STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. G-5, Sub 565

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Application of Public Service Company	)	ATTORNEY GENERAL'S
of North Carolina, Inc., for a General	)	BRIEF
Increase in Its Rates and Charges	)	**REDACTED**

The North Carolina Attorney General's Office (the "Attorney General") respectfully submits this brief in opposition to Public Service Company of North Carolina, Inc.'s ("PSNC's") Application for Rate Increase filed in the above-captioned docket. First, the 7.53% rate of return proposed in a non-unanimous settlement reached by PSNC and others[1] is not supported by the evidence for two reasons: 1) the capital structure contains an excessive equity-to-debt ratio, and 2) the rate of return on equity is excessive. If the settlement is adopted, the Commission will fix a rate of return that is too high and impose an unreasonable burden on the region served by PSNC. Second, the proposed Integrity Management Tracker (IMT) rate adjustment mechanism is not in the public interest and should be rejected because PSNC has not shown that there is a need for yet another rate adjustment mechanism, and any benefit it offers to investors is outweighed by multiple disadvantages for consumers, i.e., that it will allow frequent additional rate increases, based on expedited review, without regard to offsetting cost factors, and without meaningful public input.

[1] An Amended Stipulation between PSNC, The Public Staff-North Carolina Utilities Commission, the Carolina Utility Customers Association, Inc., and Blue Ridge Paper Products, Inc., was filed August 30, 2016 and admitted as part of the record in the case. (T5 p 51)

I. THE STIPULATED RATE OF RETURN IS EXCESSIVE.

The rate of return proposed in the stipulation should not be adopted by the Commission. The evidence demonstrates that PSNC can maintain access to investment capital on reasonable terms using a capital structure that relies on more long term debt than has been proposed, and the effect on rates of the excessive proposal to use 52% equity adds millions of dollars to the Company's revenue requirement calculation unnecessarily. In addition, the financial market evidence shows that establishing a rate of return on equity (ROE) of 9.7%, as proposed, will provide for a profit level in excess of what is sufficient. As a result, the 7.53% overall rate of return in the settlement imposes unreasonable costs, contrary to consumer interests.

Even though the proposed 9.7% ROE appears to move the rate of return gradually toward the lower cost of capital reflected in financial market data, that appearance is deceptive because it ignores the offsetting effect of the higher equity ratio proposed in the stipulated capital structure. The overall rate of return – taking into account the ROE along with other factors proposed in this case – is actually *higher* at 7.53% than the overall rate of return the Commission fixed for Piedmont three years ago in Docket No. G-9, Sub 631 (which was 7.51%) although Piedmont's ROE was fixed at 10% in that case and capital costs have trended downward. (T5 p 75) The Company appears to be giving customers a lower profit (ROE), but is more than taking it all back by raising the ratemaking equity ratio, absent any showing that PSNC has significantly increased business risk that would warrant such a high equity ratio.

A. North Carolina law requires that the rate of return be fair both to the utility's investors and its customers, and be fixed as low as possible.

North Carolina law requires the Commission to fix a rate of return that is fair to the utility's investors *and its customers*. N.C. Gen. Stat. § 62-133(a); § 62-133(b)(4). "Chapter 62's ROE provisions cannot be read in isolation as only protecting public utilities and their shareholders. Instead, it is clear that the Commission must take customer interests into account when making an ROE determination." *State ex rel. Utilities Comm'n v. Cooper*, 366 N.C. 484, 495, 739 S.E.2d 541, 548 (2013) ("*Cooper*"). Indeed, the legislative intent of the rate-setting provisions contained in Chapter 62 is that the Commission "fix rates as low as may be reasonably consistent with the requirements of the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States, those of the State Constitution, Art. I, § 19, being the same in this respect." *State ex rel. Utilities Comm'n v. Duke Power Co.*, 285 N.C. 377, 388, 206 S.E.2d 269, 276 (1974). The burden of proof in the case is upon the utility to show that its proposed rates are just and reasonable. N.C. Gen. Stat. § 62-75; *State ex rel. Utilities Comm'n v. Central Tel. Co.*, 60 N.C. App. 393, 394, 299 S.E.2d 264, 265 (1983).

Furthermore, the Commission must engage in an independent analysis of the evidence and reach its own conclusion when it fixes the rate of return. *Cooper*, 366 N.C. at 494, 739 S.E.2d at 547. The Commission cannot simply rely on the rate of return proposed in a non-unanimous stipulation. *Id*.

B. The Evidence Does Not Support the Need to Fund 52% of Ratebase Using Common Equity, and the Excessive Reliance on Equity in the Company's Capital Structure Will Cost Ratepayers Millions of Dollar Per Year Unnecessarily.

Within the regulatory framework for fixing a utility's rate of return, one factor the Commission must determine is the appropriate capital structure. See 21 December 2012 Order Granting General Rate Increase to Virginia Electric & Power Company (d/b/a Dominion North Carolina Power) in Docket No. E-22, Sub 479 ("Dominion 2012 Order") at 97. In the case of natural gas utilities, the Commission includes short-term as well as long-term debt in the capital structure, using an estimate of the Company's average gas inventory as a proxy for the amount of short term debt. (T5 pp 58, 73) The Commission is not bound by the actual capital structure of the Company at the time that rates are set. See, e.g., Dominion 2012 Order at 97.

