, Piedmont will assume all of the outstanding

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obligations of NCNG. Piedmont will acquire and hold Eastern NCNG as a 50%-owned subsidiary company and will therefore become a "holding company" within the meaning of Section 2(a)(7)(A) of the Act with respect to Eastern NCNG. Accordingly, Piedmont is requesting in this Application/Declaration that the Commission issue an order under Section 3(a)(2) of the Act exempting Piedmont and its subsidiary companies as such from all provisions of the Act, except Section 9(a)(2). Piedmont's request for exemption is addressed in Item 3.3, below.

1.3 Principal Terms of the Transaction. Under the Stock Purchase Agreement, Piedmont has agreed to pay \$417,500,000 in cash for the NCNG Shares, plus or minus the Working Capital (as described below) on the balance sheet of NCNG for the end of the most recent month immediately preceding the closing of the Transaction (the "Closing"). The Working Capital (which may be a positive or negative number) will be equal to the difference between the book value of current assets and book value of current liabilities on the date the Working Capital is determined, provided that current assets shall not include any tax refund, tax credit or other tax asset and current liabilities will not include any liability for taxes or notes payable to any affiliate of NCNG./5/ In addition, Piedmont has agreed to pay \$7,500,000 for the ENCNG Shares and the ENCNG Rights and Obligations. Under the Stock Purchase Agreement, the parties are obligated to close on the sale and purchase of the NCNG Shares, the ENCNG Shares and the ENCNG Rights and Obligations at the same time, provided, however, that, if, on the date of Closing, (i) Progress Energy has not obtained from APEC a waiver of certain restrictions on the transfer of the ENCNG Shares under the ENCNG Shareholders' Agreement, (ii) APEC has not consented to the assignment to Piedmont of an existing agreement pursuant to which CP&L has agreed to construct, operate and maintain Eastern NCNG's gas distribution system, or (iii) Piedmont has not received an exemption from the provisions of the Act (except for Section 9(a)(2) thereof), then Piedmont shall have no obligation to purchase the ENCNG Shares and the ENCNG Rights and Obligations and the parties shall close on the sale and purchase of the NCNG Shares alone.

The obligations of Progress Energy and Piedmont under the Stock Purchase Agreement are subject to the satisfaction prior to Closing of various conditions precedent that are normal and customary for a transaction of this type, including receipt of all required regulatory and corporate approvals and satisfaction of state laws.

1.4 Application of Net Proceeds. As indicated, the net proceeds of the Transaction will be used by Progress Energy to pay down debt. Progress Energy is filing herewith as Exhibit FS-11 pro forma consolidated financial statements

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that show the impact of the Transaction on Progress Energy' Page 7 of 12

/5/ In accordance with authorizations in File No. 70-9909, all of NCNG's long-term debt is held by Progress Energy and all of NCNG's short-term debt is currently funded through borrowings by NCNG under the Progress Energy system utility money pool arrangement. See Progress Energy, et al., Holding Co. Act Release Nos. 27297, dated December 12, 2000, and 27440, dated September 20, 2001. As of December 31, 2002, NCNG had outstanding a \$150 million note payable to Progress Energy and approximately \$8 million of borrowings under the utility money pool. It is contemplated that, prior to closing of the Transaction, the intercompany note payable to Progress Energy will be repaid and that any borrowings by NCNG under the utility money pool that are outstanding at the time of closing will be repaid or extinguished.

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capitalization as of December 31, 2002, assuming for balance sheet purposes that the Transaction had closed on December 31, 2002. As shown on Exhibit FS-11, the net proceeds of the Transaction on a pro forma basis (i.e., the aggregate purchase price less Working Capital adjustment, current income taxes and Transaction expenses) are estimated at \$373.3 million. After application of the net proceeds to retire debt, Progress Energy's common equity as a percentage of consolidated capitalization (including short-term debt and current maturities of long-term debt) would have increased from 38.2% to 39.0%.

ITEM 2. FEES, COMMISSIONS AND EXPENSES.

The fees, commissions and expenses paid or incurred or to be incurred by Progress Energy in connection with the proposed Transaction are estimated at not more than \$4,500,000, including approximately \$3,500,000 in investment banking fees and \$1,000,000 in outside legal fees.

ITEM 3. APPLICABLE STATUTORY PROVISIONS.

- 3.1 General Overview. Section 12(d) of the Act and Rule 44 thereunder are applicable to the proposed Transaction, and Section 3(a)(2) of the Act is applicable to Piedmont's request for an exemption from all provisions of the Act, except Section 9(a)(2).
- 3.2 Rule 54 Analysis. The proposed Transaction is also subject to Rule 54, which refers to Rule 53. Under Rule 53, a registered holding company may not issue any security (including any guarantee) for the purpose of financing the acquisition of the securities of or other interest in an EWG unless certain conditions are satisfied. Rule 54 provides that the Commission shall not consider the effect of the capitalization or earnings of any subsidiaries of a registered holding company that are EWGs or "foreign utility companies" ("FUCOS") in determining whether to approve other transactions if Rule 53(a), (b) and (c) are satisfied.

Progress Energy currently does not comply with the "safe harbor" investment limitation in Rule 53(a)(1). Progress Energy's "aggregate investment" in EWGs is \$1.268 billion (as of December 31, 2002), or about 61.1% of Progress Energy's "consolidated retained earnings" for the four quarters ended December 31, 2002 (\$2.075 billion). Progress Energy currently does not hold any interest in a FUCO. However, by order dated July 17, 2002 in File No. 70-10060 (the "July 2002 Order"), the Commission has authorized Progress Energy to increase its "aggregate investment" in EWGs to \$4 billion./6/ Therefore, although Progress Energy's "aggregate investment" in EWGs currently exceeds the 50% "safe harbor"

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limitation, this investment level is permitted under the Ju.

Even if the Commission takes into account the capitalization of and earnings from EWGs in which Progress Energy has an interest, there would be no basis for withholding approval of the proposed Transaction. With regard to capitalization, Progress Energy's common equity as of December 31, 2002, as a percentage of consolidated capitalization, is higher than at June 30, 2002, the

/6/ Under the July 2002 Order, the Commission reserved jurisdiction over the use of financing proceeds by Progress Energy to acquire any securities of or other interest in any FUCO pending completion of the record.

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end of the quarter immediately preceding the issuance of the July 2002 Order./7/Moreover, the proposed Transaction will enable Progress Energy to retire debt and therefore modestly improved common equity as a percentage of consolidated capitalization.

As to earnings from EWGs, certificates filed pursuant to Rule 24 in this proceeding show that Progress Energy's EWG investments continue to contribute positively to consolidated earnings.

Progress Energy is currently in compliance with all other requirements of Rule 53(a):

Rule 53(a)(2): Progress Energy maintains books and records enabling it to identify investments in and earnings from each EWG and FUCO in which it directly or indirectly acquires and holds an interest. Progress Energy will cause each domestic EWG in which it acquires and holds an interest, and each foreign EWG and FUCO that is a majority-owned subsidiary, to maintain its books and records and prepare its financial statements in conformity with U.S. generally accepted accounting principles ("GAAP"). All of such books and records and financial statements will be made available to the Commission, in English, upon request.

Rule 53(a)(3): No more than 2% of the employees of the Utility Subsidiaries will, at any one time, directly or indirectly, render services to EWGs and FUCOs.

Rule 53(a)(4): Progress Energy will submit copies of the applicable filings made with the Commission to each of the public service commissions having jurisdiction over the retail rates of the Utility Subsidiaries.

In addition, Progress Energy states that the provisions of Rule 53(a) are not made inapplicable to the authorization herein requested by reason of the occurrence or continuance of any of the circumstances specified in Rule 53(b). Rule 53(c) is inapplicable by its terms.

3.3 Exemption of Piedmont. Section 3(a) of the Act, in pertinent part, provides that the Commission

"shall exempt any holding company, and every subsidiary company thereof as such, from any provision or provisions of [the Act], unless and except insofar as it finds the exemption detrimental to the public interest or the interest of investors or consumers, if-

(2) such holding company is predominantly a public-utility company whose operations as such do not extend beyond the State in which it is organized and States contiguous thereto[.]"

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/7/ At December 31, 2002, Progress Energy's consolidated ca consisted of 38.2% common equity, .5% preferred stock, 57.3% long-term debt (including current maturities of long-term debt), and 4.0% short-term debt, versus 35.3% common equity, .5% preferred stock, 58.7% long-term debt (including current maturities of long-term debt), and 5.5% short-term debt at June 30, 2002 (the end of the quarter immediately preceding the issuance of the July 2002 Order).

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Piedmont is a gas utility company that operates through divisions in three states. Following the Transaction, Piedmont's sole public-utility subsidiary will be Eastern NCNG. Taking into account its 50% common stock interest in Eastern NCNG, Piedmont and its subsidiary companies, as such, will be entitled to an exemption under Section 3(a)(2) of the Act because Piedmont will remain "predominantly" a public-utility company whose operations as such will be confined to North Carolina, its state of incorporation, and South Carolina and Tennessee, which are contiguous to North Carolina.

In making a determination whether an applicant for exemption under Section 3(a)(2) is "predominantly" an operating utility, the Commission has historically compared the size of utility operations of the holding company, as a separate entity, to the size of the utility operations of its subsidiaries, with the greatest emphasis being placed on the relative gross revenues of the companies in question. See Houston Industries, Incorporated, et al., 53 S.E.C. 34, 40 (1997), and cases cited in fn. 18. Other indicators of relative size have also been considered.

As explained more fully in File No. 70-10035, to which reference is made, Eastern NCNG is constructing a new natural gas transmission and distribution system in 14 counties in eastern North Carolina. The system is being constructed in seven phases, with completion expected in late 2004. It is estimated that, by the end of 2017, Eastern NCNG will have approximately 11,650 customers, based on various projections and assumptions concerning, among other factors, the rate of new customer hook-ups. Based on these projections, it is estimated that the gross revenues of Eastern NCNG in 2017 will be approximately \$3,179,000, or only about 0.3% of the combined gross operating revenues of Piedmont and NCNG (\$1,133,148,000) for their respective 2002 fiscal years./8/ This percentage gross-to-gross revenues comparison, which simply ignores any growth in Piedmont's utility revenues over the same period, is well within the range that the Commission has found acceptable in Houston Industries and earlier cases. Likewise, Eastern NCNG's projected customer base in 2017 (11,650) represents approximately 1% of Piedmont's and NCNG's combined customer base at year end 2001 (approximately 916,000).

Moreover, there is no basis for the Commission to conclude that granting Piedmont an exemption under Section 3(a)(2) of the Act would be "detrimental to the public interest or interest of investors and consumers." Piedmont and Eastern NCNG will both be subject to extensive regulation by the NCUC with respect to rates, service and safety standards, securities issuances, accounting and other matters. Thus, the grant of an exemption to Piedmont will not create any gap in effective regulation of Piedmont and Eastern NCNG.

ITEM 4. REGULATORY APPROVAL.

As indicated, the Transaction (as well as the merger of NCNG into Piedmont) is subject to approval by the NCUC and to the filing of pre-merger notification statements under the H-S-R Act and expiration or early termination of the

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/8/ Gross operating revenues of Piedmont for the fiscal $y \in 2002$ were \$832,028,000 and gross operating revenues of NCNG for the fiscal year ended December 31, 2002 were \$301,120,000.

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statutory waiting period thereunder. No other state commission and no federal commission, other than this commission, has jurisdiction over the proposed Transaction.

ITEM 5. PROCEDURE.

The applicants request that the Commission publish a notice of the filing of this Application/Declaration as soon as practicable and that the Commission issue an order approving the proposed Transaction and granting Piedmont an exemption pursuant to Section 3(a)(2) of the Act as soon as the rules allow. The applicants further (i) request that there not be a 30-day waiting period between issuance of the Commission's order and the date on which the order is to become effective, (ii) waive a recommended decision by a hearing officer or any other responsible officer of the Commission, and (iii) consent to the participation of the Division of Investment Management in the preparation of the Commission's decision and/or order, unless the Division of Investment Management opposes the matters proposed herein.

ITEM 6. EXHIBITS AND FINANCIAL STATEMENTS.

A. EXHIBITS.

- A-1 Amended and Restated Certificate of Incorporation of North Carolina Natural Gas Company. (Incorporated by reference to Exhibit 3(1) to Form 10 filed by North Carolina Natural Gas Company on July 21, 2000 in File No. 000-00082)
- A-2 Articles of Incorporation of Eastern North Carolina Natural Gas Company. (Incorporated by reference to Exhibit A-1 to Form U-1 Application/Declaration filed by Progress Energy, Inc. on January 15, 2002 in File No. 70-10035)
- B Stock Purchase Agreement by and between Progress Energy, Inc. and Piedmont Natural Gas Company, Inc. (Previously filed)
- C None
- D-1 Joint Application to the North Carolina Utilities Commission. (Previously filed)
- D-2 Order of North Carolina Utilities Commission. (To be filed by amendment)
- E None
- F Opinion of Counsel for Progress Energy, Inc. (To be filed by amendment)
- G Form of Federal Register Notice. (Previously filed)

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B. FINANCIAL STATEMENTS.

FS-1 Progress Energy Consolidated Statement of Income for the year ended December 31, 2002 Incorporated by reference to Annual Report of Progress Energy on Form 10-K for the year ended December 31, 2002 (File No. 1-15929)

FS-2 Progress Energy Consolidated
Balance Sheet as of December 31,

Incorporated by reference to Annual Report of Progress Energy on Form 10-K for the year ended December 31, 2002 (File No. 1-15929)

- FS-3 Intentionally left blank
- FS-4 Intentionally left blank
- FS-5 Piedmont Consolidated Statement of Income for the fiscal year ended October 31, 2002

Incorporated by reference to Annual Report of Piedmont on Form 10-K for the fiscal year ended October 31, 2002 (File No. 1-6196)

FS-6 Piedmont Consolidated Balance Sheet as of October 31, 2002 Incorporated by reference to Annual Report of Piedmont on Form 10-K for the fiscal year ended October 31, 2002 (File No. 1-6196)

FS-7 Piedmont Consolidated Statement of Income for three months ended January 31, 2003

Incorporated by reference to Quarterly Report of Piedmont on Form 10-Q for the period ended January 31, 2003 (File No. 1-6196)

FS-8 Piedmont Consolidated Balance Sheet as of January 31, 2003 Incorporated by reference to Quarterly Report of Piedmont on Form 10-Q for the period ended January 31, 2003 (File No. 1-6196)

FS-9 NCNG Consolidated Balance Sheet (Unaudited) as of December 31, 2002

Previously filed

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FS-10 NCNG Consolidated Statement of Income (Unaudited) for the year ended December 31, 2002

Previously filed

FS-11 Unaudited pro forma consolidated financial statements of Progress Energy as of December 31, 2002 Filed herewith

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ITEM 7. INFORMATION AS TO ENVIRONMENTAL EFFECTS.

The matters that are the subject of this amended Application/Declaration do not involve a "major federal action," nor do they "significantly affect the quality of the human environment" as those terms are used in section 102(2)(C) of the National Environmental Policy Act. The transactions proposed herein will not result in changes in the operations of the applicants that will have an impact on the environment. The applicants are not aware of any federal agency that has prepared or is preparing an environmental impact statement with respect to the transactions that are the subject of this amended Application/Declaration.

SIGNATURES

Pursuant to the requirements of the Public Utility Holding Company Act of 1935, each of the undersigned companies has duly caused this amended Application/Declaration to be signed on its behalf by the undersigned thereunto duly authorized.

PROGRESS ENERGY, INC.

By:/s/ William D. Johnson

Name: William D. Johnson

Title: Executive Vice President,

General Counsel and Secretary

PIEDMONT NATURAL GAS COMPANY, INC.

By:/s/ David J. Dzuricky

Name: David J. Dzuricky

Title: Senior Vice President and

Chief Financial Officer

Date: March 28, 2003

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	Тор	13.78	to	982.57	
	Second	6.97	to	13.78	
	Third	-5.31	to	6.97	
	Bottom	-145.36	to	-5.31	
- Service Management	Average			2.13	

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*When applicable, Year 1 refers to the most recent fiscal year

Return on Equity % - Trailing 12 Months

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ESTABLISHING INVESTOR'S TIME HORIZON OR HOLDING PERIOD FOR COMPANIES COMPARABLE TO PIEDMONT

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Company Name	Company Ticker	Stcok Outstanding at July 31, 2003	100% TumOver Since:
AGL	ATG	63,343,000	07/30/2002
Atmos	ATO	49,904,000	03/05/2002
New Jersey Resources	NJR	27,127,000	08/28/2001
NICOR	GAS	44,021,000	01/03/2003
Northwest Natural Gas	NWN	25,663,000	04/09/2002
Peoples	PGL	36,052,000	06/04/2002
Piedmont	PNY	33,441,000	08/07/2002
WGL	WGL	48,583,000	01/24/2002

				Prices		** .
Company	Ticker	Date	High	Low .	Close	Shares Traded
				·		
AGL	ATG	05/27/2003	26.98	26	26.61	486300
AGL	ATG	05/28/2003	26.61	26.26	26.35	211200
AGL	ATG	05/29/2003	26.55	25.81	26.03	234500
AGL	ATG	05/30/2003	26.43	26.08	26.13	300700
			٠.			
Atmos	ATO	05/27/2003	24.98	24.26	24.85	390700
Atmos	ATO	05/28/2003	24.93	24.61	24.76	94600
Atmos	ATO	05/29/2003	24.76	24.34	24.58	153300
Atmos	ATO	05/30/2003	24.78	24.55	24.75	159600
					- : .	
New Jersey Resources	NJR	05/27/2003	35.2	34.7	35.18	110600
New Jersey Resources	NJR	05/28/2003	35.32	34.92	35.21	65100
New Jersey Resources	NJR	05/29/2003	35.34	34.84	35.18	89300
New Jersey Resources	NJR	05/30/2003	35.49	35.12	35.37	62000
tion colocy itecomics						
NICOR	GAS	05/27/2003	36.3	34.6	36.14	859300
NICOR	GAS	05/28/2003	36.16	35.63	35.79	
NICOR	GAS	05/29/2003	36.19	35.26	35.26	372800
NICOR	GAS	05/30/2003	35.9	35.36	35.61	267600
	1					
Northwest Natural Gas	NWN	05/27/2003	28.52	27.35	28.15	210800
Northwest Natural Gas	NWN	05/28/2003	28.25	27.7	27.71	
Northwest Natural Gas	NWN	05/29/2003	28.32	27.3	27.97	63100
Northwest Natural Gas	NWN	05/30/2003	28.5	27.85	27.85	
Peoples	PGL	05/27/2003	44.6	43.42	43.57	399600
Peoples	PGL	05/28/2003	43.6	42.85	42.98	
Peoples	PGL	05/29/2003				
Peoples	PGL	05/30/2003				-
Piedmont	PNY	05/27/2003	39.67	38.67	38.83	293200
Piedmont	PNY	05/28/2003			+	
Piedmont	PNY	05/29/2003		39.01	39.3	· · · · · · · · · · · · · · · · · · ·
Piedmont	PNY	05/30/2003	39.69	39.04	39.23	
		17	32,00			
WGL.	WGL	05/27/2003	28.14	27.28	27.98	252100
WGL	WGL	05/28/2003				95500
WGL	WGL	05/29/2003				133700
WGL	WGL	05/30/2003				143000

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THE FOUR SCE

Net Interest Paid by the Federal Government (Percent of federal government expenditures, excluding 18 16 14 12 10 1981 1991 2011

Government. Federal discretionary spending is expected to remain under pressure throughout the projection period, as Washington attempts to mitigate the impacts of rapidly rising entitlement spending on the federal budget. As a share of GDP, federal government current expenditures will fall from their recent peak of almost 22.5% in 1992 to a low of 16.3% in 2011, before gradually rising to 18.7% by 2026. Personal transfer payments will expand as a share of government current expenditures, increasing from 42% last year to 59% by 2026.

Real military spending should decline between 2001 and 2026, as the nation continues to reap a peace dividend. In 2000 military spending garnered only 18% of total federal outlays, down from 28% as recently as 1988. The average defense share of federal outlays will average 15.48% during 2000-26.

Interest payments—the fastest-growing component of federal spending in recent years-rose from about an 8% share of the budget in 1976 to a 17.5% share in 1991, mostly due to the rapidly expanding federal debt (which climbed from 25% to 46% of GDP over the same period). This interest share should steadily fall to less than 2% after 2014 (Exhibit 14). After 28 years of deficit, the federal budget (unified basis) recorded a surplus in fiscal 1998. We expect surpluses to continue through 2020, and average 0.2% of GDP through fiscal

For much of the postwar period, state and local government spending was a leading "growth industry." Real municipal consumption and investment rose 4.4% annually from 1960 to 1975, boosting total state and local spending's share of GDP from 9.0% to 12.8%. This pattern then changed dramatically, as demand for state and local services slackened and resistance to higher taxes stiffened. In addition, real federal grants-in-aid were unchanged between 1975 and 1990, reducing their share of nominal state receipts from 23% to 17% over these years. Since then, rising Medicaid outlays have pushed this share back to 20%.

State and local consumption and investment have moderated since their robust advances of 1983-90, and should continue to rise less than 1.0% annually through the projection period. Spending, following revenues, will grow more slowly during the second half of the forecast interval than during the first half. Overall outlays will rise more rapidly than consumption and investment, the result of big increases in Medicaid outlays and retirement pensions.

International. The outlook for foreign trade is probably the most uncertain among all of the economy's sectors. The dollar's real exchange rate should decline through the forecast period. By 2026, the U.S. unit will be about 11% below its 2000 level.

Contrary to the general postwar experience, the export share of GDP plummeted in the early 1980s, from 10% in 1980 to 7% in 1986. Helped by the weakening dollar and growing foreign economies, though, this share steadily improved to nearly 11% by 2000. After some weakness this year, real exports should again record healthy advances, averaging 6.6% annual gains through 2026. Meanwhile, real imports will also continue to climb rapidly, averaging 6.0% growth over the forecast interval.

Profits and Equities. Before-tax profits will hover hetween 7.6 % and 9.0% of GNP, above the average share during the 1980s. Meanwhile, corporate cash flow will average 11.1% of GNP over the projection period. above the average of the past 25 years. The stable growth, modest inflation, and moderate real interest rates found in the trend outlook provide an excellent environment for equities over the next ten years, with stock prices enjoying steady 5.3% annual gains between 2001 and 2026.



25-Year Focus, Summer 2001 17

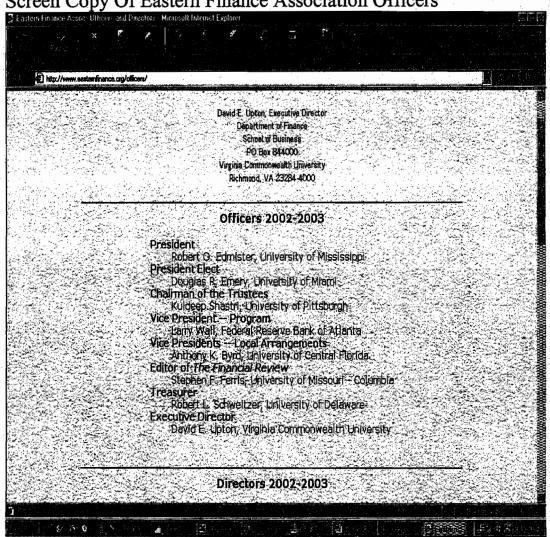
Docket No. 03-00313
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Direct Testimony__
Schedule 15 ____
Page 1 of 1____

BETAS AND THE	IR SOURCES		
	Sources on the		
Comparable Companies	Internet	The control of the co	

	Value Line Beta Is							
		.35 + Two-Thi	rds of Calc	ulated Beta				
					2			
Calculated	Values	Calculated		Value Line	4			
Masked' by		Beta		Beta				
Line Proce	dures			0.35				
	*		· .	0.42				
	-		-	0.48				
	, in			0.55				
		0.40		0.62				
	:	0.50		0.68				
		0.60		0.75				
		0.70		0.82				
		0.80		0.88				
		0.90		0.95	•			
		1.00	1.	1.02				

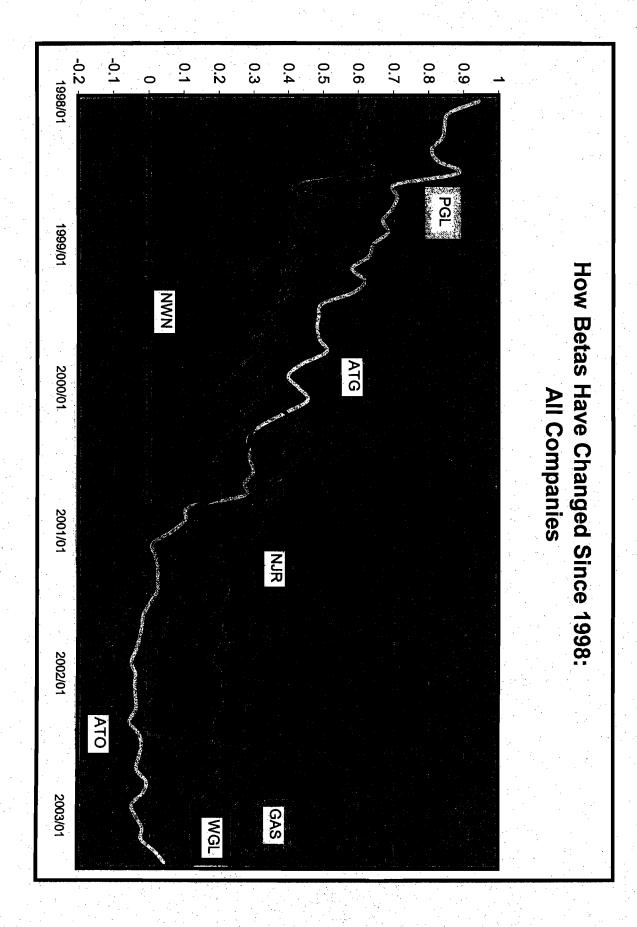
Docket No. 03-00313
Exhibit CAPD-SB__
Direct Testimony_
Schedule 17_
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Screen Copy Of Eastern Finance Association Officers



RISK PREMIUM ANALYSIS: PIEDMONT AND COMPARABLE COMPANIES REGRESSED AGAINST S&P 500

DETAI	-00										
BETA							AL I	Montherman	Doonlon		WGL
60 MO						NO I	NJ	Northwest	Peoples	Disdesient	
PERIO				AGL.	Atmos Energy	Nicor Inc	Resources	Natural	Energy Cp	Piedmont	Holdings
ENDIN	G:			(NYSE:ATG	S) (NYSE:ATO)	(NYSE:GAS)	(NYSE:NJR)	(NYSE:NWN)	(NYSE:PGL)	(NYSE:PNY)	(NYSE:WGL)
1998/0				0.656	0.144	0.651	0.485	0.103	0.944	0.338	0.622
1998/0	2			0.649	0.138	0.635	0.485	0.158	0.857	0.340	0.604
1998/0	3			0.668	0.150	0.630	0.514	0.156	0.846	0.394	0.592
1998/0	4			0.662	0.204	0.615	0.518	0.178	0.840	0.455	0.555
1998/0				0.677	0.176	0.638	0.541	0.152	0.810	0.502	0.573
1998/0				0.678	0.167	0.634	0.549	0.160	0.826	0.527	0.595
1998/0				0.700	0.203	0.644	0.565	0.210	0.887	0.614	0.648
1998/0				0.534	0.204	0.404	0.415	0.272	0.701	0.472	0.438
	_										
1998/0				0.550	0.200	0.432	0.442	0.344	0.711	0.558	0.515
1998/1				0.579	0.212	0.429	0.475	0.339	0.696	0.548	0.463
1998/1				0.582	0.181	0.408	0.453	0.336	0.670	0.489	0.426
1998/1	2			0.603	0.196	0.402	0.449	0.294	0.684	0.486	0.441
1999/0	1 .			0.569	0.166	0.373	0.424	0.262	0.642	0.433	0.410
1999/0	2			0.555	0.274	0.347	0.435	0,237	0.630	0.395	0.392
1999/0	3			0.538	0.235	0.303	0.413	0.188	0.582	0.366	0.384
1999/0				0.546	0.246	0.305	0.418	0.196	0.617	0.344	0.389
1999/0				0.517	0.239	0.287	0.401	0.157	0.588	0.311	0.366
1999/0				0.503	0.228	0.280	0.353	0.148	0.496	0.282	0.384
				0.475	0.231	0.277	0.320	0.097	0.486	0.225	0.342
1999/0											
1999/0				0.496	0.240	0.284	0.327	0.105	0.482	0.234	0.354
1999/0				0.514	0.271	0.301	0.289	0.114	0.490	0.287	0.323
1999/1				0.531	0.238	0.312	0.289	0.118	0.508	0.303	0.318
1999/1				0.492	0.280	0.268	0.324	0.097	0.438	0.293	0.281
1999/1	2			0.453	0.240	0.237	0.303	0.047	0.398	0.264	0.266
2000/0	1			0.420	0.341	0.190	0.318	0.087	0.430	0.295	0.321
2000/0	2			0.410	0.327	0.226	0.320	0.101	0.454	0.337	0.321
2000/0	3			0.438	0.277	0.267	0.400	0.097	0.395	0.350	0.388
2000/0				0.446	0.283	0.251	0.424	0.035	0.328	0.307	0.412
2000/0			٠.	0.470	0.225	0.211	0.436	0.044	0.286	0.288	0.398
2000/0				0.467	0.220	0.205	0.434	0.043	0.285	0.282	0.394
2000/0	-			0.430	0.176		0.419	0.035	0.289	0.271	0.392
						0.196					
2000/0		٠.		0.449	0.175	0.214	0.411	0.039	0.298	0.258	0.401
2000/0				0.389	0.178	0.207	0.378	0.039	0.272	0.198	0.347
2000/1				0.387	0.149	0.209	0.375	0.040	0.274	0.214	0.350
2000/1	1			0.290	0.053	0.145	0.328	0.004	0.111	0.130	0.250
2000/1	2			0.290	0.052	0.135	0.321	-0.003	0.104	0.121	0.245
2001/0	1			0.274	0.065	0.104	0.310	-0.020	0.067	0.099	0.219
2001/0	2	٠.,		0.209	0.102	0.070	0.266	-0.037	0.011	0.127	0.216
2001/0	3			0.193	0.086	0.066	0.221	-0.029	0.018	0.073	0.204
2001/0				0.204	0.062	0.082	0.235	-0.059	0.026	0.069	0.212
2001/0				. 0.209	0.063	0.084	0.237	-0.067	0.025	0.070	0.214
2001/0				0.210	0.064	0.084	0.237	-0.075	0.024	0.075	0.223
2001/0				0.198	-0.042	0.093	0.232	-0.074	0.004	0.090	0.202
				0.130	-0.078	0.065	0.208		-0.015	0.109	0.209
2001/0								-0.094			
2001/0				0.289	-0.082	0.044	0.223	0.067	-0.019	0.141	0.204
2001/1				0.281	-0.084	0.041	0.226	0.057	-0.026	0.141	0.203
2001/1				0.293	-0.137	0.023	0.214	0.072	-0.036	0.153	0.187
2001/1				0.295	-0.142	0.020	0.211	0.065	-0.049	0.140	0.177
2002/0	1			0.315	-0.128	0.021	0.215	0.049	-0.038	0.143	0.204
2002/0	2 -			0.306	-0.137	0.016	0.215	0.048	-0.039	0.152	0.200
2002/0	3			0.301	-0.116	0.016	0.211	0.063	-0.037	0.162	0.207
2002/0	4 .			0.279	-0.084	-0.010	0.186	0.061	-0.036	0.139	0.199
2002/0				0.291	-0.089	-0.015	0.171	0.059	-0.054	0.135	0.178
2002/0				0.260	-0.102	0.002	0.179	0.049	-0.027	0.108	0.182
2002/0				0.263	-0.053	0.265	0.174	0.066	-0.020	0.172	0.199
2002/0				0.231	-0.006	0.272	0.174	0.052	-0.028	0.172	0.198
	_										
2002/0				0.246	0.018	0.245	0.139	0.010	-0.034	0.168	0.190
2002/1				0.257	0.033	0.291	0.110	0.009	-0.005	0.156	0.169
2002/1				0.243	0.024	0.284	0.089	-0.073	-0.015	0.103	0.157
2002/1				0.234	-0.005	0.246	0.075	-0.101	-0.046	0.082	0.127
2003/0	1			0.244	0.004	0.259	0.082	-0.085	-0.036	0.096	0.129
2003/0	2			0.244	0.003	0.259	0.075	-0.106	-0.017	0.092	0.126
2003/0	3 .			0.236	-0.008	0.246	0.057	-0.106	-0.019	0.061	0.126
2003/0			٠.	0.267	0.026	0.265	0.077	-0.086	0.019	0.081	0.131
2003/				0.263	0.055	0.326	0.079	-0.061	0.047	0.087	0.133
2000	9			0.200	0.000	0.020	0.019	-0.001	0.047	0.007	0.100



MARKET WIDE RATE OF RETURN: 1925-200

Direct Testimony___ Schedule 19 ____ Page 1 of 1____

		Year-To-Year			Year-To-Ye
· · · · · · · · · · · · · · · · · · ·		Percentage			Percentage
	S & P 500	Change In		S & P 500	Change In
· · · · ·	Company	S&P 500	*	Company	S&P 500
·	Total	Company		Total	Company
	Return	Total		Return	Total
	Index	Return		Index	Return
YEAR	For Year	Index	YEAR	For Year	Index
:					
(1)	(2)	(3)	(4)	(5)	(6)
	(-/				, ,
1925	1.00		1964	47.14	16.48%
1926	1.12	11.60%	1965	53.01	12.45%
1927	1.54	37.54%	1966	47.67	-10.06%
1928	2.20	43.58%	1967	59.10	23.98%
1929	2.02	-8.44%	1968	65.64	11.06%
1930	1.52	-24.88%	1969	60.06	-8.50%
1931	0.86	-43.34%	1970	62.47	4.01%
1932	0.79	-8.15%	1971	71.41	14.31%
1933	1.21	53.87%	1972	84.96	18.98%
1934	1.20	-1.40%	1973	72.50	-14.66%
1935	1.77	47.62%	1974	53.31	-26.47%
1936	2.37	33.96%	1975	73.14	37.20%
1937	1.54	-35.02%	1976	90.58	23.84%
1938	2.02	31.08%	1977	84.08	-7.18%
1939	2.01	-0.40%	1978	89.59	6.56%
1940	1.81	-9.76%	1979	106.11	18.44%
1941	1.60	-11.59%	1980	140.51	32.42%
1942	1.93	20.29%	1981	133.62	-4.91%
1943	2.43	25.95%	1982	162.22	21.41%
1944	2.91	19.74%	1983	198.74	22.51%
1945	3.97	36.44%	1984	211.20	6.27%
1946	3.65	-8.07%	1985	279.11	32.16%
1947	3.85	5.71%	1986	330.67	18.47%
1948	4.07	5.50%	1987	347.97	5.23%
1949	4.83	18.79%	1988	406.46	16.81%
1950	6.36	31.70%	1989	534.46	31.49%
1951	7.89	24.03%	1990	517.50	-3.17%
1952	9.34	18.36%	1991	675.59	30.55%
1953	9.24	-0.99%	1992	727.41	7.67%
1954	14.11	52.62%	1993	800.08	9.99%
1955	18.56	31.56%	1994	810.54	1.31%
1956	19.78	6.56%	1995	1113.92	37.43%
1957	17.65	-10.78%	1996	1370.95	23.07%
1958	25.30	43.36%	1997	1828.37	33.37%
1959	28.32	11.95%	1998	2350.89	28.58%
1960	28.46	0.47%	1999	2845.63	21.04%
1961	36.11	26.89%	2000	2586.52	-9.11%
1962	32.96	-8.73%	2001	2279.13	-11.88%
1963	40.47	22.80%	2002	1775.34	-22.10%
		00 /0	2002	,110.04	
urce: Ibbotec	n Associates 3	2003 Yearbook:	ACTUAL	▶ 10.20%	12.20%
raice. IDDUISC	A ASSOCIATES 2	.000 I Edibook.	RETURN	10.2076	12.2070
Column	s (2), (5) - Froi	m Table P 4	INE I DINIA	4	ARITHMETI
		n Table A-1			AVERAGE