1. The ratio of equity in the capital structure determined for the Company has a significant impact on cost of service.

One of the factors to consider in determining a reasonable capital structure is cost. Small increases or decreases in the ratio of equity versus debt make a large difference in the utility's revenue requirement, because equity is much more expensive, particularly when the cost of income taxes is taken into account. Here are the rates of return for debt and equity proposed in the stipulation, including gross up for items such as income taxes:

RATE OF RETURN WITH GROSS UP			
	Rate of Return	Gross up Factors	Rate of Return Including Taxes etc.
Long Term Debt	5.52%	0.9961035	5.54%
Short Term Debt	0.77%	0.9961035	0.77%
Equity	9.70%	0.6215686	15.61%

See Attorney General-Addison Cross Exhibit 1. In other words, it costs $5.54 in PSNC's annual revenue requirement for every $100 of ratebase funded by long term debt, whereas it costs $15.61 for every $100 of ratebase funded by common equity.

The impact on the revenue requirement of using the 52% equity ratio proposed in the stipulation, versus an equity ratio of 50% or 45% is significant. The following tables compare the results, first using the 52% equity ratio per the settlement to calculate the revenue requirement for the proposed rate of return:

Settlement	Return	Retention	Rate of Return w/ gross up	Capital Structure	Weighted cost Return %	Weighted w/ gross up	Ratebase	ROR Revenue Requirement	ROR Revenue Requirement w/gross up
Debt	5.52%	99.61035%	5.54%	44.62%	2.46%	2.47%		$ 23,317,996	$ 23,409,210
ST Debt	0.77%	99.61035%	0.77%	3.38%	0.03%	0.03%		$ 246,394	$ 247,358
Equity	9.70%	62.15686%	15.61%	**52.00%**	5.04%	8.11%		$ 47,752,670	$ 76,826,065
				100.00%	7.53%	10.61%	$ 946,722,235	$ 71,317,059	$ 100,482,632

Second, when recalculated using a 50% equity ratio (the ratio PSNC said in discovery that it actually plans to use), the revenue requirement is reduced $1.9 million per year:

50% Equity	Return	Retention	Rate of return w/ gross up	Capital Structure	Weighted cost Return %	Weighted w/ gross up	Ratebase	ROR Revenue Requirement	ROR w gross up Revenue requirement
Debt	5.52%	99.61035%	5.54%	**46.62%**	2.57%	2.58%	$ -	$ 24,363,177	$ 24,458,480
ST debt	0.77%	99.61035%	0.77%	3.38%	0.03%	0.03%	$ -	$ 246,394	$ 247,358
Equity	9.70%	62.15686%	15.61%	**50.00%**	4.85%	7.80%	$ -	$ 45,916,028	$ 73,871,216
				100.00%	7.45%	10.41%	$ 946,722,235	$ 70,525,600	$ 98,577,054
				Difference					**$ (1,905,579)**

Third, when recalculated using a 45% equity ratio (an equity ratio *higher* than that which SCANA, the parent company, maintains while maintaining a similar credit rating to PSNC's) the revenue requirement for PSNC is reduced by $6.6 million:

			Rate of return	Capital	Weighted cost	Weighted		ROR Revenue	ROR w gross up
45% Equity	Return	Retention	w/ gross up	Structure	Return %	w/ gross up	Ratebase	Requirement	Revenue requirement
Debt	5.52%	99.61035%	5.54%	**51.62%**	2.85%	2.86%	$ -	$ 26,976,131	$ 27,081,654
ST debt	0.77%	99.61035%	0.77%	3.38%	0.03%	0.03%	$ -	$ 246,394	$ 247,358
Equity	9.70%	62.15686%	15.61%	**45.00%**	4.37%	7.02%	$ -	$ 41,324,426	$ 66,484,095
				100.00%	7.24%	9.91%	$ 946,722,235	$ 68,546,950	$ 93,813,107
				Difference					**$ (6,669,526)**

See Attorney General-Paton Cross Exhibit 2.[2] Thus, if PSNC were not capitalized with a much more conservative capital structure (one with more common equity) than that of its parent, SCANA—a company currently building nuclear generation—PSNC's ratepayers would save more than $6 Million annually, compared to the capital structure the Company requests.

2. The evidence does not show that PSNC requires 52% equity in its capital structure in order to obtain and maintain investment capital on reasonable terms.

PSNC has not shown that it requires 52% equity in the capital structure to access financial markets; indeed the evidence supports a capital structure that uses an equity ratio of 45% or 50%.

- Before the 52% equity ratio was agreed to in the settlement, PSNC stated during discovery that it "strives to maintain an approximate balance of 50% debt and 50% equity excluding goodwill." Attorney General-Addison Cross Exhibit 2.
- The fact that the actual equity ratio reported by PSNC does not reflect the appropriate ratemaking equity ratio is shown, for example, by records of capital PSNC has made available to its affiliates. According to reports filed

[2] The tables showing the effect of the 52% and 45% equity ratio are included in Attorney General-Paton Cross Exhibit 2, using data from the Amended Stipulation Exhibit A p 1 and Boswell Exhibit 1 Sch 5(a). The table showing the effect of the 50% equity ratio uses the same data, substituting only for the effect of a 50% equity ratio.

with the Commission, PSNC has been able to make substantial loans to a Money Pool maintained by SCANA that is set up so that the different affiliates as well as the parent can "take advantage of each others' cash flow or investment abilities at different points in time." (T5 p 117) During the 56 months from March 2010 through October 2014, the end-of-the-month balances reported by PSNC indicate that loans were made from PSNC to the Pool in every month but one, and on average PSNC loaned in excess of $46 million. The reports show a high of $103.7 million from PSNC to the Pool. The highest amount borrowed by PSNC from the Pool was $12.8 million. *Id.* This indicates that PSNC's rates were generating more cash than the Company needed and it was loaning that cash to SCANA and its other subsidiaries through the Money Pool.