RIS	K FREE	RATE OF F	RETURN:	1925-2	002	Schedule 20 Page 1 of 1_
Index	of Retu	rns To Thre	e-Month 1	reasurv	/ Bills 🔝	
HIGCA	OI I (Otal		O IVIOLICIT I			
		Year-To-Year			Year-To-Year	
		Percentage			Percentage	
	T-Bill	Change in		T-Bill	Change In	
	Total	T-Bill	, .	Total	T-Bill	
	Return	Total		Return	Total	
	Index	Return		Index	Return	
YEAR	For Year	Index	YEAR	For Year	Index	<u> </u>
		·			1	Marie Lander
(1)	(2)	(3)	(4)	(5)	(6)	
		<u> </u>				
1925	1.00000		1964	1.76000	3.53%	<u>, 'y </u>
1926	1.03300	3.30%	1965	1.82900	3.92%	· · · · · · · · · · · · · · · · · · ·
1927	1.06500	3.10%	1966	1.91600	4.76%	
1928	1.10300	3.57%	1967	1.99700	4.23%	
1929	1.15500	4.71%	1968	2.10100	5.21%	
1930	1.18300	2.42%	1969	2,23900	6.57%	
1931	1.19600	1.10%	1970	2.38500	6.52%	
1932	1.20700	0.92%	1971	2.49000	4.40%	
1933	1.21100	0.33%	1972	2.58500	3.82%	
1934	1.21300	0.17%	1973	2.76400	6.92%	
1935	1.21500	0.16%	1974	2.98600	8.03%	
	1.21700	0.16%	1975	3.15900	5.79%	
1936						
1937	1.22100	0.33%	1976	3.31900	5.06%	
1938	1.22100	0.00%	1977	3.48900	5.12%	
1939	1.22100	0.00%	1978	3.74000	7.19%	<u> </u>
1940	1.22100	0.00%	1979	4.12800	10.37%	
1941	1.22200	0.08%	1980	4.59200	11.24%	
1942	1.22500	0.25%	1981	5.26700	14.70%	•
1943	1.22900	0.33%	1982	5.82200	10.54%	
1944	1.23300	0.33%	1983	6.33500	8.81%	- · · · · ·
1945	1.23700	0.32%	1984	6.95900	9.85%	
1946	1.24200	0.40%	1985	7.49600	7.72%	
1947	1.24800	0.48%	1986	7.95800	6.16%	
1948	1.25800	0.80%	1987	8.39300	5.47%	
1949	1.27200	1.11%	1988	8.92600	6.35%	
1950	1.28700	1.18%	1989	9.67300	8.37%	
1950	1.30600	1.48%	1990	10.42900	7.82%	
1951	1.32800	1.68%	1991	11.01200	5.59%	
	1.35200		1000		3.51%	· .
1953		1.81%		11.39800		
1954	1.36400	0.89%	1993	11.72800	2.90%	
1955	1.38500	110110	1994	12.18600	3.91%	
1956	1.41900	2.45%	1995	12.86800	5.60%	
1957	1.46400	3.17%		13.53800	5.21%	<u>, , , , , , , , , , , , , , , , , , , </u>
1958	1.48600	1.50%	1997	14.25000	5.26%	
1959	1.53000	2.96%	1998	14.94200	4.86%	A CONTRACTOR OF THE SECOND
1960	1.57100	2.68%	1999	15.64100	4.68%	
1961	1.60400	2.10%	2000	16.56300	5.89%	
1962	1.64800	2.74%	2001	17.19700	3.83%	
1963	1.70000	3.16%	2002	17.48000	1.65%	
				1		
						at a second
rce: Ibbots	on Associates 20	02 Yearbook:	Actual Return	▶ 3.79%	3.83%	
Column	(2) - From Table	B-9			A .	
	(3) - From Table					
Column	(S) - FIOIII Table	,,,,,				
	(5) - From Table					-

	Risk Premi	um Suggested	Rate Of Return		
			Market		Comparable Company
	Debt		Risk	Risk	Equity
	Yield	Beta	Premium =	Premium	Cost
			10.20% - 3.79%		
COMPANY	(a)	(b)	(c)	(d)=(b)X(c)	(e)=(a)+(d)
					· · ·
AGL (NYSE:ATG)	6.83%	0.280	6.41%	1.79%	8.62%
Atmos Energy (NYSE:ATO)	6.83%	0.050	6.41%	0.32%	7.15%
Nicor Inc (NYSE:GAS)	6.83%	0.090	6.41%	0.58%	7.40%
N J Resources (NYSE:NJR)	6.83%	0.290	6.41%	1.86%	8.69%
Northwest Natural (NYSE:NWN)	6.83%	-0.070	6.41%	-0.45%	6.38%
Peoples Energy Cp (NYSE:PGL)	6.83%	0.050	6.41%	0.32%	7.15%
WGL Holdings (NYSE:WGL)	6.83%	0.140	6.41%	0.90%	7.72%
	1				
	RISK PREMIUM I	ROR - EQUITY:	ALL COMPARABLE	E COMPANIES:	7.59%

7.35	2.66	4.69		
6.41	1.48	4.93	WGL Holdings	WGL Holdings (NYSE:WGL)
7.31	2.03	5.28	Peoples Energy	Peoples Energy Cp (NYSE:PGL)
5.38	0.81	4.57	Northwest Natural Gas	Northwest Natural (NYSE:NWN)
10.82	5.38	5.44	Nicor	Nicor Inc (NYSE:GAS)
6.03	2.47	3.56	New Jersey Resources	N J Resources (NYSE:NJR)
7.90	2.83	5.07	Atmos	Atmos Energy (NYSE:ATO)
7.58	3.60	3.98	AGL Resources	AGL (NYSE:ATG)
Return	Rate	Div Yield		
Suggested DCF	5- Yr Div Growth Suggested DCF	Current		

North Carolina Natural Gas Corporation

Comparable Local Distribution Companies

Comparison of Common Equity Ratios

	prioc' Average R7 0%	57.1%	٠.	-	57.4%	-	Laclede Group 58.6% 57.8%	-		ont Natural Gas 55.3% 53.8%	1998 1999
% JJ.U%							% 54.5%			% 53.9%	9 2000
31.4%	л 140	56.3%	55.5%	53.2%	61.7%	49.9%	50.2%	45.7%	38.7%	52.4%	2001
01.0%	n 1 69/	52.0%	59.5%	50.5%	64.5%	48.0%	52.3%	46.0%	40.0%	58.0%	2002(E)
33.3%	π 3	55	. 59	51	62	49	54.7%	48	4	54.7%	Five Year Average

Source: Value Line Investment Survey

Schedule 4 I fididx3 ynuM Docket No. G-21, SUB 442 NCNG

Docket No. 03-00313
Exhibit CAPD-SB
Direct Testimony
Schedule 23
Page 1 of 1

IN THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

2005 JUL 26 PH 17: 55

IN RE:)	F.R.A. DOCKET ROOM
)	•
APPLICATION OF CHATTANOOGA)	
GAS COMPANY, A DIVISION OF)	
PIEDMONT NATURAL GAS)	
COMPANY, INC., FOR AN)	DOCKET NO. 04-00034
ADJUSTMENT OF ITS RATES AND)	
CHARGES, THE APPROVAL OF)	
REVISED TARIFFS AND)	
APPROVAL OF REVISED SERVICE	j .	
REGULATIONS)	

AFFIDAVIT

I, Steve Brown, for the Consumer Advocate and Protection Division of the Attorney

General's Office, hereby certify that the attached Direct Testimony represents my opinion in the

above-referenced case and the opinion of the Consumer Advocate and Protection Division.

STEVE BROWN

Economist

Sworn to and subscribed before me this 19 day of ______, 2004.

NOTARY RUBLIC

My commission expires. 9- 2

73058

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1		and Utility Specialist and State Liaison
,2		Officer to the U.S. Nuclear Regulatory
3		Commission. From 1984 to 1986 I worked for
4		Houston Lighting & Power as Supervisor of
5		Rate Design. From 1982 to 1984 I worked
6		for Arizona Electric Power Cooperative as
7		a Rate Analyst. From 1979 to 1982 I worked
8		for Tri-State Generation and Transmission
9		Association as Power Requirements
10		Supervisor and Rate Specialist. Since 1979
11		my work spanned many issues including cost
12		of service studies, rate design issues,
13		telecommunications issues and matters
14		related to the disposal of nuclear waste.
15		
16	Q_5.	What is your educational background?
17		
18	A_5.	I have an M.S. in Regulatory Economics
19		from the University of Wyoming, an M.A.
20		and Ph.D. in International Relations with
21		a specialty in International Economics
22		from the University of Denver, and a B.A.
23		from Colorado State University.
24		
25	Q_6.	Dr. Brown, have you authored any articles
26		relating to your profession?
27		
28	A_6.	Yes, my articles have appeared in Public
29		Utilities Fortnightly.
30		
31	Q_7.	Are you and have you been a member of any
32		professional organizations, Dr. Brown?

Page 3 of 124 Yes, I am a past member of the NARUC Staff l' a 7. 2 Committee on Management Analysis, a past trustee of and a member of the Board for 3 4 the Automatic Meter Reading Association, and a current member of the National 5 Association of Business Economists. 6 7 8 Have you studied mathematics and Q 8. 9 statistics as part of your education? 10 11 A_8. Yes. 12 13 Dr. Brown, do you use mathematics and Q 9. statistics in combination with economics 14 15 as part of your profession? 16 17 A 9. Yes. 18 19 Q 10. What were you asked to do with respect to this case? 20 21 22 I was asked to form opinions on: 1) the A 10. 23 appropriate comparable companies which are 24 the basis for setting prices that 25 Chattanooga's ratepayers will bear as a 26 result of this case; 2) the capital 27 structure and the components of the 28 capital structure used to determine prices 29 for natural gas consumers in Chattanooga; 30 3) the effect of AGL Resources' Holding 31 Company, which is a registered holding 32 company bound by the Federal Public 33 Utility Holding Company Act (PUHCA), on 34 the economic conditions presented in this CAPD Witness Brown - Direct Docket 04-00034

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case by AGL's wholly-owned subsidiary
Chattanooga Gas Company(CGC); 4) whether
AGL Resources' Holding Company is in
compliance PUHCA; 5) the cost-of-capital
which includes determining the appropriate
capital structure, the appropriate marketbased common equity return, the cost of
long-term-debt, the cost of short-termdebt; and 6) to assist in the evaluation
of testimony offered by other witnesses in
this docket.

II. Summary

Q_11. Please provide a summary of your testimony.

My testimony is in two parts: public testimony A 11. and confidential testimony. The confidential testimony is filed separately. In my public testimony I give several opinions that I formed by comparing the financial information the company filed in this case with financial information available in the public records of the TRA, the United States Securities and Exchange Commission (SEC), and the Virginia State Corporation Commission (VSCC). The public records of the Georgia Public Service Commission (GPSC), which regulates AGL Resources in Georgia, do not have the same degree of internet access provided by the SEC and VSCC. Thus the GPSC's public records were not a source for my opinions.

CAPD Witness Brown - Direct, Docket 04-00034

1

In late 2000 AGL Resources became a registered public utility holding company, and therefore became subject to the SEC's extensive filing requirements for companies subject the Public Utility Holding Company Act (PUHCA). The change in regulatory status was triggered when AGL Resources purchased Virginia Natural Gas (VNG), a natural gas distribution company in Virginia. At the same time CGC became a direct operating subsidiary of the parent holding company. This was a substantial change from the earlier corporate relationships where AGL Resources had been a holding company exempted from PUHCA regulation and where CGC operated as a subsidiary of Atlanta Gas Light. The change in corporate organization allowed CGC to take part in substantial business transactions with nonutility subsidiaries of the holding company.

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32 33 Because of the change in corporate organization, I examined the public records of the TRA, the SEC and the VSCC as a means to verify the information presented by CGC and AGL Resources in this rate case.

The information in the public records of the SEC, VSCC and the TRA, as well as the SEC's rules, has led to the several opinions in my testimony.

CAPD Witness Brown - Direct Docket 04-00034

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1. AGL Resources' financial reporting procedures are inaccurate with respect to the equity return of CGC. Thus, there is no good reason to accept CGC's assertion that its current and projected equity return is low enough to justify a rate increase. The inaccurate financial reporting of equity returns is proven by AGL Resources filings with the SEC, the VSCC and the TRA. From September 2002 to December 2003 CGC's equity return declined by 2.48% and VNG's equity return increased by 2.65%. This abrupt and large reversal of equity returns prompted me to examine AGL's public records in detail.

For the twelve-month period ending September 2002 CGC's actual return for on equity was 10.53% and VNG's actual equity return 8.73%. By December 2003 CGC's actual equity return declined to 8.05%, and AGL Resources subsequently filed a rate case in Tennessee. From September 2002 to May 2003 VNG's equity return improved from 8.73% to 10.9%, but at the same time VNG's cash flow declined by \$2 million. By December 2003 VNG's actual equity return improved to 11.38%, but at the same time there was no improvement in VNG's cash flow and no change in VNG's capital structure. For cash flow to decline by \$2 million while the equity return improves by 2.65% is unlikely.

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As a result of AGL Resources' procedures, CGC and VNG quickly traded places in the profitability ranking of AGL Resources' distribution subsidiaries. Also, where a low return in Tennessee caused AGL resources to file a rate case, a low equity return did not cause a rate-case filing in Virginia. Other specific details supporting my opinion, that AGL's financial procedures are inaccurate with respect to the actual profitability of its regulated subsidiaries CGC and VNG, are provided in Section V, page 29 of my testimony.

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2. In 2003 AGL Resources engaged in a purely discretionary activity through its subsidiary, Sequent, to manage CGC's "idle" assets where such discretionary activity occurred in Tennessee under the provisions of a tariff known as the Interruptible Margin Credit Rider In 2003 the IMCR tariff allowed (IMCR). profits from the "idle" capacity transactions to be split equally between Sequent and CGC. According to public documents filed by AGL Resources with the TRA on February 27, 2004, Sequent and CGC shared profits of approximately \$2.4 million, thus Sequent received a management fee of approximately \$1.2 million for putting CGC's "idle" assets to work in 2003.

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Transactions between Sequent and all of its gas distribution subsidiaries appear in the SEC's U-9C-3, a public record which summarizes transactions between a holding company's subsidiaries and which is filed quarterly with the SEC by AGL Resources. According to the U-9C-3, Sequent manages the idle assets of each gas distribution subsidiary. Sequent's fee in 2003 for managing CGC's idle assets was not limited to \$1.2 million. Additional amounts of "direct costs" were charged to CGC by Sequent for Sequent's management of CGC's "idle" assets. The amounts were redacted from the SEC's public records but are revealed in my confidential testimony.

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The presence of additional "direct costs" in the SEC's public records puts the IMCR tariff and Sequent's idle-asset-management in a new light. If those redacted amounts exceed \$1.2 million (CGC's share of the profits from Sequent's management of CGC's "idle" capacity) then the IMCR tariff has created a net loss for CGC, lowering its income and equity return. If there is such a loss, then AGL Resources' discretionary activity (carried out through Sequent and the IMCR tariff) is contributing to AGL Resources' perceived need to increase CGC's rates. If Sequent's transactions have imposed economic loss on CGC and thus created a financial need for a rate increase to CGC's consumers, then AGL Resources is not complying with PUHCA. Details supporting my opinion are in Section VI, page 55 of my testimony.

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3. The usual way for the holding company to transfer profit from the subsidiary is by the subsidiary paying dividends to the parent. However, the SEC's records show that the holding company is transferring profit from the subsidiary by retaining operating expense credits at the parent rather than distributing them to the subsidiary, thus preventing the subsidiary's operating expenses from declining and consequently making CGC's equity return lower than it would be otherwise.

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SEC form U-13-60 is a record of the billings between the parent and the subsidiary. I examined AGL's U-13-60 for years 2002 and 2003 and discovered that the parent company had a negative cost or credit of approximately \$8.2 million in the parent company's indirect cost category in 2003. The total costs billed to the subsidiaries barely changed from 2002 to 2003. The U-13-60 shows that AGL Services Company's total billing to CGC for 2003 was \$6.391 million and for 2002 the amount was \$6.068 million. These figures match the annual shared services operating expenses in CGC's TRA form 303 for 2002 and 2003, therefore, CGC did not share in the \$8.2 million credited to the parent. In my opinion there is no good reason to accept CGC's assertion that its current and projected equity return is confiscatory while at the same time the parent company retains \$8.2 million of operating expense credits that should be distributed to the subsidiaries.

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The U-13-60 tables are shown below and discussed in Section VI of my testimony.

AGL Resources SEC Form U-13-6	O Filed May 2	2003			Ц	AGL Resources SEC Form U-13-6	0 Filed May 4 2	004		
For the Year Ended December 31 2002	2				Ц	For the Year Ended December 31	2003	Negativ		
ANALYSIS OF BILLING					Ц	AMALYSIS OF BILLING		In 2003		
ASSOCIATE COMPANIES						ASSOCIATE COMPANIES				
ACCOUNT 457					Ц	ACCOUNT 457				
NAME OF ASSOCIATE	DIRECT	INDIRECT	COMPENS ATION FOR	TOTAL		NAME OF ASSOCIATE	OIRECT COSTS	INDIRECT COSTS	COMPENS ATION FOR	TOTAL
	457-1	457-2	457 3	11			457-1	457-2	457-3	/1
AGL Resources inc	860 069	336 380	-	1 196 449	Н	AGL Resources Inc	4 657 610	+ -8.136.765		-3 479 155
Atlanta Gas Light Company	85 727 080	39 437 252	1 490 702	106 655 034	Н	Atlanta Gas Light Company	50 430 737	54 241 138	1 352 780	106 024,656
Chattanooga Gas Company	3 520 968	2 459 340	88 300	6 068 608	H	Chattanooga Gas Company	3 402 886	2 916 541	71 899	6 391 326
Virginia Natural Gas, Inc	8 722 911	9 365 947	362 157	16 451 015	Н	Virginia Natural Gas, Inc	4 450,523	13 050 512	299 055	17 800 090
Sequent Energy Management, LP- Core	1 060 243	1 031 212	53 535	2 144 991	П	Sequent Energy Management LP- Corp	3 109 881	2 097 161	103 959	5 310 981
AGL Capital Corporation	35 189	20 213	1 875	57 078	Н	AGL Capital Corporation	93 683	20 462	1,930	116 075
AGL Capital Trust	22 630	112 125	11 269	146 024	П	AGL Capital Trust	20 218	91 814	8 561	120 593
AGL Capital Trust II		207 070	22 167	229 237	П	AGL Capital Trust II	1 400	167 776	16 971	186 146
AGL Energy Corporation	18 002	1 476	15	19 493	П	AGL Energy Corporation	14 070	250	19	14 338
AGL Investments, Inc	692 346	49 368	1 432	743 144	П	AGL investments, inc	107 889	35 404	1 680	144 973
AGL Networks LLC	870 371	353 340	13 943	1 237 655	П	AGL Networks, LLC	1 824 567	574 802	24 229	2 423 598
AGL Peaking Services Inc	952	5 628	583	7 164	П	AGL Peaking Services Inc	34	4 487	418	4 940
AGL Propane Services, Inc.	77,149	63 729	4 724	145 502	П	AGL Propane Services inc	292 680	44 375	3 532	340 587
AGL Rome Holdings Inc	547	1 596	151	2 294	П	AGL Rome Holdings, Inc	9	1 205	109	1 324
Customer Care Services Company	5 065	5 488	458	11 029	П	Customer Care Services Company	1 348	7 801	709	9 857
Georgia Natural Gas Company	199 539	91 081	8 544	299 164	П	Georgia Natural Gas Company	354 444	80 471	7 987	442 902
Global Energy Resources Insurance Corporation		1 289	141	1 410	П	Global Energy Resources Insurance Corporation	298	452	44	794
Southeastern LNG, inc	53 018	3 015	321	56 351		Southeastern LNG, Inc	42 937	3 422	357	46 717
Trustees investment inc	48 128	27 484	1 319	76 928		Trustees investment inc	26 151	26 395	1 061	
Others- Not Shown					П	Others- Not Shown				
TOTAL	79,933 762	53,574 111	2,061,518	135,569,391	П	TOTAL	68 835,848	65,227,703	1,895,300	135,958 851

4. AGL Resources and CGC substantially overstate the total cost of debt in this rate case. The company proposes a total debt cost of 6.65%, where "total debt" represents all forms of debt in this rate case - short-term debt, long-term debt, and preferred stock. AGL Resources actual total cost of debt was just 6.09% in 2002. AGL Resources expected its total cost of debt to be just 6% by the end of 2003 and just 5.5% by the end of 2004. Supporting details on the cost of short-term debt and preferred stock are provided in Sections VII and VIII of my testimony.

5. AGL Resources and CGC substantially understate the company's expected reliance on short-term debt. On January 26 the company filed a proposed capital structure with a short-term debt ratio of 4.3%. In contrast, AGL Resources has capitalized its operating subsidiary in Virginia with an 18% short-term ratio in two different financing cases before the VSCC. To the extent that short-term debt is the least costly form of debt in the capital structure, CGC's proposed 4.3% short-term ratio would substantially raise prices for CGC's ratepayers. In March 2004, the parent company petitioned the SEC to approve CGC's issuance of \$250 million in short-term debt via another subsidiary with the holding company. The petition confirms that CGC's reliance on shortterm debt will be much higher than the 4.3% ratio the company filed in this case. Section IV, page 19 of my testimony provides details.

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6. Section VIII of my testimony shows that AGL Resources singles out CGC to bear the burden of very-high cost preferred stock, despite AGL Resources choosing not to allocate preferred stock to VNG even though AGL Resources has been through two different financing cases in Virginia. When one subsidiary's rates incorporate preferred stock while the other's does not, the parent is shifting costs between its subsidiaries through its rate-case by selectively choosing the subsidiary to bear the cost.

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7. In my opinion the understatement of CGC's expected reliance on short-term debt and the arbitrary assignment of preferred stock to CGC but not VNG, prove that CGC's proposed capital structure is arbitrary. My opinion is further supported by the capital structure of the comparable companies. Taken as a whole over three reporting years of 2001, 2002, and 2003, the comparable companies have a capital structure of 12.9% short-term debt, 42.5% common equity, and 44.6% long-term debt. In addition, my capital structure is similar to AGL Resources actual capital structure, while CGC's proposed capital structure is quite different than its parent's. Capital structure is discussed in my testimony at Section IV.

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8. My equity ratio is derived by including short-term debt in the calculation of the equity ratio. In its rate-case petition the company calculates equity ratios by excluding short-term debt from the calculation, but this contradicts of the company's position in its SEC filing of March 2004, which I have already described. In that filing AGL Resources agrees to use short-term debt in the calculation of the equity ratio.

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9. My capital structure's source is the United States' Securities and Exchange Commission's database, commonly known as "Edgar," which is publicly available over the Internet. More specifically, the capital structure is taken from each comparable company's SEC form 10-K for each comparable company's most recent fiscal year. Each form 10-K has the benefit of being audited. I use the SEC's data as a means of building in accountability and objectivity into the capital structure.

In contrast, the company's capital structure is derived from a publication named Value Line, which disclaims responsibility: "THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMMISSIONS HEREIN [Value Line's emphasis]."

10. It is my opinion that the company's capital structure is 42.5% equity, 12.9% short-term debt, 44.6% long-term debt, and 0.0% preferred stock. In my opinion the cost of equity is 8.35%; the cost of short-term debt is 1.26%; the cost of long-term debt is 6.74%. The company's overall cost of capital is 6.72%, well below the overall return of 8.84% proposed by the company. My equity cost of 8.35% is well below the equity cost of 11.25% proposed by the company. My overall cost of debt, including short and long-term, is 5.51%, well below the

company's proposed total debt cost of 6.65%.

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11. As part of its rate case, the company suggests that it needs a rate increase because there has been no increase since 1995. This argument has no economic merit because a utility's economic viability is not measured by its prices but by its rate of return. That CGC has waited until 2004 to request a rate increase means that CGC believes it earned a satisfactory return for several years. The absence of a rate increase since 1995 does not mean that consumers have paid less than fair prices for CGC's services or that consumers have somehow underpaid for the benefit they receive from CGC's gas service. Paragraphs 5 and 6 of CGC's rate case petition show the company's reliance on the rate of return as the justification for a rate increase.

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- 5. As shown on Exhibit MJM-1 to this Petition, using current rates during the attrition period (the 12 months ending June 30, 2005), Chattanooga Gas is projected to earn net operating income of \$5,687,380 on a rate base of \$95,564,212, which results in an overall rate of return of 5.95%. Such a return is not fair and reasonable and is confiscatory. Without rate relief, Chattanooga Gas will incur a deficiency during the attrition period of approximately \$4.6 million.
- 6. Chattanooga Gas proposes rates that will allow it a reasonable opportunity to alleviate the projected deficit of approximately \$4.6 million and to achieve an overall rate of return of 8.84% and a return on equity of 11.25%.

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I		
2	III.	Comparable Companies
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5	Q_12.	What purpose do "comparable companies" serve i
6		the regulatory setting of prices?
7		
8	A_12.	The "comparable companies" principle is a
9		long-standing regulatory tool which has
10		the effect of establishing utility equity
11		costs and ultimately the prices borne by
12		consumers. The principle entails the
13		selection of natural gas companies to
14		stand in as substitutes for CGC or its
15		parent, AGL Resources, so that prices are
16		based the economic behavior of comparable
17		companies.
18		
19	Q_13.	What comparable companies has CGC's cost-
20		of-capital witness, Dr. Morin, chosen to
21		use in this case?
22		
23	A_13.	Dr. Morin has not explicitly identified
24		comparable companies.
25		
26		For example, in his exhibit RAM-2 he lists
27		15 natural gas companies, 33 gas-electric
28		combination companies and 66 electric
29		power companies. The list of 15 natural
30		gas companies is repeated in Dr. Morin's
31 32		exhibit RAM-9.
1/		

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1 Q_14. In your opinion, which companies form the
2 basis of his recommended rate of return in
3 this case?

In my opinion the 15 natural gas companies are the basis of his recommended rate of return. I have that opinion because in his testimony at page 4 lines 15-16, Dr. Morin testifies, "My recommended rate of return is also predicated on a capital structure consisting of 49%." Dr. Morin provides capital structures for the 15 natural gas companies appearing in his exhibit RAM-9, but he provides no capital structure for the 99 other companies. Thus they are not a basis for his return.

In my opinion none of electric companies and none of the combination companies are comparable to either CGC or AGL Resources. However, any dispute over their comparability has already been resolved by Dr. Morin. He predicates his return on a capital structure derived from the 15 natural gas companies, but at the same time he does not provide capital structures for the companies listed in his "Exhibit RAM-2," pages 2 and 3. Therefore, it is clear that Dr. Morin has in effect identified the 15 natural gas companies listed in exhibits RAM-9 and RAM-2 page 1 as the comparable companies.

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Of the 15 natural gas companies in Dr. Morin's exhibit RAM-9, which do you accept as a basis for setting rates in this case?

4

Of the 15 companies, I accept 10 as the basis 5 A 15. to establish rates. I exclude AGL Resources 6 7 because it is a 100 percent owner of CGC. Because AGL Resources controls CGC, it is reasonable to remove AGL Resources from the 9 10 group of comparable companies so the group's capital structure is independent of AGL's. I 11 exclude Amerigas because it sells only propane 12 gas, and I do not know of any state utility 13 agency in the United States which regulates the 14 15 sales price of propane to individual purchasers. In addition, on November 7, 2003 16 AGL Resources announced that its AGL Propane 17 Services subsidiary was selling its interests 18 19 in Heritage Propane Partners, L.P. Thus AGL 20 Resources is not in the propane business. I 21 also exclude Amerigas because it is 100% owned 22 by UGI.

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I exclude UGI because it is an international energy conglomerate. According to its
Securities and Exchange Form 10-K filed on
December 23, 2003, the company derives only 17% of its revenues from gas sales in the United
States, a contrast with CGC and AGL Resources, which get over 90% of their revenues from natural gas sales. In addition, of UGI's \$2 billion of assets, over 53% is tied up in
Amerigas, which sells propane.

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I exclude Energen because it has not been through a rate case since 1982. In his testimony at page 54 lines 9-10, Dr. Morin opines that the "principle objective of regulation is to act as a substitute for the market place and emulate the returns for industries in the competitive market." However, the usual way to reach that objective is through contested rate cases with expert witness testimony and cross-examination. Energen has not been through that process for 22 years. According to Energen's SEC Form 10-K filed December 12 1995:

"As a public utility in the state of Alabama, Alagasco is subject to regulation by the Alabama Public Service Commission (APSC), which has adopted several innovative approaches to rate regulation, including Alagasco's Rate Stabilization and Equalization (RSE) rate-setting process. Implemented in 1983 and modified in 1985, 1987, and 1990, RSE replaced the traditional utility rate case ... Under Alagasco's current RSE order, which became effective December 1990, Alagasco's allowed ROE range is 13 15 percent to 13 65 percent "

That particular regime continues to this day, according to Energen's 10-K filed in December 2003:

í

"On June 10, 2002, the APSC extended RSE for a sixyear period, through January 1, 2008. Under the APSC order, Alagasco's allowed range of return on average equity remains 13.15 percent to 13.65 percent throughout the term of the order"

I also exclude Southern Union because it is a pipeline company. In 2003 Southern Union bought the bankrupt Panhandle Eastern pipeline system and over 50% of Southern Union's assets are tied up in the pipeline. This is a contrast with CGC and AGL Resources, both of whom have their assets tied up primarily in distribution systems. Schedule 1 pages 1 to 4 display the information on Amerigas, UGI, Energen and

IV. Capital Structure

Southern Union.

Q_16. What capital structure does Dr. Morin employ to achieve his results?

21 A_16. Dr. Morin testifies at page 52 lines 10-12 to
22 "a capital structure consisting of 49% common
23 equity and 51% debt." However, these figures do
24 not represent the entire capital structure.

For example, Mr. Morley, in his testimony at page 18 lines 1-2 and in his Schedule 2 represents Dr. Morin's capital structure as being 95.7% of CGC's total capital structure.

Q_17. In your opinion why did Mr. Morley derive a short-term debt ratio for CGC?

		Page 20 of 124
1	A_17.	In my opinion Mr. Morley derived a short-term
2		debt ratio because Dr. Morin's common equity
3		ratio of 49% in his exhibit RAM-9 does not
4 .		include the effect of short-term debt.
5		
6		
7	0_18.	What has Dr. Morin testified to regarding
8		short-term debt?
9		
10 -	A_18.	Dr. Morin testifies at page 21 lines 4-7:
11		
12		"Long-term rates are the relevant benchmarks when
13		determining the cost of common rather than short-
14		termrates. Short-term rates are volatile [and]fluctuate
15		wildly "
16		
17	Q_19.	Do you agree with Dr. Morin's assessment of
18		short-term rates being volatile?
19		
20	A_19.	No, I disagree. If short-term rates are
21		sufficiently lower than long-term rates, short-
22		term debt can be useful. As CGC's and AGL
23		Resources' own behavior suggest, they are
24		willing to rely heavily on short-term debt. My
25		Schedule 2, pages 1 to 3, displays portions of

an SEC release relevant to this case.

26

27

		Page 21 of 124
1		For example, according to the SEC's Release No.
2		35-27812 of March 10, 2004 AGL Resources on
3		behalf of its distribution subsidiaries,
4		Atlanta Gas Light Company and CGC, petitioned
5		. the SEC to allow each subsidiary to
6		respectively issue short-term debt of \$750
7		million for Atlanta Gas Light and \$250 million
8		for CGC.
9		
10	Q_20.	Does the SEC release indicate if the
11		subsidiary's equity ratio is to be calculated
12		by including short-term debt in the capital
13		structure?
14		
15	A_20.	Yes. In the release at page 13 footnote 3 says:
16		
17		"Applicants would calculate the Common Stock Equity
18		Ratio to total capitalization ratio as follows: common
19		stock equity [/] (common stock equity + preferred stock
20		+ gross debt). Gross debt is the sum of long-tem debt,
21		short-term debt and current maturities "
22		
23	Q_21.	Did AGL Resources, CGC or Dr. Morin apply the
24		SEC's method to the calculation of the equity
25		ratio testified to by Dr. Morin?
26		
27	A_21.	No, they did not apply the SEC's method.
28		
29		
30	Q_22.	In your opinion is the SEC's method reasonable?
31		
32	A_22.	Yes. In my opinion the SEC's method is
33		reasonable.
34		

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Any capital structure's equity ratio should be calculated using all forms of debt that comprise total indebtedness. If a certain class of debt were left out of the capital structure, the prices set through a regulatory proceeding will be higher than they need to be, and the market would not be fully informed about a company's financial condition. It is standard procedure for equity ratios to be calculated on the basis of total debt. Otherwise the capital structure is misleading.

For example, if a capital structure is based on just part of the debt and all of the equity, the capital structure will be inaccurate. In this case the equity ratio would be higher than it really is, giving a company a financial appearance of needing more of a price increase than otherwise.

Q_23. How do you know that AGL Resources, CGC or Dr.

Morin did not apply the SEC's method to the
calculation of the equity ratio testified to by
Dr. Morin?

A 23.

I know they did not apply the method because I applied the method to AGL Resources and the 10 comparable companies. My results, shown in my Schedule 3 pages 1 to 11 show different capital structures than those employed by Dr. Morin.

For example, Dr. Morin shows NICOR having an equity ratio of 65% but that figure declines to 48.5% when short-term debt is included.

A summary appears in my Schedule 4. As a group, the 10 comparable companies are summarized into a single capital structure for the years 2001, 2002 and 2003. The summary shows consistent results from year-to-year for the group taken as a whole. The equity ratio for each year is approximately 42.5% and there is almost no variation in that ratio. Short-term varies from a minimum of 10.6% to a maximum of 15.6% with an average of 12.9%.

Q 24.

How do these results compare to AGL Resources' current equity and short-term debt ratios now and in the near future?

A_24. These results are a good match to AGL's ratios.

For example, my Schedule 5 page 1 displays AGL Resources capital structure as of December 31, 2003 as provided in its most recent SEC Form 10-K. My Schedule 5 contains a copy of a slide AGL presented at its investor conference of November 17 and 18 2003. The slide depicts various components of what AGL Resources designates as "debt." To the left of the slide are calculations I made on the basis of the data in the slide, and below those calculations are the ratios from my comparable company analysis. Clearly the results of my comparable company analysis are a sound basis for the capital structure in this case.

		Page 24 of 124
1	Q_25.	What is the source of the data in your capital
2		structure?
3		
4	A_25.	The source of my data is each company's SEC
5		form 10-K for 2003 and 2001. The 2003 10-K
6		provides data for 2003 and 2002. The 2001 10-K
7		provides data for 2001.
8		
9	Q_26.	Why did you use the 10-K form?
10		
11	A_26.	I used the 10-K because it is audited. My
12		Schedule 6 pages 1-10 display portions of the
13		auditors' statements from each SEC form 10-K
14		for 2003. In every case the auditors write that
15		the results shown in the 10-K are a "fair"
16		representation of the company's financial
17		condition.
18		
19	Q_27.	Does Dr. Morin's testimony refer to auditors'
20		statements?
21		
22	A_27.	No. Dr. Morin does not refer to any statement
23		by an auditor.
24		,
25	Q_28.	What is the source of the equity ratios listed
26		in Dr. Morin's Exhibit RAM-9?
27		
28	A_28.	The source of equity ratios listed in Dr.
29		Morin's is a publication named Value Line.
30		
31	Q_29.	What disclaimer does Value Line make to people
32		who rely on its data?
22		

1 2 3 4 5 6	A_29.	Page 25 of 124 Value Line tells the people who rely on its data: "Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN [sic]."
7		
8	Q_30.	Regarding Dr. Morin's exhibit RAM-9, are any of
9		those equity ratios the result of Value Line
10		omitting data in the calculation of the equity
11		ratio?
12		
13	A_30.	Yes. Of the 10 companies I accept as comparable
14		in Dr. Morin's exhibit RAM-9, all 10 equity
15		ratios are the result of Value Line omitting
16		short-term debt from the calculation of the
17		equity ratio. '
18		
19	Q_31.	To your knowledge has Value Line published
20		information regarding AGL Resources' recent
21		petition to the SEC asking that its
22		subsidiaries be allowed to issue \$1 billion in
23		short-term debt?
24		
25	A_31.	No. I have no knowledge of Value Line
26		publishing information regarding AGL Resources'
27		recent petition to the SEC asking that its
28		subsidiaries be allowed to issue \$1 billion in
29		short-term debt.
30		
31	Q_32.	Do you know if AGL Resources or CGC has

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informed the TRA of CGC taking on \$250 million

of short-term debt in the attrition year?

32

33 34

Page 26 of 124 No. I do not know if AGL Resources or CGC has A_32. informed the TRA of CGC taking on \$250 million 2 of short-term debt in the attrition year. 3 4 5 Do you know if AGL Resources or CGC has filed Q 33. its SEC petition in the current case? 6 7 No. The rate case was filed on January 26, and 8 A 33. the SEC petition was filed about 5 weeks later 9 10 in early March. The SEC petition is not part of the material CGC filed in this case. 11 12 13 Which federal and state agencies approve the Q 34. 14 short-term debt issues of a subsidiary of a 15 registered Public Utility Holding Company, as 16 in the case of CGC being a subsidiary of AGL Resources? 17 18 Depending on circumstances, just one agency 19 A_34. 20 approves the short-term debt issues of the subsidiary. The SEC defers to state commissions 21 22 when they have taken actions to approve short-23 term issues of a utility subsidiary. On the other hand, if there has been no such action, 24 25 then the SEC is the approving agency. 26 Examples are provided in SEC release No. 35-27 28 . 27767 of November 21, 2003 which also appears 29 in the Federal Register Vol. 68. No. 230, 30 Monday December 1, 2003, page 67232. In that release Section D "Utility Subsidiary 31 32 Financing" footnote 15 specifically lays out 33 the conditions for the SEC's approval of short-

34

term issues.