- One way to assess the reasonableness of a particular equity ratio is to examine the equity ratios used for comparable investments. (T5 pp 208-209) PSNC expert witness Robert Hevert compared the equity ratios maintained by gas companies in his proxy group in his Supplemental Exhibit No. RBH-2, and found that the average equity ratio for the group is 49.75%. Initially, Mr. Hevert testified that the average equity ratio for companies in his proxy group is higher than 50%, see his Table 8 (T5 p 210), but his initial calculation failed to include short-term debt in the capital structures for the proxy companies and so significantly overstated the equity portion relative to PSNC's capital structure (which is calculated including short-term debt). (T 5 pp 206, 210) When he recalculated the equity ratio for his supplemental testimony, Mr.

Hevert corrected the analysis to include short-term debt, but also factored in two more recent fiscal quarters for a total of ten quarters in his Supplemental Exhibit RBH-2. The use of ten fiscal quarters rather than eight could distort the results due to seasonal variations in the ratio of short-term debt. "[T]here typically is a seasonable aspect to it." (T5 p 244) When the average equity ratio is calculated for the proxy companies using the same eight periods as in Mr. Hevert's original testimony, the equity portion averages 49.69%. See *id.* When calculated using the most recent eight periods, the equity portion averages 48.73%. See *id.* In sum, when short-term debt is considered, as it is for gas utilities in North Carolina, Mr. Hevert's proxy company data indicates that an equity ratio of less than 50% is sufficient.

- The capital structure of a utility's parent holding company provides another proxy for assessing what is a reasonable capital structure, (T5 p 207), and PSNC's parent SCANA maintains an equity ratio that has typically been less than 45% over the past five years. See Attorney General-Hevert Cross Exhibit 1 pp 1-2.
- **[Confidential]** [redacted]

[redacted] [**End confidential]**

- SCANA witness Jimmy Addison, who serves as the Chief Financial Officer for PSNC and SCANA as well as SCANA's other subsidiaries, described the debt risk as similar for PSNC and SCANA. (T5 pp 87-88) He agreed that SCANA is rated about the same as PSNC by credit agencies even though SCANA maintains an equity ratio of 45% or less. (T5 p 88)
- Mr. Addison opined that PSNC has a sound balance sheet *as does* SCANA. (T5 p 82)
- He also indicated that PSNC's plan to step up capital investments in ratebase during 2016-2018 provides a reason for PSNC to use a higher equity ratio in order to obtain capital on reasonable terms, but Mr. Addison's own statement that SCANA's balance sheet is sound, (T5 p 82) and the analyses in credit reports for PSNC and SCANA, [**confidential]** [redacted]

[redacted] [**End confidential]**

- Mr. Addison testified that the higher debt level in SCANA's capital structure is attributable to SCANA's cost of acquiring PSNC. (T5 pp 86-87) He suggests that this factor should be considered as a matter of fairness, but the Commission must also consider the fairness relating to consumer interests. SCANA has borrowed capital at the lower cost of debt, invested the capital as equity in PSNC, and seeks a rate of return based on the cost of equity capital. Yet, **[confidential]** [redacted]

[redacted] [**end confidential]**

In fairness to PSNC's consumers, where SCANA has borrowed capital to invest in PSNC, and **[confidential]** [redacted] **[end confidential]** it is reasonable to take into account the lower equity ratio of the consolidated companies when determining the reasonable equity ratio for PSNC. Otherwise, PSNC's consumers will be effectively shouldering the risks attendant to SCANA's power plant construction – a risk that does not exist for PSNC.

Thus, in view of the evidence that **[confidential]** [redacted] **[end confidential]** and considering that SCANA is viewed as having a strong balance sheet even though it maintains an equity ratio below 45%, on average, it is reasonable and appropriate for the capital structure for PSNC to use a 45% equity ratio. PSNC has not shown that the higher equity ratio is needed, and the extra $6.6 million included in PSNC's revenue requirement, which is created by the very high equity ratio requested by PSNC, is excessive and burdensome to consumers in PSNC's service territory.

C. PSNC Has Not Shown that a 9.7% ROE Is Required In Order to Maintain Adequate Service, and Market-Based Data Indicate that the Cost of Equity Capital is Lower.

The 9.7% rate of return on equity proposed in the settlement moves the rate downward, and is closer to the cost of equity capital for comparable investments, but still exceeds the ROE that is adequate, and thus imposes an unfair burden on PSNC's consumers.

PSNC expert witness Hevert testified that the ROE required by regulated utilities "is estimated by using one or more analytical techniques that rely on market-based data to quantify investor expectations regarding required equity returns, adjusted for certain incremental costs and risks." (T5 p 138) He explained that the cost of equity is not directly observable, and analysts use a number of approaches to develop their estimates from market data. They use quantitative models that produce a range of results and judgment is required in making assumptions and using proxies. (T5 pp 138-139)

One method used by Mr. Hevert is the Constant Growth Discounted Cash Flow (DCF) model. (T5 pp 140-147) He also performed variations of this approach which involved many more detailed assumptions and multiple stages of growth. (T5 pp 147-154) Another method Mr. Hevert used was a "Capital Asset Pricing Model" or "CAPM". (T5 pp 154-157) The third type of method he used was called a "Bond Yield Plus Risk Premium" approach. (T5 pp 157-160) The DCF and CAPM methods estimate ROE based on financial market data but Mr. Hevert elects to rely on data that tends to skew his results upward, in order to produce estimates that support the Company's high ROE recommendation. The third method (Risk Premium) does not use financial market data and instead produces a high ROE based on data that reflects the rates of return authorized by regulatory agencies in other states.