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the issue and sale of securities by the utility Subsidiaries will be exempt, under rule 52(a), from the preapproval requirements of sections 64(a) and 7 of the Act, as most such securities must be approved by the public service commission in the state in which each Utility Subsidiary is incorporated and operating. Specifically, the Indiana Utility Regulatory Commission must approve all financings by Northern Indiana, Kokomo and NIFL, other than short-term indebtedness having a maturity of 12 months or less; the Massachusetts Department of Telecommunications and energy must approve all financings by Bay State other than short-term indebtedness having a maturity of one year or less; the New Hampshire Public Utilities Commission ("NHPUC") must approve most financings by Northern Utilities other than short-term indebtedness having a maturity of one year or less up to a maximum amount equal to 10% of net plant; the Public Utilities Commission of Ohio must approve all financings by Columbia Ohio other than short-term indebtedness with a maturity of less than one year, the Public Service Commission of Kentucky must approve all financings by Columbia Kentucky other than notes with a maturity of less than two years; the Pennsylvania Public Utilities Commission must approve all financings by Columbia Pennsylvania other than short-term indebtedness with a maturity of one year or less or having no fixed maturity but payable on demand; and the Virginia State Corporation Commission must approve all financings by Columbia Virginia other than short-term indebtedness with a maturity of less than one year if the [short-term] amount is less than 12% of total capitalization .. "

1		
2	Q_35.	In your research for this case have you found
3	•	any SEC release where the TRA is mentioned or
4		considered as having authority to approve
5		short-term debt issues of a Public Utility
6		Holding Company's subsidiary, such as CGC?
7		
8	A_35.	No. I have not found any SEC release where the
9		TRA is mentioned or considered as having
10		authority to approve short-term debt issues of
11		a Public Utility Holding Company's subsidiary,
· 12		such as CGC.
13		
14	Q_36.	In your opinion what does the SEC release mean
15		for this rate case?
16		•
17		
18	A_36.	It means that CGC, as wholly owned subsidiary
19		of AGL Resources, has offered in this case a
20		capital structure substantially at odds with
21		the one it is likely to operate on and one
22		substantially at odds with the capital
23		structure shown in my Schedules 4 and 5.
24		
25	Q_37.	What is your opinion of the capital structure
26		CGC offers in this case?
27		
28	A_37.	My opinion is to disregard the capital
29		structure because it is neither representative
30		of the comparable companies nor representative
31		of CGC's likely future behavior.

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1 Q_38. In your opinion what capital structure should 2 be the basis for the rates resulting from this 3 case?

A_38. In my opinion the rates resulting from this case should be based on an equity ratio of 42.5%, a short-term debt ratio of 12.9%. The remainder of 44.6% is composed of long-term debt.

V. Effect Of AGL Resources On The Economic Conditions Presented By CGC In This Case

Q_39. What has Dr. Morin testified to regarding the economic effect of AGL Resources on CGC's capital cost?

20 A_39. Dr. Morin has separated CGC from AGL Resources, 21 as if the parent holding company has no effect 22 on the capital costs or operating costs of CGC.

For example, at page 6 line 3 Dr. Morin testifies, "I am treating CGC as a separate stand-alone entity distinct from its parent company..." and further testifies at page 6 lines 12 -13 that, "the required return on CGC... is unrelated to the parent's cost of capital."

		Page 30 of 124
1	Q_40.	In your opinion is Dr. Morin's position
2		consistent with the previous rate case decision
3		for Chattanooga in Docket No. 97-00982?
4		
5	A 40.	No. In my opinion Dr. Morin's position is
6	_	inconsistent with previous order.
7		
8		For example, the docket's final order, at page
9		50, says: "The Directors adopted the testimony
10		for the Consumer Advocateandfor AVI
11		that AGL is the appropriate company to
12		reference for determining the cost of equity."
13		
14	Q_41.	Are there other CGC witnesses who take the same
15		approach as Dr. Morin, that CGC's capital costs
16		should be different than the capital costs of
17		its parent?
18		
19		
20	A_41.	Yes. Mr. Morley, the Director of Financial
21		Accounting for AGL Services Company, takes the
22		same approach with regard to short-term debt
23		cost.
24		
25		For example, in his testimony from page 18 line
26		16 to page 19 line 1, Mr. Morley testifies:

		Page 31 of 124
1		"The estimated cost of short-term debt includes the cost
2		of AGLR's projected average short-term debt balance
3		through the attrition period The cost of short-term debt
4		is based on the estimated London Inter-Bank Offer Rate
5		(LIBOR) plus an estimated spread above LIBOR.
6		Additionally, AGLR's costs to maintain its credit faculty
7		have been included in the cost of short-term debt. The
8		spread is based on the estimated interest costs were
9		Chattanooga to have a short-term financing facility in its
10		name."
11		
12	Q 42.	In your opinion what is the practical meaning
13		of Mr. Morley's statement?
14		·
15	A_42.	In my opinion Mr. Morley's statement means
16		CGC's short-term debt cost is higher than its
17		parent's cost by the amount of the "spread."
18		
19	Q_43.	In your opinion, if CGC issues short-term debt
20		in its own name, who will be the lender?
21		
22	A_43.	In my opinion the lender will be AGL Resources
23		or another subsidiary such as AGL Capital.
24		
25	Q_44.	Why would the lender be AGL Resources or AGL
26		Capital?
27		
28	A_44.	I have that opinion because SEC release of
29		March 10, 2004 says:
30		ŧ
31		"Applicants request authorization for the following
32		transactions . issuances by AGL Resources of
33		guarantees and other forms of credit support in an
34		aggregate amount of \$1 billion at any time outstanding
		CAPD Witness Brown - Direct Docket 04-00034

"Current Debt Ratings The debt ratings of AGL 2 Resources and certain of its subsidiaries are set forth 3 below.....CGC and VNG currently have no externally · 4 held securities and therefore are not rated..." 5 6 7 In your opinion will CGC's issue of short-term Q 45. debt create an avenue for profit on the part of 8 the parent holding company? 9 10 Yes. My opinion is that an avenue for profit is 11 A 45. being created because AGL will have a markup on 12 the short-term debt it extends to CGC, even 13 though CGC is a wholly owned subsidiary. 14 15 In your opinion, what economic justification 16 Q 46. does AGL Resources offer for its treatment of 17 CGC? 18 19 Judging from the overall testimonies of Dr. 20 A 46. Morin and Mr. Morley, in my opinion the holding 21 company is offering an economic justification 22 that I paraphrase as: If CGC were on its own, 23 24 its capital cost would be much higher than it is, but by being affiliated with the holding 25 company, CGC is still far better off than 26 otherwise, even when the markup is considered. 27 28 29 My paraphrase is another way of expressing Mr. 30 Morley's statement, "were Chattanooga to have ... in its own name," and another way of 31 32 expressing what Dr. Morin says in his testimony 33 at page 23 lines 18 to 21:

34

		Page 33 of 124
1		"Given the Company's relatively small size, it is
2		reasonable to postulate that CGC possesses an
3		investment risk profile that is at least as risky as that of
4		the average risk publicly-traded natural gas distribution
5		utility company "
6		
7		Dr. Morin and Mr. Morley propose to set utility
8		rates on a condition contrary to fact: as if
9		CGC were independent of AGL even though AGL
10		acquired CGC in 1989.
11		
12		
13	Q_47.	In your opinion, who would benefit from Dr.
14		Morin's and Mr. Morley's proposal to apply a
15		markup to a subsidiary's capital cost?
16		
17	A_47.	In my opinion, the parent company would benefit
18		from the markup.
19		
20	Q_48.	In your opinion, is AGL Resources pursuing a
21		regulatory strategy where the subsidiaries will
22		pay a markup on their capital costs?
23		
24	A_48.	Yes. In my opinion AGL Resources is pursuing a
25		regulatory strategy where the subsidiaries will
26		pay a markup on their capital costs.
27		
28	•	I have that opinion because AGL Resources used
29		this strategy in its financing case before the
30		Virginia State Corporation Commission (VSCC).
31		My Schedule 7 displays selected information
32 33		from that VSCC case

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As part of my research for this case I reviewed filings in Virginia by AGL Resources and its subsidiary Virginia Natural Gas. I discovered information relevant to the current case before the TRA. Case PUE-2002-00515, "Application For Authority To Issue Short-Term Debt, Long-Term Debt and Common Stock To Affiliate Under Chapters 3 and 4, Title 56 of the Code of Virginia" was a joint filing by Virginia Natural Gas, AGL Resources and AGL Services. Attached to the petition was a 5-page document titled "Exhibit A Financing Summary," which contains a statement similar in economic meaning to Dr. Morin's and Mr. Morley's statements.

For example, at page 5 of 5:

"Even though the rate of interest to be used for the long-term debt is not known at this time, it will be lower than VNG could expect to obtain on its own were it not affiliated with AGLR"

The petition itself was a 10-page document. At page 6 the applicants wrote: "Because the proposed financing transactions will be private transactions, expenses relating to the proposed financing...will be borne by the Applicants."

The VSCC's order of September 27, 2002 stated:

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1		"The amount of short-term debt proposed in the
2		application exceeds twelve percent of capitalization
3		Approval of this application shall have no implications
4		for ratemaking purposesThe Commission reserves the
5		right pursuant to Virginia Code to examine the books
6		and records of any affiliate in connection with the
7		Authority granted herein, whether or not such affiliate is
8		regulated by this Commission."
9		
10	Q_49.	In your opinion, what is the economic meaning
11	_	of "private" in the context of transactions
12		between the parent, AGL Resources, and its
13		subsidiary?
14		
15	A_49.	In my opinion the economic meaning of "private"
16		means that such transactions are not carried
17		out at a prevailing market price enjoyed by the
18		parent but at a higher price set by the parent
19		according to its discretion. Thus the parent's
20		economic discretion leads to higher prices for
21		the subsidiary's ratepayers
22		
23	Q_50.	In your opinion is CGC's proposed short-term
24		debt ratio of 4.3% an example of the parent's
25		discretion leading to higher prices for the
26		subsidiary's ratepayers?
27		
28	A_50.	Yes. In my opinion CGC's proposed short-term
29		debt ratio of 4.3% an example of the parent's
30		discretion leading to higher prices for the
31		subsidiary's ratepayers.
32		

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For example, SEC's Release No. 35-27812 already shows that CGC is being positioned to rely more heavily on short-term debt than the 4.3% debt ratio suggests. In addition, in Virginia the parent company proposed a short-term ratio nearly three times larger than the ratio proposed in Tennessee. To the extent that short-term debt is the least costly form of debt in the capital structure, CGC's proposed 4.3% short-term ratio raises prices for CGC's ratepayers.

Q_51. Do you know if the VSCC has accepted AGL
Resources regulatory proposition that a parent
company has the discretion to apply a markup to
the capital cost of a wholly owned subsidiary?

No. I do not know if the VSCC has accepted AGL Resources' proposition.

21 Q_52. Do you accept AGL Resources' proposition?

No. I reject it because it introduces A 52. incentives within the holding company system to acquire profits through markups to subsidiaries rather than the efficient operation of a business. In addition, wholly owned subsidiaries do not have individual, independent judgment in their financial affairs. They are the economic instruments of the holding company.

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In your opinion is the VSCC taking a reasonable 1 Q 53. economic precaution when reserving "the right 2 pursuant to...Virginia Code to examine the 3 books and records of any affiliate in connection with the Authority granted herein, whether or not such affiliate is regulated by this Commission?" 7 8 Yes. In my opinion that approach to regulating 9 A 53. a subsidiary of a registered public holding 10 company is a reasonable economic precaution to 11 quard against the unreasonable shifting of 12 expenses, revenues and other type of entries 13 between subsidiaries. 14 15 16 Why do you have the opinion that economic Q 54. 17 precaution is necessary? 18 19 My opinion is based on two discoveries A 54. 20 resulting from CAPD's preparation for this 21 case. 22 23 One discovery concerns AGL Resources' compliance with SEC rules governing 24 notification of the federal agency when a 25 26 holding company issues long-term debt to a 27 subsidiary. The other discovery concerns the 28 abrupt reversal of CGC's and VNG's profitability in a short period of time, where 29 the two subsidiaries traded places in their 30 31 rates-of-return on equity, according to 32 documents filed with the SEC by AGL Resources.

33

Page 38 of 124 What are the details of the first item you Q_55. discovered? 2 3 4 The details are provided in my Schedule 8, 5 A 55. which displays SEC Form U-6B-2 filed in late 6 7 July 2003. In the form, paragraphs 3, 4, 5, 6, and 7 respectively show that AGL Resources 8 9 issued a long-term note to VNG for \$20.3 10 million at an interest rate of 8.3%, on July 15 2001, that the security was new rather than a 11 12 reissue, and that the maturity date is July 15, 2031. Paragraph 15 shows the phrase "Rule 13 52(a)," which is an SEC rule which exempts a 14 15 holding company from getting the SEC's approval 16 to issue such debt when the holding company already has approval by a state utility 17 18 commission. 19 20 CFR 250.52(a) reads:

21

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"§ 250 52 Exemption of issue and sale of certain securities (a) Any registered holding-company subsidiary which is itself a public-utility company shall be exempt from section 6(a) of the Act (15 U.S.C. 79f(a)) and rules thereunder with respect to the issue and sale of any security, of which it is the issuer if: (1) The issue and sale of the security are solely for the purpose of financing the business of the public-utility subsidiary company; (2) The issue and sale of the security have been expressly authorized by the state commission of the state in which the subsidiary company is organized and doing business; and (3) The interest rates and maturity dates of any debt security issued to an associate company are designed to parallel the effective cost of capital of that associate company"

But there is a deadline for notifying the SEC of such transactions. The deadline is in CFR 250.52(c):

"(c) Within ten days after the issue or sale of any security exempt under this section, the issuer or seller shall file with the Commission a Certificate of Notification on Form U-6B-2 (17 CFR 259 206) containing the information prescribed by that form. However, with respect to exempt financing transactions between associate companies which involve the repetitive issue or sale of securities or are part of an intrasystem financing program involving the issuance and sale of securities not exempted by this section, the filing of information on Form U-6B-2 may be done on a calendar quarterly basis"

		Page 40 of 124
1		Thus AGL's U-6B-2 filing was two years late,
2		according to the SEC's rules.
3		
4	Q_56.	Besides this U-6B-2, has AGL Resources filed
5		any others?
6		
7	A 56.	Yes. AGL Resources filed one on March 23, 2001
8	_	for the quarter ending December 31, 2000.
9		
10	Q 57.	About the time AGL Resources filed the U-6B-2
11	_	on behalf of VNG, what interest rate was AGL
12		Resources offering on its new issues of debt
13		securities?
14		
15	A_57.	AGL Resources was offering a rate of 4.45% on a
16	_	ten-year note. On June 30, 2003 AGL Resources
17		filed an SEC form 424B2. The form is a
18		supplement to an earlier AGL Resources
19		prospectus. The form describes an offering of
20		\$225 million at 4.45% for 10 years.
21		•
22	Q_58.	In your opinion what issues does the U-6B-2
23	_	filing raise with regard to a parent providing
24		a capital note to its subsidiary?
25		_
26	A 58.	In my opinion the filing raises the issue of
27	_	how a parent's treatment of a subsidiary's
28		capital costs should be treated for ratemaking
29		purposes, especially because SEC rule 52(a)
30		shows that a holding company is not to have an
31		unrestrained hand in setting its long-term-
32		interest rate for the subsidiary.
33		•

Page 41 of 124 The very-late U-6B-2 filing also begs three 1 questions: 3 how can 8.3% "parallel the effective cost of 4 capital of that associate company" when VNG, as a subsidiary of AGL Resources, has not yet been 6 in a rate case before the VSCC? 7 8 how can 8.3% represent a market rate for the 9 security, when at nearly the same time of the 10 notification the parent is engaged in a 11 "public" transaction of issuing 4.45% 10-year 12 debt securities? 13 14 are the terms "subordinated" and "unsecured" 15 accurate descriptions of the risk, if there is 16 any at all, a parent is taking when it provides 17 18 capital to a 100% owned subsidiary? 19 20 Does the holding company's interest rate to the 21 Q_59. 22 subsidiary matter in a rate case? 23 The holding company's interest rate to the 24 A 59. subsidiary matters most if consumers are paying 25 26 rates based on the subsidiary's capital 27 structure. In this situation the capital 28 transactions between the parent and its various 29 subsidiaries require tracing, auditing, and 30 verifying. To the extent rates are set on 31 comparable companies and on the parent's 32 capital costs, the audit and verification 33 burdens are lifted. However, the debt's 34 interest rate, if allowed to enter the

Page 42 of 124 subsidiary's books, has an impact on expenses 1 2 and masks the true earnings of the subsidiary 3 as if it is not earning the targeted rate of 4 return. 5 6 Q_60. How does this issue relate to CGC's cost-of-7 debt? 8 9 The issue shows that a subsidiary's cost of A 60. 10 debt can be higher than the parent's depending on the parent's timing and method of populating 11 12 a subsidiary's debt balances. 13 14 For example, Mr. Morley, at page 19 lines 4-13 explains his derivation of CGC's long-term debt 15 16 cost: 17 "The cost of long-term debt includes the cost of senior 18 19 notes and medium-term notes within the consolidated capital structure of AGLR. Interest costs and 20 21 amortization of debt discounts, debt premiums and debt 22 issuance costs (collectively referred to as amortization of 23 debt costs) were projected for the attrition period. The 24 cost projection was calculated using actual interest rates 25 and the current monthly amortization of debt costs on 26 existing debt. If applicable [emphasis added by CAPD], interest rates and amortization of debt costs were 27 28 estimated for new issuances of debt. The total cost of 29 long-term debt projected for the attrition period was then 30 divided into the projected ending debt balance at June 31 30, 2005, resulting in a cost rate of 6 74%." 32 33 "How was the cost of preferred stock determined?" 34

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"The cost of preferred stock was calculated in the same manner as the cost for long-term debt, resulting in a cost rate of 8 54%."

However, at its investor conference of November 17-18, 2003, AGL Resources presented the slide I am showing as my Schedule 9. For the period 2001 through 2004, that slide depicts a pattern of a declining cost of debt, where debt is apparently every capital type except equity.

To the extent that declining costs are achieved by replacing higher cost notes with lower cost ones, new issues are required. But Mr. Morley uses the term "if applicable" to describe his decision to apply new issues in his determination of debt and preferred cost. Just as AGL Resources' petition to the SEC regarding CGC's issuing \$250 of short-term debt was not accounted for in CGC's rate-case filing, there may be other financing activities that may affect the rates set in this case.

Therefore, caution should be applied to the methods AGL Resources employs to establish a subsidiary's capital cost.

For example, in his testimony at page 19, lines 19-21, Mr. Morley suggests that it is reasonable to use AGL Resources consolidated debt to derive CGC's debt and preferred costs:

"Why was the long-term debt cost based on consolidated AGLR?

"Chattanooga has no debt in its name and any financing needs are provided through the debt structure of the AGLR consolidated group. Additionally, use of the AGLR consolidated debt cost is consistent with the previous rate case decision for Chattanooga in Docket No 97-00982"

Q_61. Do you agree that consolidated costs should be used?

A_61.

Yes. I agree that consolidated costs should be used but I disagree with Mr. Morley's reasoning, about why the consolidated costs should be used. What Mr. Morley does not say is that Chattanooga has no debt in its name because in February 2001 AGL Resources reclassified CGC's long-term debt as a premium on capital stock, thus eliminating long-term debt from CGC's balance sheet. As a consequence, AGL Resources is now in the position of being able to pay itself dividends out of the premium without having any tax liability.

Page 45 of 124

In addition, AGL Resources now has the opportunity to repopulate CGC's long-term debt balance with new long-term debt issues from the parent, with rates set by the parent, provided the long-term notes are approved by either the SEC or the state utility agency. To the extent AGL Resources seeks state approval rather than federal approval, any such note could be exempt from SEC approval because of the rules in CFR 250.52(a) which I explained earlier.

1 2

Once AGL Resources receives the SEC's approval for CGC to issue large amounts of short-term debt, the door is open sometime later for CGC to seek state or federal regulatory approval to convert the short-term notes to long-term at rates set by the holding company not by the market.

Therefore, in any subsequent CGC rate case the subsidiary may have substantial amounts of long term debt on its books, and there would no longer be a need to use consolidated debt if Mr. Morley's reasoning were accepted. In my opinion that would put CGC ratepayers on a long-term path to permanently higher rates.

		Page 46 of 124
1		There is one best procedure to protect rate
2		payers, regardless of the amount of long-term
3		debt on the subsidiary's balance sheet: Set the
4		subsidiary's utility rates by determining the
5		parent's equity cost and debt cost, and then
6		use that total capital cost as the subsidiary's
7		capital cost. That cost would be adjusted only
8		if the subsidiary owes debt that is from a
9		lender outside the holding company.
10		
11	Q_62.	Is there a name for the procedure you are
12		describing?
13		
14	A_62.	Yes. The procedure's name is "double-leverage."
15		
16	Q_63.	Has the TRA or its predecessor, the Tennessee
17		Public Service Commission, dealt with the
18		"double-leverage" in prior rate cases?
19		
20	A_63.	Yes. In the final order of TPSC dockets U-83-
21		7226 and U-85-7338, at pages 16-17, the TPSC
22		wrote:
23		
24		"The Commission adopts the double leverage capital
25		structure advocated by Dr. Westfield for setting rates in
26		this caseThe company argues that the Commission
27		should reject double-leverage and ignore the parent-
28		subsidiary relationship between AWWC and the
29		Company. Dr. Morin testified that the Commission
30		should pretend that Tennessee-American's equity capital
31		is raised in the marketplaceThe double-leverage
32		approach rejects this fiction"
33		

		Page 47 of 124
1		Schedule 10 displays information from that
2		final order
3		
4	Q_64.	What is your opinion about the other portion of
5		Mr. Morley's reasoning, that " additionally,
6		use of the AGLR consolidated debt cost is
7		consistent with the previous rate case decision
8		for Chattanooga in Docket No. 97-00982?"
9		
10	A_64.	My opinion is that his reasoning is not
11		supported by the order.
12		
13		For example, the final order of Docket No. 97-
14		00982, at page 49, says: "the Advocate and AVI
15		did not endorse [CGC's] proposed capital
16		structure and cost rates Therefore, the
17		Directors adopted [CGC's] capital structure and cost rates." There are no statements in the
18 19		order affirming that consolidated capital costs
20		must be used to set rates.
21		must be used to set races.
22		In addition, AGL Resources is now a registered
23		holding company subject to all the SEC rules.
24		At the time of the last case AGL Resources was
25		an exempt holding company.
26		
27	Q_65.	What are the details of the second item you
28		discovered?
29		
30	A_65.	The details are provided in my Schedules 11 and
31		12.
32		
33		

		Page 48 of 124
1		My Schedule 11 is a copy of one part of AGL
2		Resources SEC Form 8-K filing of November 7,
3		2002. At an analysts' conference in Miami,
4		Florida the company reported the actual return
5		on equity as of September 30, 2002 for AGL
6		Resources distribution subsidiaries Atlanta Gas
7		Light, CGC, and VNG. CGC's actual equity return
8		was 10.53%, or 175 basis points higher than
9		VNG's actual equity return of 8.73%. VNG's
10		return was based on "actual weather" conditions
11		according to footnote 3, apparently a reference
12		to a "Weather Normalization Program" tariff
13		rider in VNG's rates.
14		
15	Q_66.	If these returns are actual returns, then is it
16		correct to say these returns are not "forward
		-
17		looking" returns?
		looking" returns?
17	A_66.	<pre>looking" returns? Yes. Those statements are not "forward</pre>
17 18	A_66.	
17 18 19	A_66.	Yes. Those statements are not "forward
17 18 19 20	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward
17 18 19 20 21	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as
17 18 19 20 21 22	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as economic estimate for which no guarantees are
17 18 19 20 21 22 23	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as economic estimate for which no guarantees are
17 18 19 20 21 22 23 24	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as economic estimate for which no guarantees are implied.
17 18 19 20 21 22 23 24 25	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as economic estimate for which no guarantees are implied. For example, many of the statements and the
17 18 19 20 21 22 23 24 25 26	A_66.	Yes. Those statements are not "forward looking." The SEC's policy is that a "forward looking" statement is one that is accepted as economic estimate for which no guarantees are implied. For example, many of the statements and the data at the AGL Resources November 2003

		Page 49 of 124
1		However, to the degree that such statements are
2		about actual and past performance, they are not
3		"forward looking." Therefore, the actual equity
4		returns in AGL Resources' SEC form 8-K are not
5		"forward looking" equity returns.
6		
7	Q_67.	At the time of the November 2002, 8-K filing
8		were those actual returns also returns that
9		were in the past, that had already occurred?
10		
11	A_67.	Yes.
12		
13	Q_68.	What kind of returns are shown in Schedule 12?
14		
15	A_68.	My Schedule 12 is a copy of a slide included in
16		AGL Resources SEC Form 8-K filing of November
17		18, 2003. The slide was presented by AGL
18		Resources at its investor conference of
19		November 17-18, 2003. The slide shows "actual"
20		returns in the body of the chart, but its
21		header has a slightly different title:
22		"Distribution Operations Projected ROE - 12
23		Months Ending 12/31/03." CGC's <u>actual</u> equity
24		return was 8.97% and VNG's <u>actual</u> return was
25		11.38%. But this particular presentation makes
26		no reference to VNG's weather conditions.
27		
28	Q_69.	Besides these SEC Form 8-K filings, have you
29		found any other public document issued by AGL
30		Resources that discloses the actual equity
31		returns of CGC and VNG?
32		

No. Other than those two documents, I have

found no others.

33

34

A_69.

1		~
2	Q_70.	What rate-of-return references have you found
3		regarding CGC and VNG in AGL Resources' other
4		SEC documents?
5		
6	A_70.	The other references typically say "Return on
7		Rate Base Authorized" or "Return on Common
8		Equity Authorized" or "Estimated 2003
9		Jurisdictional Return on Equity."
10		
11	Q_71.	What was CGC's overall rate of return for the
12		period ending September 30, 2002, according to
13		TRA Form 303?
14		
15	A_71.	According to the TRA Form 303, CGC' overall
16		rate of return was 8.85%, which was derived
17	•	from an operating income of \$8.45 million and a
18		rate base of \$95.5 million.
19		
20	Q_72.	Does CGC report a rate of return on equity in
21		the TRA Form 303?
22		•
23	A_72.	No. CGC does not report a rate of return on
24		equity in the TRA Form 303.
25		
26		
27	Q_73.	When VNG's equity return was 8.73% in September
28		2002, did AGL Resources subsequently file a
29		rate case to improve VNG's equity return to
30		11.36% by the end of 2003?
31	٠.	No. 201 Parameter did not 612
32	A_73.	No. AGL Resources did not file a rate case in
33		Virginia for VNG.
34		

		Page 31 of 124
1	Q_74.	What did VNG and AGL Resources do instead of
2		filing a rate case in Virginia?
3		
4	A_74.	Prior to September 2002 VNG offered a two-year
5		rate freeze as part of a petition to the VSCC
6		requesting approval for the company to add a
7		Weather Normalization Adjustment (WNA) rider to
8		bills of VNG's consumers. The reference is VSCC
9		Case No. PUE-2002-00237.
10		
11	Q_75.	What did the VSCC order VNG to report with
12		regard to the WNA program?
13		•
14	A_75.	As a part of its approval order, the VSCC
15		ordered VNG to file reports with the VSCC July
16		2003 and July 2004 and to report on the WNA's
17		impact on VNG's cash flow and on VNG's equity
18		return both with and without revenues from the
19		WNA.
20		
21	Q_76.	Did you review the July 2003 report?
22		
23	A_76.	Yes. I reviewed the July 2003 report.
24		
25	Q_77.	What information did you discover in the report
26		regarding VNG's return on equity?
27		
28	A_77.	My Schedules 13, 14, and 15 display the
29		information.

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Schedule 13 displays the report's cover page, Schedule 14 displays the WNA's cash-flow effect on VNG and Schedule 15 displays the change in equity return. According to the report, VNG had a net cash-flow decline of approximately \$2 million and a decline in equity return of .56%, which is the difference between 11.46% and 10.90%.

Q_78. Are these equity returns consistent with VNG's actual equity return of 8.73% as of September 30, 2002, which was reported by AGL Resources in its SEC Form 8-K filing of November 7, 2002?

A_78. No. The results are very inconsistent.

Consider this information: On September 30, 2002 VNG has an actual equity return of 8.73%, according to AGL Resources; VNG initiates its WNA in November 2002; VNG has a \$2 million decline in revenues by the end of May 2003; VNG has a 10.9% return on equity for twelve months ending May 2003; VNG's equity return improves by 2.2% from September 30, 2002 to May 30, 2003 while its cash flow declines by \$2 million.

Q_79. In your opinion what is the effect of these inconsistent returns?

In my opinion the inconsistency throws doubt on the accuracy of AGL Resources' financial reporting procedures with respect to the actual profitability of its regulated subsidiaries CGC and VNG. Accounting adjustments by the holding CAPD Witness Brown - Direct: Docket 04-00034

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company, changes in allocations between the subsidiaries or a combination of both may have a substantial effect on a subsidiary's profitability, especially one as small as CGC.

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Consider again VNG's 11.38% "actual" equity return, shown in AGL's slide copied into my Schedule 12, reported to the SEC. Nothing in the slide indicates the influence of the WNA program on VNG's 11.38% equity return. Compare that return to the 11.46% return VNG reported for the twelve months ending May 31, 2003, shown in my Schedule 15. VNG reported that the return of 11.46% "Excluded Net WNA Credits To Customers." In contrast, the actual equity return is just 10.90% when the WNA program is included. Therefore, the 11.38% return reported to the SEC, an agency whose data is most likely to be accessed by investors, is probably not an "actual" return and is different from the "actual" return reported to the state agency, the VSCC. AGL Resources is very inconsistent in how it represents its subsidiaries' return on equity.

2526

Q_80. What has AGL Resources reported since November 2003 about the subsidiaries equity returns?

28

27

In an SEC Form 8-K filing of January 28, 2004

AGL has reported an "estimated 2003

Jurisdictional returns on equity" of 11.07% for

VNG and 8.05% for CGC, a difference of 302

basis points. Sixteen months earlier CGC's

equity return was 175 points higher than VNG's.

		Page 34 of 124
1	Q_81.	Is there information in the 8-K report of
2		January 28, 2004 indicating that VNG's reported
3		equity return excludes the WNA program's
4		effects?
5		
6	A 81.	No. There is no information in the 8-K filing
7	_	indicating that VNG's reported equity return
8		excludes the WNA program's effects.
9		· · · · · · · · · · · · · · · · · · ·
10	Q_82.	Does AGL Resources advise investors to use the
11	_	SEC's 8-K form as a source of information on
12		AGL Resources?
13		
14	A_82.	Yes. AGL Resources advises investors to use the
15		SEC's 8-K form as a source of information on
16		the company. For example, AGL Resources issued
17		a press release on July 15, 2004 announcing
18		AGL's acquisition of NUI Corporation. In the
19		press release AGL said:
20		
21		"Additional factors that could cause AGL Resources"
22		and NUI Corporations' results to differ materially from
23		those described in forward-looking statements can be
24		found in the companies respective Annual Reports on
25		Form 10-K, Quarterly Reports on Form 10-Q and
26		Current Reports on Form 8-K filed with the Securities
27		and Exchange Commission."
28		
29		AGL's press release confirms that the SEC's 8-K
30		form is an important source of information to
31		investors, but in my opinion AGL's 10-Ks,10-Qs,
32		and 8-Ks are not necessarily reliable regarding

the company's rate-of-return.

1 VI. CGC Must Benefit From Sequent's 2 Transactions If AGL Is To Comply 3 With PUHCA 4 5 In your opinion, is AGL Resources 6 Q 83. complying with PUHCA, according to public 7 8 records? 9 10 No. In my opinion AGL Resources is not A 83. complying with PUHCA, according to public 11 records. 12 13 14 Why are you giving your opinion on the issue of 15 Q 84. AGL Resources' compliance with PUHCA? 16 17 I am giving my opinion because Mr. Morley has 18 A 84. made AGL's compliance with PUCHA an issue in 19 this case. In Mr. Morley's direct testimony, at 20 page 11 lines 17 to 23, he testifies: "In 21 accordance with the Act, AGLR formed AGL 22 Services Company ("AGSC") to provide shared . 23 24 services to all subsidiaries of AGLR at actual 25 cost... AGLR [is] in compliance with" PUHCA. 26 27 Does Mr. Morley provide a definition of "at Q_85. 28 actual cost?" 29 30 No. Mr. Morley does not provide a definition of A 85. 31 "at actual cost."

32

Page 56 of 124 In your opinion, does Mr. Morley's claim, 1 Q 86. that all of AGL's services are provided 2 "at cost," mean AGL is in compliance with 3 PUHCA? 4 5 No. In my opinion Mr. Morley's claim that all 6 A 86. of AGL's services are provided "at cost" does 7 not mean or ensure PUHCA compliance. 8 9 What is the basis for your opinion that AGL 10 Q_87. Resources is not complying with PUHCA? 11 12 My opinion is based on Section 13(b) of PUHCA, 13 A 87. as it applies to the transactions between two 14 of AGL's subsidiaries - Sequent and CGC. 15 Section 13(b) permits the registered holding 16 company's subsidiary to perform a service, sale 17 or construction contract for another subsidiary 18 only if the transaction is "... for the benefit 19 of [the subsidiary receiving the service], at 20 cost, fairly and equitably allocated among such 21 22 companies." [15 U.S.C. §79(m)]. 23 I emphasize the phrase "for the benefit of" 24 25 because if Sequent is imposing economic loss on CGC for Sequent's discretionary activities, 26 27 then AGL Resources is not in compliance with 28. PUHCA, because PUHCA requires that transactions 29 benefit the receiving subsidiary rather than 30 harming it, even if Sequent is billing every service to CGC "at cost." 31

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Based on my review of AGL's public records on file with the SEC and AGL's public records filed with the TRA regarding the Interruptible Margin Credit Rider (IMCR), my opinion is that CGC is not benefiting from its transactions with Sequent because CGC has suffered substantial losses caused by its transactions with Sequent. Therefore, Mr. Morley's testimony, that AGL is providing services "at cost". and is therefore in compliance with PUHCA, is mistaken. Transactions between Sequent and CGC under the Interruptible Margin Credit Rider (IMCR) show Sequent frequently imposing losses on CGC.

A table from attachment D.page 1 of 14 of the IMCR report(filed February 27, 2007 with the TRA by AGL Resources) and a table from AGL's SEC U-9C-3 report for the quarter ending 12/31/03 are shown below.

Attachment D Page 1 of 14

Chattanooga Gas Company IMCR Credit Rider Sharing For Twelve Months Ended December 31, 2003 Details Of Net Gross Profit Margin from Transactions with Non-jurisdictional Customers

	Aggregate Net	Annual Value Allocation			
Month	Margin	CGC Agent 50%	CGC Customer 50%		
January 2003	3,191,999	1,595,999	1,595,999		
February 2003	328,733	164,366	164,366		
March 2003	(69,149)	(34,574)	(34,574)		
April 2003	(387)	(193)	(193)		
May 2003	642,467	321,233	321,233		
June 2003	323,826	161,913	161,913		
July 2003	(60,773)	(30,387)	(30,387)		
August 2003	150,300	75,150	75,150		
September 2003	(153,156)	(76,578)	(76,578)		
October 2003	405,819	202,910	202,910		
November 2003	(7,453)	(3,726)	(3,726)		
December 2003	(2,266,909)	(1,133,454)	(1,133,454)		
Adjustments					
InGround Transfer -01/03	(125,000)	(62,500)	(62,500)		
Total	2,360,317	1,180,158	1,180,158		

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11	_	q	ί,	_	٦.