Based on his studies, Mr. Hevert testifies that a reasonable range of estimates for PSNC's required ROE is from 10% to 10.75%, and he initially recommended an ROE of 10.60% as reasonable and appropriate. (T5 p 128)

However, in his Supplemental Testimony, Mr. Hevert testifies that, although the 9.7% settlement ROE is below the lower bound of his recommended range, he supports it:

> If it is the Company's determination that the terms of the Stipulation, taken as a whole, are such that it will be able to raise the external capital required to continue the investments required to provide safe and reliable service, and that it will be able to do so when needed and at reasonable cost rates, I appreciate and respect that decision.

(T5 p 221) He continued to posit, however, that a range of 10.00 to 10.75 percent would represent a reasonable and appropriate range of ROE in a fully litigated proceeding. (T5 p 221)

Mr. Hevert's estimates of the range of what ROE is reasonable and appropriate tend to exceed what regulated utilities are willing to agree to in settlement, as he conceded during cross-examination. (T5 p 259) He testified in two cases for Duke Energy Carolinas and one for Duke Energy Progress in North Carolina in recent years, and in all three cases Duke settled on an ROE that was 25-30 basis points lower than the lowest end of Mr. Hevert's estimated ROE range. (T5 pp 258-259) In a fourth general rate case which was brought by Dominion North Carolina Power, the case was fully litigated and the Commission fixed the ROE at a rate 30 basis points below the bottom end of Mr. Hevert's recommended ROE range. (T5 pp 259-260)

Similarly, in this case an examination of Mr. Hevert's testimony and exhibits shows that market data support an ROE lower than 9.7% and his study results are high because of the upwardly skewed factors or inappropriate considerations that he elected to rely on.

1. The results of the Constant Growth DCF study indicate that 9.48% is an adequate return on equity, and the results would be lower if Mr. Hevert had not relied solely on the highest growth data of multiple types available to investors and emphasized the highest data.

Mr. Hevert's Constant Growth DCF study (the most widely used equity cost estimation method and one this Commission has long relied on) examines utility investments comparable to PSNC, and produces an average ROE of 9.48%, almost 30 basis points lower than the ROE proposed under the settlement. (T6 p 28) When he examined the average daily closing price of stocks in his proxy group using shorter and longer time frames, the average ROE result based on 30-trading days ending February 12, 2016 was 9.36%; whereas it was 9.46% for 90-trading days; and it was 9.61% for 180-trading days. (T5 p 147) Therefore, Mr. Hevert's study also shows that the trend is downward for ROE results produced from more recent market data. (T5 p 147)

The Constant Growth Discounted Cash Flow model is "widely recognized in regulatory proceedings, as well as in financial literature." (T5 p 140) Mr. Hevert explained that the DCF approach "expresses the Cost of Equity as the sum of the expected dividend yield and long-term growth rate." (T5 p 140)

In order to understand Mr. Hevert's analysis, it is useful to review the details regarding the inputs he used. Table 2 in Mr. Hevert's direct testimony shows his Summary of Constant Growth DCF Results, (T5 p 147) and the summary corresponds to the results that were calculated in his model as detailed in Exhibit No. RBH-1 pages 1-3.[3] See Attachment 1.

[3] Exhibit RBH-1 lists the comparable companies that were used in Mr. Hevert's proxy group. For each company the 'expected dividend yield' is developed in columns 1-4, the 'long term growth

There are two features of Mr. Hevert's DCF study that skew his results. One is his reliance on the most extreme data. He calculates his "High ROE" from the *highest* growth data that exists. (T6 p 22) As he points out, he also calculates a "Low ROE" from the *lowest* growth data; (T6 p 22) but, whereas his study produces a wide range of ROE results of 8.14% to 11.32%, (T5 p 147) his recommended ROE range draws from the high results, not the low results, which are ignored.

The other feature of Mr. Hevert's DCF study that skews his results upward is his over-reliance on sources of data that reflect five-year projections of annual growth in earnings per share -- Zack's, First Call, and Value Line -- without consideration of other factors available to investors for measuring growth. See Exhibit RBH-1 columns 5, 6, and 7. (Attachment 1 pp 2-4) (T6 pp 21-22) Compare the 15 measures of growth that are provided in Value Line reports for Mr. Hevert's proxy companies, including the annual rates of change per share for revenues, cash flow, earnings, dividends, and book value, each provided for the past 10 years, the past 5 years, and as estimates for future years. See Attachment 2, Attorney General–Hevert Cross Exhibit 3. For example, the growth measures for Laclede Group (one of the proxy companies) are shown in the following box, blown up from the Value Line report, and the only DCF growth

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rate' is developed in columns 5-9, and Mr. Hevert's estimates for each company's "Low ROE," "Mean ROE," and "High ROE" are calculated in columns 10-12. Mr. Hevert's summary results use the numbers he calculates as the PROXY GROUP MEAN in the lower right part of the table. Page 1 of the exhibit shows the results using the 30 day average stock price as of 2/12/2016, page 2 shows the results using the 90 day average stock price, and page 3 shows the results using the 180 day average stock price. (T6 pp 17-20) factor Mr. Hevert used from these data available to investors (projected EPS) in his DCF study is highlighted:[4]

Laclede Group NYSSSE-LG				
ANNUAL RATES		Past	Past	Est'd '12-'14
of change (per sh)		10 Yrs.	5 Yrs	to '18-'20
Revenues		-2.5%	-15.5%	7.0%
"Cash Flow"		3.0%	-2.0%	8.5%
Earnings		4.0%	-2.0%	10.0%
Dividends		2.5%	3.0%	4.5%
Book Value		7.0%	7.5%	7.5%

See Attachment 2 p 2.