ITEM 3 - ASSOCIATE TRANSACTIONS								
1		rformed by Reporting Companie			ciate Com	panies		
		Quarter Ended December 31,						
Reporting Company Rendering Services	Associate Company Receiving Services	Types of Services Rendered	Direct Costs Charged (b)	Indirect Costs Charged (b)	Cost of Capital	Total Amount Billed		
	(2)				(b)	(b)		
SEM	Atlanta Gas Light Company	Gas procurement, scheduling and other	\$34			\$34		
SEM	Virginia Natural Gas, Inc	Gas procurement, scheduling and other	541					
SEM	Chattanooga Gas Company	Gas procurement, scheduling and other	25			25		
SEM	GNG	Management and administrative payroll	4			. 4		
SEM	AGL Networks, LLC	Management and administrative payroll	26			26		
SEM	Atlanta Gas Light Company	Gas Transmission Storage Management	**.	**	**	**		
SEM	Virginia Natural Gas, Inc	Gas Transmission Storage Management	**	**	**	**		
SEM	Chattanooga Gas Company	Gas Transmission Storage Management	**	**	**	**		
(a) (b)	All services are being provided at cost and are being billed (with the exception of certain direct billings) through AGL Services Company ("AGSC") As per Rules 80 and 81, energy purchases are not reported hereunder. The Receiving Company makes available idle or underutilized gas transportation and storage capacity for use by the Serving Company, as agent for the Receiving Company, in return for which the Serving Company pays for costs incurred and shares the profits with the Receiving Company in accordance with approval by the appropriate state commissions.							
**		separately with the Commission purplied Utility Holding Company Act			confidentia	i treatment		

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The U-9C-3 uses the double-star image, "**", to conceal the amount of direct cost assigned to CGC from Sequent. However, the two tables establish that CGC's IMCR tariff and Sequent's "natural gas transmission and storage" for CGC service are actually the same service. For example, the IMCR report refers to "CGC Agent 50%" and footnote (b) in the U-9C-3 refers to "the Serving Company, as agent for the Receiving Company; " footnote (b) in the U-9C-3 says "the Serving Company ... shares the profits with Receiving Company," and the IMCR table shows the "net gross profit margin" being split "50-50" between CGC's agent and CGC as a customer. Thus AGL's own language establishes that Sequent's "natural gas transmission and storage" service utilizing CGC's "idle" capacity is the company's alternative description given to the SEC for transactions occurring through CGC's IMCR tariff in 2003.

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As the tables show, CGC's "idle" assets are being managed by Sequent for a fee of \$1.2 million (half of the net profits for "idle" capacity transactions go to Sequent) plus an additional amount of "direct costs" charged to CGC for Sequent's management of the "idle" assets.

31 32

Page 60 of 124

exceed \$1.2, then the IMCR tariff creates a net loss for CGC, lowering its income

and equity return

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9 Q_88. In your opinion why has Sequent assigned direct costs to CGC?

11

12 A_88. In my opinion, Sequent has assigned direct
13 costs to CGC because the SEC's rules
14 require such assignment.

15 16

17

18

The SEC defines "at cost" in CFR250.91, which has four subparts, (a), (b), (c), and (d). Subpart (b) says:

19

"§250 91 Determination of cost. (b) Direct charges
shall be made so far as costs can be identified and
related to the particular transactions involved without
excessive effort or expense.."

Page 61 of 124 The assignment of direct costs to CGC for 1 Sequent's discretionary management of 2 CGC's idle capacity provides a superficial 3 appearance of AGL Resources' being in compliance with the SEC "at cost" rules. If those costs exceed CGC's share of the 6 IMCR profits, Sequent is harming CGC and 7 8 such transactions should cease. Otherwise any holding company can impose losses on a 9 regulated gas distribution subsidiary by 10 using discretionary costs to drive down 11 the subsidiary's equity return and quicken 12 a cycle of rate increases. 13 14 In your opinion, does the public record 15 Q 89. provide evidence that CGC is suffering a 16 loss on its transactions with Sequent? 17 18 19 Yes. In my opinion the public record A 89. provides evidence that CGC is suffering a 20 21 loss on its transactions with Sequent. 22 AGL's U-9C-3 report for 12/31/03, footnote 23 (b,) says Sequent "shares the profit with 24 the Receiving Company in accordance with 25 approval by appropriate state commissions." But a glimpse at the IMCR 26 27 report shows several months where Sequent 28 is "sharing" and imposing losses on CGC. 29 AGL is implementing the SEC's "at cost" 30 rules as if the PUHCA language were: 31 " the net effect of all transactions on an annual basis 32 shall be to the benefit of the receiving company " 33 34

22

Page 63 of 124 Attachment D Page 1 of 14

Chattanooga Gas Company

IMCR Credit Rider Sharing For Twelve Months Ended December 31, 2003

Details Of Net Gross Profit Margin from Transactions with Non-jurisdictional Customers

****Adjusted by CAPD To Remove Transactions Where Losses Are Assigned to CGC

	Aggregate Net	Annual Value Allocation			
Month	Margin	CGC Agent 50%	CGC Customer 50%		
	2 404 000	1 505 000	1 505 000		
January 2003	3,191,999	1,595,999	1,595,999		
February 2003	328,733	164,366	164,366		
March 2003	0	0	0		
April 2003	0	0	0		
May 2003	642,467	321,233	321,233		
June 2003	323,826	161,913	161,913		
July 2003	0	0	0		
August 2003	150,300	75,150	75,150		
September 2003	0	0	0		
October 2003	405,819	202,910	202,910		
November 2003	0	0	0		
December 2003	0	0	0		
Adjustments					
InGround Transfer -01/03	0	0			
Total	5,043,144	2,521,570	2,521,570		

By applying the SEC's rules to the IMCR, CGC's customers receive \$2.5 million instead of just \$1.2 million. However, even the additional \$1.3 million adjustment does not guarantee that CGC is better off with Sequent acting as an agent for CGC. If the direct costs assigned to CGC by Sequent exceed \$2.5 million, then the IMCR tariff creates a net loss for CGC. In this case Sequent's transactions provide no benefit for CGC and such transactions contradict Section 13(b) of PUHCA.

					Page 6	4 of 124	ļ
1	Q_90.	Was Sequent	's "natural gas	transm	•		
2	-	-	e" service being				
3		in 2002?		_			
4							
5	A_90.	No. Sequent	's "natural gas	transm	issio	n and	i
6		-	ervice was not p				
7		_	EC U-9C-3 report				
8		-	31/02 shown belo		-		
9		3	·				
			TEM 3 - ASSOCIATE TRANSACT For the Quarter Ended December 31,				
	0.41.7				(th		
	Part I - 1r	ansactions Performed by Repo	rting Companies on Behalf of Asso	ociate Compani	es (in thou	sands)	
	Reporting Company Rendering Services	Associate Company Receiving Service (e)	Types of Services Rendered	Direct Costs Charged	Indirect Costs Charged	Cost of Capital	Total Amount Billed
	Sequent	Atlanta Gas Light Company	Gas supply management services	\$86			\$86
	Sequent	Virginia Naturał Gas, Inc	Gas supply management services	\$109	-		\$109
	Sequent	Chattanooga Gas Company	Gas supply management services	\$46	-	-	\$46
10 11			are being billed (with the exception o energy purchases are not reported he		llings) throug	gh AGL Sen	vices
12							
13		Unlike AGI.	s U-9C-3 report	for 12	/31 /0	3. AG	II.' s
14			ort for 12/31/02				.11 5
15		-	o) nor is there			ve a	
16			to be redacted		110101		
17			. co se reduceda	•			
18							
19	Q_91.	In your op	inion, what is t	he fina	ncial		

effect of Sequent on the parent holding

company in 2003 versus 2002?

20

21 22

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In my opinion Sequent's gas transmission storage management service, a practice that began in 2003, has allowed the parent holding company to book approximately \$8.1 million of operating expense credits.

My opinion stems from my review the annual SEC form U-13-60 filed by AGL Services Company for annual billings to all of AGL Resources subsidiaries for years 2002 and 2003. Both documents are public and can be found in the SEC's on-line database. The U-13-60 provides a record of the billings between the parent and the subsidiary for 2002 and 2003, as shown below.

AGL Resources SEC Form U-13-	60 Filed May	2003			П	AGL Resources SEC Form U-13-	60 Filed May 4 2	004		
For the Year Ended December 31 2002				П				ive Entry		
ANALYSIS OF BILLING						ANALYSIS OF BILLING	1	In 200		
ASSOCIATE COMPANIES					П	ASSOCIATE COMPANIES				
ACCOUNT 457						ACCOUNT 457			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
NAME OF ASSOCIATE	DIRECT	INDIRECT	COMPENS ATION FOR	TOTAL	Н	NAME OF ASSOCIATE	DIRECT	INDIRECT	COMPENS	TOTAL
COMPANY	457-1	457-2	457-3	AMOUNT	₽	COMPANY	457-1	COSTS 457-2	ATION FOR	AMOUNT /1
	10.1		10.7		Н		707-7	45,-2 [447.3	
AGL Resources Inc	850 069	338 380	0	1 198 449	H	AGL Resources Inc	4 657 610	-8,136,765	; -	3,479 155
Atlanta Gas Light Company	65 727 080	39 437 252	1 490 702	108 655 034	H	Atlanta Gas Light Company	50 430 737	54 241 138	1 352 780	106 024 656
Chattanooga Gas Company	3 520 968	2 459 340	88 300	6 068 608	П	Chattanooga Gas Company	3 402 886	2 916 54 1	71 899	6 391 326
Virginia Natural Gas Inc	6 722 911	9 365 947	362 157	16 451 015	П	Virginia Natural Gas, Inc	4 450 523	13 050 512	299 055	17 800 090
Sequent Energy Management, LP- Corp	1 060 243	1 031 212	53 535	2 144 991	П	Sequent Energy Management, LP- Corp	3 109 861	2 097 161	103 959	5 310 981
AGL Capital Corporation	35 189	20 213	1 875	57 078	П	AGL Capital Corporation	93 683	20 452	1 930	116 075
AGL Capital Trust	22 630	112 125	11 269	146 024	П	AGL Capital Trust	20 218	91 814	8 561	120 593
AGL Capital Trust II	•	207 070	22 167	229 237	П	AGL Capital Trust II	1 400	167 776	16 97 1	186 146
AGL Energy Corporation	18 002	1 476	15	19 493	П	AGL Energy Corporation	14 070	250	19	14 338
AGL investments inc	692 346	49 366	1 432	743 144		AGL investments inc	107 689	35 404	1 680	144 973
AGL Networks LLC	870 371	353 340	13 943	1 237 655	П	AGL Networks, LLC	1 824 587	574 802	24 229	2 423 598
AGL Peaking Services, Inc	952	5 628	583	7 164	П	AGL Peaking Services, Inc.	34	4 487	418	4 940
AGL Propane Services, Inc.	77 149	63 729	4 724	145 602	П	AGL Propane Services Inc	292 680	44 375	3 532	340,587
AGL Rome Holdings Inc	547	1 596	151	2 294	П	AGL Rome Holdings, inc	9	1 205	109	1 324
Customer Care Services Company	5 085	5 488	458	11 029		Customer Care Services Company	1 348	7 801	709	9 857
Georgia Natural Gas Company	199 539	91 081	8 544	299 164	П	Georgia Natural Gas Company	354 444	80 471	7 987	442 902
Global Energy Resources Insurance Corporation	•	1 269	141	1 410	T	Global Energy Resources Insurance Corporation	298	452	44	794
Southeastern LNG, Inc	53 016	3 015	321	58 361		Southeastern LNG Inc	42 937	3 422	357	46 717
Trustees investment, inc	48 128	27 484	1 319	76 928		Trustees Investment Inc	26 151	26 395	1 061	
Others- Not Shown					1	Others- Not Shawn				
TOTAL	79,933,762	53 574,111	2.061,518	135,569,391		TOTAL	58,835,848	65,227,703	1,895 300	135,958,851

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In 2003 the parent company had a negative cost or credit of approximately \$8.1 million, shown in the parent company's indirect cost category. The costs billed to the subsidiaries barely changed from 2002 to 2003. In 2002 the total billings were \$135.6. In 2003 the billings were \$135.9 million, which is a net figure that reflects the negative cost of \$8.1 million credited to the parent. Sequent's billings and the parent company's billings are the only ones to change substantially from 2002 to 2003. The only corresponding change in economic activity from 2002 to 2003 is Sequent's management of the gas distribution subsidiaries' idle assets, an economic activity first introduced in 2003 and documented in the U-9C-3 forms.

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18 Q_92. In your opinion is there such a thing as a "negative cost?"

20

21 A_92. In my opinion there is such a thing as a 22 negative cost, because that is the way AGL 23 Resources has reported its transactions.

24

25 Q_93. In your opinion is it appropriate for the 26 parent company to retain those negative costs 27 rather than distribute them to the 28 subsidiaries?

29

No. In my opinion it is not appropriate for the parent company to retain those negative costs.

32

Page	67	of	124
~ ~5~	.	-	~

Consider Mr. Morley's direct testimony at page 13 line 1: "AGSC's total operating expenses are charged back, at cost..." Therefore, entries in the SEC form U-13-60 represent operating expenses and credits to operating expenses, and are "above the line" transactions. What Mr. Morley, does not say in his testimony is that "at cost" can be negative, as clearly shown by the holding company's negative entry or credit of \$8.136 million in the U-13-60. Thus if "AGSC's total operating expenses are charged back, at cost..." as Mr. Morley says, the negative entry or credit of \$8.136 million in the parent company's indirect cost category should also flow to the subsidiaries.

It is also clear that CGC did not share any portion of the \$8.2 million credited to parent. The U-13-60 shows that AGL Services Company's total billing to CGC for 2003 was \$6.391 million and for 2002 the amount was \$6.068 million. These figures match the annual shared services figures in CGC's TRA form 303 for 2002 and 2003. Therefore, it is clear CGC has received no portion of the \$8.1 million negative cost held by the parent company.

Q 94.

In your opinion, by what means has the parent company acquired the \$8.1 million negative credit in 2003?

In my opinion, the parent company acquired the \$8.1 million negative credit in 2003 through Sequent's dual practice of sharing in the CAPD Witness Brown - Direct Docket 04-00034

1		Page 68 of 124 profits from its use of CGC's "idle" and
2		"underutilized" assets while at the same time
3		imposing additional direct charges on CGC for
4		Sequent's use of CGC's "idle" assets.
5		
6	Q_95.	Do you know if there is any precedent for AGL's
7		practice of holding negative costs at the
8		parent level instead of redistributing those as
9		credits to the subsidiaries operating expenses?
10		
11	A 95.	I do not know of any precedent for AGL's
12	_	practice. Because KeySpan is one of the
13		comparable companies, I reviewed all of
14		KeySpan's SEC forms U-13-60 that were available
15		on the SEC's website. The forms are public and
16		available for 2001 through 2004. I also
17		reviewed the U-13-60 forms for Consolidated
18		Natural Gas (CNG) for 1997 through 1999, a time
19		when Virginia Natural Gas was a subsidiary of
20		CNG before AGL Resources purchased VNG.
21		However, I found nothing suggesting that AGL
22		Resources' practice has a precedent.
23		
24		In my confidential testimony I provide my
25		opinion regarding the redacted amount of
26		"direct costs" billed to CGC and whether that
27		amount is low enough in comparison to the \$2.5

million adjusted profits allocated to CGC's

customers, to meet the SEC's definition that

Sequent's transactions provide benefit for CGC.

28

29

		Page 69 of 124
1		Also, in my opinion the \$2.5 million should be
2		accounted for in this rate case as a reduction
3		to CGC's costs. This procedure would recapture
4		CGC's portion of the \$8.2 million of "negative
5		costs" or operating expense credits permanently
6		retained by the parent.
7		
8	Q_96.	In your opinion, has AGL Resources
9		provided any testimony explaining how Mr.
10		Morley's claim, that all of AGL's services
11		are provided "at cost" accords with
12		CFR250.91?
13		
14	A_96.	No. In my opinion, AGL Resources has
15		provided no testimony explaining how Mr.
16		Morley's testimony accords with CFR250.91.
17		
18		•
19		
20	Q_97.	In your opinion as an economist, are
21		transactions between Sequent and CGC
22		exempt from Section 13 of the Act?
23 24		No. In my oninion as an economist the
25	A_97.	No. In my opinion as an economist the transactions are not exempt from Section
26		13 of the Act.
27		15 of the Act.
28		
29	Q 98.	What is the SEC rule regarding
30	2	transactions that could be exempt from
31		Section 13 of the Act?
22		

		Page 70 of 124
1	A_98.	The SEC's rules regarding exempt
2		transactions appears in CFR250.80 and
3		CFR250.81.
4		
5	-	CFR250.80 says:
6		
7		"§ 250 80 Definitions of terms used in rules under
8		section 13.
9		
10		"As used in the rules and regulations under section 13 of
11		the Act (49 Stat. 825; 15 U.S.C 79m), unless the context
12		otherwise requires:
13		
14		"(a) Service means any managerial, financial, legal,
15		engineering, purchasing, marketing, auditing, statistical,
16		advertising, publicity, tax, research, or any other service
17		(including supervision or negotiation of construction or
18		of sales), information or data, which is sold or furnished
19		for a charge.
20		
21		"(b) Goods means any goods, equipment (including
22		machinery), materials, supplies, appliances, or similar
23		property (including coal, oil, or steam, but not including
24		electric energy, natural or manufactured gas, or utility
25		assets) which is sold, leased, or furnished, for a charge.
26		
27		"(c) Construction means any construction, extension,
28		improvement, maintenance, or repair of the facilities or
29		any part thereof of a company, which is performed for a
30		charge "
31		
32		CFR250.81 says:
33		
34		§ 250 81 Exempted transactions
		CAPD Witness Brown - Direct Docket 04-00034

1		
2		"Unless otherwise expressly provided, the rules,
3		regulations, and orders of the Commission pertaining to
4		the performance of services or construction or the sale of
5		goods shall not be applicable to the sale of water,
6	•	telephone service, transportation, or a similar commodity
7		or service, the sale of which is normally subject to
8		public regulation, [emphasis added By CAPD] or to the
. 9		furnishing of services, construction, or goods, to a
10		customer incidentally to such a sale; and such
11		transactions shall be exempt from the provisions of
12		section 13 of the Act (49 Stat 825; 15 U.S.C. 79m) and
13		the rules and regulations there under. Provided, That,
14		where any such transaction is with an associate company
15		in its capacity as a consumer, comparable services,
16		construction, or goods are offered to customers other
17		than associate companies on terms which are
18		comparable having due regard to any differences of
19		quality or quantity "
20		
21		
22	Q_99.	In your opinion, how is Sequent profiting
23		from its transactions with CGC?
24		-
25	A_99.	In my opinion Sequent is using CGC's
26		natural gas transmission and storage
27		capacity to serve buyers who are not
28		within the regulatory jurisdiction of the
29		TRA. These transactions are commonly
30		called "nonjurisdictional sales."
31		
32	Q_100.	In your opinion, are Sequent's
33		"nonjurisdictional sales" regulated by the
34		ጥኮልኃ