According to the Value Line report for Laclede, 10.0% is the annual rate of change per share in Earnings projected through 2020 (which is the growth factor Mr. Hevert used to estimate long-term growth), and that is the number that appears in RBH-1 column 7 for Laclede. But a glance at the historic earnings would show investors that Laclede's annual earnings growth was only 4% over the past 10 years and earnings declined 2% over the past 5 years. It is reasonable to believe that when investors see a negative 2% earnings growth over the past five years coupled with a projected earnings growth of 10%, they will assume that the projected growth is, in part, a function of the paucity of recent growth, and, most importantly, that Laclede is *unlikely* to grow sustainably, forever, at a 10% rate (the assumption used by Mr. Hevert in the traditional DCF). Further, Laclede's other growth data indicate that, on average over the past 10 years, Laclede's dividends were **2.5**%, its revenues declined 2.5%**,** and its book value was up 7%. Just looking at projected earnings growth does not

[4] Mr. Hevert referenced Value Line reports for his proxy group for 12/4/15 to obtain the "Value Line Earnings Growth" number shown in column 7 of Exhibit RBH-1. The Value Line reports for each proxy company are attached for reference.

appropriately capture the long term growth data for Laclede that investors would consider.

In sum, Mr. Hevert's Constant Growth DCF "mean ROE" results support an ROE of 9.48% or less, even using data that exaggerate the growth rate relative to other measures of growth available to investors. Using a more balanced treatment of the data actually available to investors, which are lower than the earnings-only analysis used by Mr. Hevert, would produce lower results than his average 9.48%. Again, the settlement ROE, 9.7%, is shown to be too high.

Mr. Hevert also submits studies that substitute two variations on the DCF model by changing the assumptions about growth for future periods, which is termed a "Multi-Stage DCF." Whereas the Constant Growth DCF assumes that, over time, a single growth estimate that is sustainable over the long-term will apply, (T5 p 143), the Multi-Stage DCF makes many additional detailed assumptions about the future to measure earnings growth differently in three stages. (T5 p 143)

The first of Mr. Hevert's two Multi-Stage DCF variations (see Table 5a in his testimony) produced an average ROE of 9.42%, (T5 p 153), close to the average results from his Constant Growth DCF model and, again, substantially lower than the 9.7% ROE proposed in the settlement. The Multi-Stage DCF study is complex and relies on a trial-and-error method as well as assumptions about changes in growth in the distant future. Mr. Hevert's Multi-Stage DCF model also relies on data that tends to skew his results in an upward direction.

He begins with the same method and assumptions for the initial stage as he used in the Constant Growth DCF model but he assumes these growth rates (which he assumed to be infinite in the standard DCF) will last only five years. See Table 4. (T5 p 151) In the third stage, he assumes that on a date certain (10 years in the future) all of his sample companies' dividends will begin to grow at a rate exactly equal to the long-term growth in GDP (Gross Domestic Product). *Id.* In the second stage he assumes that the growth of each of his sample group companies moves in a step-wise fashion, changing year-by-year from the first stage growth rate to the third stage growth rate (the projected rate of growth in GDP). *Id.*

His results are skewed by his reliance on a high long-term growth rate of 5.31% for the GDP growth in the last stage of his model. (T5 p 151, T6 pp 32-34) He did not use a forward-looking GDP growth rate that is published for investors or used by other authorities, and instead calculated the rate himself. (T6 pp 32-33) Further, he confirmed that he referenced other much lower projected GDP growth rates when he filed testimony July 1, 2016 in Missouri on behalf of Union Electric Company, a subsidiary of Ameren Corporation. (T6 pp 16, 33-34) The rates that he referenced in his Missouri testimony were 4.35% used by the Social Security Administration and 4.24% used by the Energy Information Administration. (T6 pp 33-34) Those current long-term GDP growth rate projections from reputable sources are more than 100 basis points below Mr. Hevert's own 5.31% estimate (which is based in part on long-term historical GDP growth). He conceded that it would have made a sizeable difference in the results of his first Multi-Stage DCF model had he used the 4.35% or 4.24% rates referenced in his Missouri testimony for the final stage growth rate in his Multi-Stage DCF analysis in this proceeding. (T6 p 34) Indeed, the results of his study would have been considerably lower.

His second Multi-Stage DCF study (see Table 5b) uses “the current proxy group P/E ratio to calculate the terminal value.” (T5 pp 153-154) As in the first Multi-Stage DCF, Mr. Hevert relied on the same assumptions that he used in his Constant Growth DCF study for the first stage. For the last stage, in addition to all the assumptions regarding growth rates used in his first Multi-Stage DCF, Mr. Hevert elected to make the assumption that the price to earnings (”P/E”) ratio for stocks will be as high in the end stage as they are now. (T5 p 153) Yet he testified during cross-examination that current P/E values are higher than they have been historically, “and if we were to look at what happens whenever these valuations hit high levels, it’s likely they’ll revert back to their longer term mean ….” (T6 p 12) However, the Value Line growth rates and other investor service growth rates he relies on in this analysis do not make the assumption that P/E ratios will remain constant, and Mr. Hevert’s second Multi-Stage DCF model makes conflicting assumptions when he elects to impose his P/E ratio restriction on those data. This theoretical conflict skews the results in an upward direction throughout all stages of the study, and produces a mean result that is predictably higher than that produced by Mr. Hevert’s other, more widely used, DCF methods. (T5 p 154)

2. The results of Mr. Hevert's CAPM Analysis Are Exaggerated By His Estimate that Investors in the Overall Stock Market Require a ROE of over 13%.

The second method that Mr. Hevert uses to estimate PSNC's ROE is the Capital Asset Pricing Model. (T5 pp 154-157) "[W]hereas [the] discounted cash flow model says what do I expect the cash flows to be and what does that mean for the expected rate of return, this approach looks at the relative risk of each company." (T6 p 35, T5 p 154) The method estimates the risk premium that investors require from the stock market overall adjusted for the relative risk factor (called the "beta coefficient" or "beta") that measures how risky the specific investment is relative to the overall stock market. (T6 pp 15, 35) The risk premium for the particular investment is added to an estimate of the risk-free rate to estimate the required ROE. (T6 p 36)

In this case, since PSNC is not traded on the stock market, Mr. Hevert used an average of the betas published for his proxy companies. Exhibit RBH-6. He explained that a company with a beta of 1 is as risky as the overall market. (T6 p 16) A company with a beta of more than 1 indicates the company is riskier than the overall market, and a beta of under 1 indicates that the risk for an investment is low relative to the overall market. *Id.* He relied on two investor resources for the betas: Bloomberg and Value Line. The average beta from Bloomberg's for the proxy companies is 0.634 and the average beta for the proxy companies from Value Line is 0.757. See Exhibit RBH-6.

To estimate the ROE that investors expect from the stock market, Mr. Hevert identified two "risk free" rates, i.e., the current rate for 30-year treasuries, and the near-term projected rate for 30 year treasuries. *Id.*

Then he estimated the "risk premium" that investors require over the risk-free rate in order to estimate the ROE required for stocks, generally. *Id.* This is the factor that skews Mr. Hevert's results. Instead of relying on a published market source to estimate the risk premium associated with stocks, generally, compared to risk-free investments, Mr. Hevert "derived" his own risk premium estimates by performing a DCF study using certain data obtained from Bloomberg and Value Line. For his DCF analysis of the overall stock market, Mr. Hevert uses a Single-Stage DCF analysis and, as he did previously, ignores all projected growth rate data available to investors except for projected earnings growth. Just as it did with his original DCF, that methodology works to overstate the final DCF results. See Exhibit RBH-6 columns 3 and 4. (T5 p 156) The risk premium estimates that Mr. Hevert relies on in his CAPM *are not* published by Bloomberg or Value Line or any other reliable source that investors would use. (T6 p 37)

Based on his DCF-derived risk premium, Mr. Hevert projects that the overall ROE in the stock market, currently, is over 13%. (T6 p 37) His study indicates that he estimates a required return on equity for the overall stock market (reflecting the risk free rate plus his risk premium) is between 12.78% and 14.01%. In other words, it is Mr. Hevert's testimony that investors in the stock market, on average, expect to earn a return of over 13%, when the current cost rate for 30-year US Treasury bonds is below 3%. While many would certainly like to earn 13% on their stock investments, this estimate is unlikely to represent investor stock market return expectations under the circumstances. This is shown in the following table using Mr. Hevert's factors in Exhibit RBH-6:

Hevert's Assessment of the ROE Required in the General Stock Market			
Hevert Market Risk Premium 1	Risk-Free Rate	Hevert DCF-based Risk Premium	Overall Market ROE
Current 30-Year Treasury	2.79%	10.66%	13.45%
Projected 30-Year Treasury	3.35%	10.66%	14.01%
Hevert Market Risk Premium 2			
Current 30-Year Treasury	2.79%	9.99%	12.78%
Projected 30-Year Treasury	3.35%	9.99%	13.34%
See Exhibit RBH-6			

In order to calculate the ROE for PSNC, Mr. Hevert factors the risk premium for comparable investments, using the average betas from his proxy companies (as described earlier). See Exhibit RBH-6. Then he calculates estimates of the ROE required for the proxy companies, on average, to reflect his estimate of the ROE required for comparable investments. *Id.*

If instead of relying on Mr. Hevert's DCF-derived estimates of the risk premium for the overall stock market, we substitute the risk premium provided in a "Client Alert" issued by Duff & Phelps, an investor service that publishes data regarding the market risk premium and investor expectations regarding that parameter, the results for the CAPM would be substantially lower:

				PSNC Rate Case	
			Docket No. G-5 Sub 565		
CAPM using Duff & Phelps					
	[1]	[2]	[3]		[4]
	Risk Free	Avg	Duff &		MRP
	Rate	Beta	Phelps		
	4.00%	0.634	5.50%		7.49%
	4.00%	0.757	5.50%		8.16%

See Attorney General-Hevert Cross Exhibit 5 (a summary of the Duff & Phelps recommendations for U.S. equity risk premium for use in the CAPM and other models); Attorney General-Hevert Cross Exhibit 6. Duff & Phelps alerted investors that the current market risk premium is 5.5% - roughly 500 basis points lower than Mr. Hevert's self-derived number.