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1
            In my opinion Sequent's "nonjurisdictional
2
   A 100.
             sales" are not regulated by the TRA.
3
4
            In your opinion are Sequent's
5
   Q 101.
            nonjurisdictional sales "normally subject
6
            to public regulation" as the SEC requires
7
            for a sales transaction to be exempt from
8
             the SEC rules?
9
10
11
            No. In my opinion Sequent's
   A 101.
12
            nonjurisdictional sales are not normally
            or actually "subject to public regulation"
13
14
            by the TRA.
15
            Therefore, Sequent's "idle" capacity
16
             transactions for CGC are not transactions
17
             exempt from the SEC's "at cost" rules.
18
19
            There is no "exemption" basis for AGL
20
            Resources to retain profits Sequent made
21
            on its use of CGC's assets. AGL Resources
22
             is obliged to redistribute at least a
23
            portion the $8.136 million to CGC, where
24
            that portion is equal to the losses
25
             Sequent has imposed on of CGC's assets for
            nonjurisdictional sales. AGL Resources is
26
            obliged to redistribute not only the
27
28
            losses imposed in 2003 but in all years
29
            since AGL Resources became a registered
30
            holding company obliged to follow the
31
            SEC's rules.
32
```

Page 73 of 124 In your opinion does it make economic sense for 1 Q 102. Sequent to use CGC's "idle" or "underutilized" 2 capacity to give CGC profits that CGC would not 3 otherwise have? 4 5 Yes, provided the SEC's rules are applied to 6 A 102. each transaction. Otherwise, in my opinion, it 7 does not make economic sense because this is a 8 case of "putting the cart before the horse." 9 Allowing Sequent to profit from CGC's "idle" or 10 "underutilized" capacity without applying the 11 SEC's rules gives the holding company an 12 incentive to create "idle" and "underutilized" 13 capacity, thereby reserving more capacity than 14 CGC needs in the first place. Applying the 15 SEC's "at cost" rules to the Sequent-CGC "idle" 16 capacity transactions eliminates the holding 17 company's incentive to reserve excess capacity 18 and profit from it. Thus the SEC's "at cost" 19 20 rules are good economics: They cause the 21 holding company's capacity planning to focus on 22 CGC's customer load rather than blending CGC's customer load with all the side-deals aimed at 23 24 improving the holding company's profit margin. 25 26 What is your opinion of the Q 103. 27 representations AGL makes in the U-9C-3,

footnotes (a) and (b)?

28 29

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In my opinion the representations are 1 A 103. contradictory and cast doubt on the 2 accuracy of AGL Resources' financial 3 reporting procedures. Footnote (a) says 4 "all services are being provided at cost" 5 while footnote (b) says Sequent "pays for costs incurred." But if "Sequent pays for costs incurred" then there is no reason 8 for Seguent to bill direct charges to CGC. 9 If Sequent were paying for "costs 10 incurred", there would be zeroes, "0", 11 entered in the cost-columns of the U-9C-3 12 instead of the double-star image, "**." 13 The double-star image clearly means that 14 there is a billing-flow (one that the 15 holding company wants to keep 16 confidential) between Sequent and the 17 three natural gas distribution 18 subsidiaries. 19 20

AGL's contradictory language in footnotes (a) and (b), and AGL's arbitrary retention of \$8.136 million of operating expense credits at the parent are further reasons to doubt the accuracy of AGL Resources' financial reporting procedures with respect to the actual profitability of its regulated subsidiaries.

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VII. Short-term Debt Cost

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33 Q_104. In your opinion what is the cost of short-term debt?

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A_104. In my opinion in the cost of short-term debt is 1.26%. The derivation of that figure is shown in two steps, as indicated in my Schedules 16 and 17. In March 2001 AGL Resources filed with the SEC a form U-6B-2 which provides details for approximately 130 of AGL's commercial paper transactions from October 2000 through December 2000. The U-6B-2 is the only source I have found in public records which provides detail on AGL Resources actual performance in the short-term debt market.

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The data from the U-6B-2 form is in my Schedule 16, which derives AGL's short-term interest rate actually achieved for each month. For the three-month period as a whole AGL Resources paid a rate of 7.08%. In Schedule 17, I compared AGL's historical performance to the Federal Reserve Board's (FRB) data on commercial paper transactions for the same historical period. For the three-month period of October 2000 through December 2000 AGL paid a rate of 7.08%, and the FRB's data shows that the average rate for 30, 60, and 90-day maturities was 6.47% in that same three-month period. This establishes that AGL paid a shortterm rate approximately 10% higher than the FRB's data suggests.

		Page 76 of 124
1		In Schedule 17 I applied the 10% ratio to the
2		current FRB data for commercial paper rates for
3		the 12 months of March 2003 through February
4	•	2004. The average in that time period was
5		1.156%. Therefore, the short-term cost to use
6		in this case is 1.265%.
7		
8	Q_105.	What short-term debt cost does Mr. Morley use?
9		
10	A 105.	Mr. Morley uses a figure of 2.69%.
11	_	
12	Q 106.	Does Mr. Morley provide any record of
13	_	commercial paper transactions to support his
14		figure of 2.69%?
15		
16	A_106.	No. Mr. Morley does not provide any record of
17	_	commercial paper transactions to support his
18		figure of 2.69%. According to the company's
19		response to CAPD discovery request no. 5:
20		•
21		"The 2 69% cost is not calculated using existing
22		short-term notes or commercial paper"
23		
24		Rather than use any history from AGL Resources
25		extensive commercial paper program that began
26		four years ago, or any current short-term debt
27		cost, the company uses a "synthetic forward
28		rate" based on the London Inter Bank Offering
29		Ratebanking.
30		
31	Q_107.	Do the transactions you refer to in the U-6B-2
32		form indicate if the interest was prepaid?
33		

Page	77	οf	124
1 ago	, ,	O.	12-

Yes. the transactions in the U-6B-2 form indicate the interest was prepaid.

Q 108.

A 108.

Should the figures of 7.08% and 1.156% which you calculated be raised slightly to reflect the prepayment of interest?

No. Those figures should not be raised. The workpapers provide by the firm of Work & Greer, which document the working capital analysis for CGC, indicate the calculation of working capital already includes the effect of prepaid interest. If the prepayment were also reflected in the short-term debt the effect would be to double count the prepayments.

VIII. Preferred Stock Ratio In the Capital Structure and Preferred Stock Cost.

Q_109. In this rate case is preferred stock being treated by AGL Resources as equity?

 A_109. No. Preferred stock is not being treated as equity. Preferred stock is being treated as debt, meaning that the payment of preferred dividends are treated as if it were an interest expense.

Page 78 of 124 In your opinion what preferred stock ratio Q 110. 1 should be should be used in the capital 2 structure? 3 4 In my opinion the ratio of 0.0% should be used. 5 A 110. Why do you have that opinion? 7 Q 111. 8 I have that opinion for three reasons. 9 A 111. Preferred stock is a financing tool rarely used 10 by comparable companies. The comparable 11 companies as a whole have just a 0.6% preferred 12 ratio; AGL's rates on the preferred stock are 13 high enough to appear unreasonable; and, in 14 Virginia AGL Resources has not applied any 15 preferred stock to the capitalization of its 16 subsidiary Virginia Natural Gas 17 18 My Schedule 18, pages 1 and 2, shows VNG's 19 capital structure which includes the effects of 20 AGL Resources recapitalization of that 21 subsidiary in the VSCC's cases PUE-2002-00515 22 and PUE-2003-00548. 23 24 25 There is no preferred stock in the proforma capital structures of June 2002 and June 2003, 26 27 even though AGL Resources had the option of applying preferred stock to VNG's capital 28 29 structure, as indicated in AGL Resources' 30 application and in my Schedule 18. Thus, there 31 is no good reason for Chattanooga's ratepayers 32 to shoulder the burden of what appears to be 33 very expensive capital stock and arbitrarily

assigned to CGC.

34

1 For example, according to AGL Resources' SEC 2 form 424B1 filed on May 15, 2001, the company 3 issued 6 million shares at 8% at an offering 4 price of \$25 per share. According to that 5 document the underwriters' fees were \$4.725 6 million. In addition, AGL Resources wrote: 7 8 "We intend that the net proceeds from the sale of the 9 Trust Preferred Securities (estimated to be \$144,733,700 10 after payment of fees and expenses in the offering)." 11 12 13 In other words, AGL Resources paid \$154.75 million to garner \$145 to \$146 million, or 14 15 about 6 to 7 cents on the dollar. 16 17 Q_112. Has AGL Resources provided any evidence in this 18 . case supporting the reasonableness of those 19 costs? 20 21 No. AGL Resources has not provided any such A 112. 22 evidence. 23 24 Has the Tennessee Regulatory Authority ever Q 113. 25 approved any preferred stock or preferred 26 security issues of AGL Resources or CGC? 27 28 No. The Tennessee Regulatory Authority has not A 113. 29 approved any such issues. 30 31 Q 114. Did CGC have preferred stock in its last rate 32 case before the TRA?

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1 A_114. Yes. CGC had preferred stock in its last rate case before the TRA.

3 4

Q_115. If preferred stock was in the last case, then how is the current case different?

6

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The current case is different for a few 7 A 115. reasons. All the preferred stock that was in 8 the last case has been retired and replaced by 9 two higher-cost preferred issues, one at \$75 10 million for 8.17% issued in 1997 and a \$150 11 million issue for 8% issued in 2001. AGL 12 Resources was not a registered holding company 13 in the last case. Then CGC operated as direct 14 subsidiary of Atlanta Gas Light and any 15 preferred cost assigned CGC had to pass through 16 Atlanta Gas Light first. Now CGC is a direct 17 subsidiary of the parent, which assigns 18 . preferred cost on a discretionary basis. As I 19 20 have pointed out, AGL Resources has chosen not 21 to allocate preferred stock to VNG, despite 22 going through two different applications in 23 Virginia.

24 25

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Q 116.

If the parent's costs are the basis for setting a subsidiary's rates, then isn't it true that the absence of preferred stock in VNG's capital structure is not related to CGC's capital structure?

2930

No, it is not true. There is relationship
between the capital structures of VGC and CGC:
to the extent that one subsidiary's rates
incorporate preferred stock while the other's

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does not, the parent's actual cost of preferred are borne by one subsidiary but not the other. This is example of the parent shifting costs between its subsidiaries, except in this instance the cost is not shifted by the holding company recording an amount in an accounting ledger. Instead, the holding company shifts the cost by including it in the company's proposed capital cost in this regulatory proceeding.

In addition, AGL Resources application of preferred stock to one subsidiary but not another emphasizes the arbitrary nature of the capital structure created by the parent for this rate case. Also, AGL Resources has already been before the VSCC for two financing cases where no preferred stock is allocated to VNG, thus AGL Resources is not likely to reverse its policy and present a VNG-rate-case in the future where preferred stock is suddenly a part of VNG's capital structure. Thus CGC has been singled out to bear the burden of preferred stock.

Q_117. Isn't your setting of the preferred stock ratio to zero percent arbitrary?

A 117.

No, it is not arbitrary. I have already pointed out that preferred stock is rarely used by the comparable companies and that its cost is high enough to appear unreasonable. In addition, setting the preferred ratio to zero produces a reasonable result.

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For example, my Schedule 9 shows AGL Resources expects its total debt cost to be 5.5% in 2004. This figure balances back to a weighted cost of debt in my capital structure, where the total debt ratio is 57.5%, which is the sum of 44.6% (the long-term debt ratio) and 12.9% (the short-term ratio). With regard to debt, 77.56% is long-term debt valued at a cost 6.74% and 22.44% is short-term valued at 1.265%. The weighted average of these numbers -- .0674 multiplied by .7756, plus .2244 multiplied by .01256 - is 5.51%, which is AGL's Resources expected total debt cost in 2004 shown in my Schedule 9.

A preferred ratio of zero is reasonable because it brings CGC's total debt cost to the same total debt cost of the parent, which is the principle of double leverage. For the same reasons my calculation of 1.256% cost for short-term debt is reasonable, because it brings CGC's total debt cost to same total debt cost as the parent. Therefore, the commercial paper rates shown in the company's response to the TRA staff request, "TRA Econ #1, Data Request No. 8," are a basis for the short-term rate in this case only if they conform to the parent's total debt cost of 5.5% in 2004.

Q 118.

What cost of total debt has Mr. Morley testified to?

33 A_118. Mr. Morley has testified to a total debt cost 34 of 6.65%, an amount that can be derived quickly CAPD Witness Brown - Direct Docket 04-00034

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from his exhibit MJM-4 Schedule 1: take the 1 weighted average cost of total debt, 3.56%, and 2 divide by the total debt ratio of 53.1%, the 3 result is 6.65%. But according to my Schedule 9, AGL had an actual total cost of debt of 5 6.09% in 2002. Thus Mr. Morley's total debt cost of 6.65% has not been experienced by AGL 7 Resources since 2001, when it had a total debt 8 cost of 6.89%. Therefore, CGC's proposed total 9 debt cost has a built-in "spread", just as the 10 short-term debt cost has a built-in "spread," 11 which Mr. Morley indicated in testimony page 18 12 line 21. 13

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IX. Long-term Debt Cost

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Q_119. In your opinion what is the cost to apply to the long-term debt in this case?

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A_119. I accept Mr. Morley's estimate of 6.74% as the cost for long-term debt in this case. That is the cost to apply in this case to my debt ratio of 44.6%.

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X. Cost of Equity

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Q_120. What is Dr. Morin's opinion on the equity return that should be granted in this case?

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		Page 84 of 124
1	A_120.	Dr. Morin's opinion is that an equity return of
2		11.25% be granted in this case.
3		
4	Q_121.	How many different cost-of-equity methods does
5		Dr. Morin employ to reach his opinion?
6		
7	A_121.	Dr. Morin employs four cost-of-equity methods.
8		In his order of presentation those methods are
9		- the Capital Asset pricing Model (CAPM), the
10		Historical Risk Premium (HRP), the Allowed Risk
11		Premium (ARM), and Discounted Cash Flow (DCF).
12		
13	Q_122.	In your opinion, are all of these methods a
14		standard way to arrive at the cost of equity?
15		
16	A_122.	No. In my opinion two of his methods, the ARP
17		and HRP are not standard.
18		
19		Dr. Morin's ARP relies on the rate-of-return
20		decisions by several state commissions since
21		1994. In his testimony at page 30, lines 20-22,
22		Dr. Morin describes the allowed premium: "I
23		also examined the historicalreturns on
24		equity allowed by regulatory commissions over
25		the last decade[and] found the average ROE

spread over long-term Treasury yields was 5.1%

for...1994-2003."

26

27

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Dr. Morin has brought the results of those several unnamed rate cases into this particular rate case for CGC and its parent, AGL Resources, but he has not brought any underlying facts from those cases into this particular rate case. Nor has he made available the orders from those cases, nor has he identified the companies in those cases, nor has he identified the dockets so the orders could be acquired from public records. Dr. Morin does not testify that the companies in those cases are comparable companies. Therefore, my opinion is to disregard Dr. Morin's ARM as a valid method to arrive at the cost-of-equity in this case.

Dr. Morin's HRP is not standard. His HRP is impossible to crosscheck and verify because it is not based on the comparable natural gas distribution companies which Dr. Morin identifies in his schedules RAM-2 and RAM-9. The HRP model is based on a natural gas company index with unknown members for the past 50 years. The HRP model is a contrast to Dr. Morin's CAPM and DCF models, where each specifically uses comparable-company data that can be verified through alternative data sources.

Therefore, my opinion is to disregard Dr. Morin's HRM model as a valid way to determine the cost-of-equity in this case.

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1	Q_123.	What reasons does Dr. Morin offer to support
2		his opinion that 11.25% is the cost-of-equity
3		in this case?
4		
5	A_123.	Dr. Morin offers several reasons for his
6		opinion, all of which center on two ideas
7		investors must be compensated for the risk they
8		are taking and the investor's risk is measured
9		by reference to the cost of long-term debt
10		which has to be less than the cost of equity.
11		
12		In his testimony at page 9 line 26, Dr. Morin
13		quotes the U.S. Supreme Court's Permian
14	ţ	decision with regard to risk:
15		
16		" [the] regulatory agency's rate of return order should
17		'. fairly compensate investors for the risks they have
18		assumed'"
19		
20		Dr. Morin then develops a risk measure that
21		depends on long-term debt cost. Each of his
22		four cost-of-equity methods the CAPM, HRP, ARP
23		and DCF is dependent on long-term debt cost as
24		the measure of risk.
25		
26		Consider his testimony regarding his CAPM
27		analysis, which is the first analysis he
28		presents.
29		
30		At page 21 lines 4-5:
31		
32		"Long-term rates are the relevant benchmarks when
33		determining the cost of common equity rather than short-
34		term or intermediate-term interest rates."
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	1 450 0 7 01 14 7
1 2	At page 22 line 3:
3	Ac page 22 line 5.
4	"Since common stock is a very long-term investment"
5	
6	At page 25 lines 9-10:
7	
8	"Only over long time periods will investor return
9	expectations and realizations converge."
10	
11	His reliance on long-term debt cost is woven
12	into his other methods.
13	•
14	Regarding the HRP he testifies at page 29 lines
15	13-15:
16	
17	"The average risk premium over the period was 5.7%
18	over long-term Treasury bonds."
19	
20	Regarding the ARP he testifies page 30 lines
21	20-22:
22	
23	"To estimate the Company's cost of common equity, I
24	also examined the historical risk premiums implied in the
25	returns on equity ("ROE") allowed by regulatory
26	commissions over the last decade relative to the
27	contemporaneous level of the long-term Treasury bond
28	yield."
29	
30	Regarding his DCF analysis, Dr. Morin
31	eliminates any result where the equity return
32	is less than long-term debt. At page 39 lines
33	19-21 he testifies:
34	

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1		"If the three companies whose ROE estimate is less than
2		these companies' cost of long-term debt [then these
3		companies] . are eliminated from the computation of
4		ROE."
5		
6		Clearly, in Dr. Morin's analysis the debt
7		investor is the horse and the equity investor
8		is the rider.
9		·
10	Q_124.	In your opinion are equity investors making
11	_	investments in AGL Resources and the comparable
12		companies where the investment's duration
13		approximates the duration of a long-term
14		investment?
15		
16	A_124.	No. In my opinion equity investors are not
17	_	making investments in AGL Resources and the
18		comparable companies where the investment's
19		duration approximates the duration of a long-
20		term debt investment.
21		
22	Q_125.	What is the basis of your opinion?
23		
24	A_125.	My opinion is based on the turnover rates of
25		stock ownership for AGL Resources and for each
26		comparable company.
27		
28		I gathered daily trading history for each stock
29		going back several years.
30		
31		For example, Yahoo's web site on internet,
32		http://chart.yahoo.com/d, has historical
33		trading data, as does America Online.
34		
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