Mr. Hevert testified that he is quite familiar with the risk premium report published by Duff & Phelps and that it is specifically identified for use in a CAPM assessment. (T6 pp 39-40) He agreed that, if the published overall market risk premium estimated by Duff & Phelps of 5.5% as well as Duff & Phelps' higher risk-free rate of 4% were substituted in the model he used, the rate of return results for PSNC using the CAPM would be between 7.49% and 8.16% as shown in Attorney General-Hevert Cross Exhibit 6. However, he expressed concerns that if the Commission were to adopt a ROE at the low end of that range, the market would react negatively and the "view" of the Commission as being "constructive" would come under pressure. (T6 p 42) In other words, notwithstanding market data, the ROE should be maintained at a higher rate to protect investors from such a big reduction. While data published by Duff & Phelps and recognized as legitimate by Mr. Hevert may not be appropriate to determine a point-estimate for the cost of equity capital in this proceeding, it does show, unequivocally, that there are other legitimate estimates of the current market risk premium and expectations by investors that are significantly at odds with that produced by Mr. Hevert on behalf of PSNC. Moreover, those widely-available data show that the cost of capital could be significantly lower than either the 9.7% adopted in the settlement or Mr. Hevert's own traditional DCF result of 9.58%. Mr. Hevert's CAPM analysis, and in particular, his estimate of the current market risk premium is not reliable.

In sum, Mr. Hevert's CAPM results are skewed in an upward direction by his reliance on a high estimate that Mr. Hevert performed himself of the market premium for the overall stock market relative to the risk free rate. Mr. Hevert's risk premium estimate for the overall stock market is not a source that is relied on by investors, and is too high for these purposes and not reliable. Indeed, the published source available to clients of Duff & Phelps estimates an overall market premium that is 450 to 500 basis points lower than Mr. Hevert's estimate. As such, the CAPM results produced by Mr. Hevert should not be given weight by the Commission.

3. Mr. Hevert's "Bond Yield Plus Risk Premium" Approach Does Not Reflect Market Data and Should Not Be Weighed in the ROE Determination.

In his last cost of capital approach, witness Hevert uses a risk premium analysis that does not rely on financial market data. (T5 pp 157-158, T6 pp 44-45) Instead, he relies on the "authorized" rates of return that have been established by regulatory agencies for other utilities. *Id.* The "authorized" rates of return were determined elsewhere based on policies and underlying data estimates of market conditions that are not provided to the record in this case.

It is not appropriate for the Commission to determine PSNC's ROE based on such evidence. The Commission's reliance on past ROE determinations authorized for other utilities in other states, without evidence tying those determinations to the facts of this case is unlawful, and prevents the Commission from fairly considering current economic conditions. *State ex rel. Utilities Comm'n v. Cooper,* 367 N.C. 430, 443, 758 S.E.2d 635, 643 (2014); *State ex rel. Utilities Comm'n v. Public Staff*, 331 N.C. 215, 225, 415 S.E.2d 354, 361 (1992).

In sum, an analysis of the evidence demonstrates that PSNC has not shown that a 9.7% ROE is required, and market-based data indicate that the cost of equity is at least 35 basis points lower. Furthermore, the evidence does not support the need to fund 52% of ratebase using common equity, and the excessive reliance on equity in the company's capital structure will cost ratepayers millions of dollar per year unnecessarily.

II. PSNC'S PROPOSAL TO IMPOSE ANOTHER RATE ADJUSTMENT MECHANISM IN ORDER TO ACCELERATE RATE INCREASES UNDER AN "INTEGRITY MANAGEMENT TRACKER" IS CONTRARY TO THE PUBLIC INTEREST AND SHOULD BE REJECTED.

The non-unanimous settlement in the case would also authorize PSNC to create an Integrity Management Tracker (IMT), and increase rates twice annually for certain costs without initiating a general rate case. The adjustment mechanism is not in the public interest and should be rejected because PSNC has not shown that there is a need for yet another rate adjustment mechanism, and any benefit it offers to investors is outweighed by multiple disadvantages for consumers, i.e., that it will allow frequent additional rate increases, based on expedited review, without regard to offsetting cost factors, and without meaningful public input.

The Commission is authorized under North Carolina law to approve the adoption of a rate adjustment mechanism for recovery of “prudently incurred capital investment and associated costs of complying with federal gas pipeline safety requirements, including a return based on the company's then authorized return” but “only upon a finding by the Commission that the mechanism is in the public interest.” N.C. Gen. Stat. § 62-133.7A.

PSNC witness George Ratchford testified in support of adopting the IMT, and claimed that the justification for the tracker is that it addresses programs required to comply with regulations which are capital intensive and difficult to plan and budget for. The tracker would allow “timelier” recovery of capital costs for activities relating to pipeline integrity, reducing the carrying costs and postponing the need for general rate cases. (T6 p 73)

PSNC witness Addison testified that the IMT will allow recovery to be more predictable and efficient, with less frequent general rate cases, and he believes the new statute was enacted to encourage the investment. (T5 pp 109, 112) He was candid that the IMT proposal is being sought because the rate adjustment mechanism is allowed under N.C. Gen. Stat. § 62-133.7A, and will provide faster rate increases for qualifying costs, *but* that it is not *needed* to address investor uncertainties about the risks associated with the investments.

Mr. Addison testified that the use of a tracker mechanism for cost recovery will not reduce investor perceptions of risk, (T5 p 63) and explained,

> While we expect the rider mechanism we have proposed for the recovery of transmission and distribution integrity management expenses should help enhance our reputation among investors as a prudent, safe, efficient, and reliable company, I would not expect the approval of the rider mechanism to cause an investor to think that PSNC's risk is significantly altered as the Commission is viewed as reasonable and investors are aware of the previous approval of similar mechanisms for other utilities.

(T5 p 63)

Mr. Addison's assessment that the mechanism is not required to address investor concerns is echoed by market analysis. **[confidential:** [redacted]

[redacted] **[end confidential]** In short, North Carolina already provides adequate security and stability to investors through the Customer Usage Tracker and the rate adjustment mechanism for gas costs.

There are clear disadvantages of adopting the mechanism, from the perspective of consumers. Although there may indeed be fewer general rate cases, rate increases will be allowed twice each year, with less scrutiny than occurs in a general rate case. See Exhibit H to the Amended Stipulation, Rider E p 1. The issue is not whether or not these costs will be recoverable, but whether the recovery will be allowed on an accelerated basis through the IMT mechanism. (T5 p 115) All utility costs and rate elements are considered in the context of a general rate case, and factors that offset the need for a rate increase are included, but under the IMT proposal, another accelerated recovery mechanism will be added to PSNC's "suite" based on certain costs without investigation of the overall need for the rate increase.

Indeed, the mechanism will result in substantial rate increases, and there is not a prospect of downward adjustments for such costs. (T5 p 112) The estimate is that about $5 million per year will be added to the Company's revenue requirement. (T6 p 115) And there is not a cap on the maximum rate increase that is allowable under the mechanism before a general rate case must be filed. (T6 p 80)

Furthermore, the time for review and consideration of the costs will be too short for meaningful participation by interested parties. The calculation of the rate increases will involve multiple "vintage years" and be difficult for interested parties to monitor or understand. Exhibit H to the Amended Stipulation, Rider E at 2-3. PSNC will file details about its IMT-related revenue requirement by January 31st and July 31st and seek Commission approval of a rate change under the IMT by mid-February to be implemented the following March 1 and by mid-August to be implemented the following September 1. *Id.*

In sum, PSNC has not proven that the IMT proposal is needed in order to maintain the financial integrity of the Company, and the mechanism will increase rates significantly without the protections afforded in a general rate case. Thus, the proposal is not in the public interest and should be denied.

Respectfully submitted this the 6th day of October, 2016.

ROY COOPER
Attorney General

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CERTIFICATE OF SERVICE

The undersigned certifies that she has served a copy of the foregoing ATTORNEY GENERAL'S BRIEF upon the parties of record in this proceeding and their attorneys by electronic mail.

This the 6th day of October, 2016.

/s/ Margaret A. Force
Margaret A. Force
Assistant Attorney General

Attachment 1

Table 2: Summary of Constant Growth DCF Results

	Mean Low	*Mean*	*Mean High*
30-Day Average	8.14%	9.36%	11.08%
90-Day Average	8.24%	9.46%	11.18%
180-Day Average	8.38%	9.61%	11.32%

Multi-Stage DCF Model

Q. IS IT REASONABLE TO CONSIDER ANALYTICAL MODELS IN ADDITION TO THE CONSTANT GROWTH DCF MODEL?

A. Yes. First, as noted earlier, it is both prudent and appropriate to use multiple methodologies in order to mitigate the effects of assumptions and inputs associated with any single approach. Second, the Constant Growth DCF model assumes that earnings, dividends and book value will grow at the same, constant rate in perpetuity; that the payout ratio will remain constant in perpetuity; that the P/E ratio will remain constant; and that the return required today will be the same return required every year in the future. However, those assumptions are not likely to hold. In particular, it is likely that over time, payout ratios will increase from their current levels. In addition, to the extent that long-term interest rates increase over the next few years, it is likely that the Cost of Equity also will increase. For these reasons, it is appropriate to consider more than one analytical model in estimating the ROE.

Q. WHAT OTHER FORMS OF THE DCF MODEL HAVE YOU USED?

A. To address the considerations underlying the Constant Growth form of the DCF model, discussed above, I also considered the Multi-Stage (three-stage)

I/A

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Retention Growth Estimate	[9] Average Earnings Growth	[10] Low ROE	[11] Mean ROE	[12] High ROE
Atmos Energy Corporation	ATO	$1.68	$65.65	2.56%	2.65%	6.60%	6.40%	7.00%	8.21%	7.05%	9.04%	9.70%	10.87%
Laclede Group, Inc. (The)	LG	$1.96	$61.14	3.21%	3.30%	4.80%	4.78%	10.00%	4.90%	6.12%	8.06%	9.42%	13.37%
New Jersey Resources Corporation	NJR	$0.96	$34.36	2.79%	2.87%	6.50%	6.50%	4.00%	5.81%	5.70%	6.85%	8.58%	9.38%
Northwest Natural Gas Company	NWN	$1.87	$51.25	3.65%	3.73%	4.00%	4.00%	7.00%	3.73%	4.68%	7.45%	8.42%	10.78%
South Jersey Industries, Inc.	SJI	$1.06	$24.21	4.36%	4.50%	NA	6.00%	7.00%	6.56%	6.52%	10.49%	11.02%	11.51%
Southwest Gas Corporation	SWX	$1.62	$57.43	2.82%	2.90%	5.00%	4.00%	7.00%	7.53%	5.88%	6.88%	8.78%	10.45%
WGL Holdings, Inc.	WGL	$1.95	$64.08	3.04%	3.14%	7.30%	8.00%	5.50%	5.11%	6.48%	8.23%	9.62%	11.16%
Proxy Group Mean				3.20%	3.30%	5.70%	5.67%	6.79%	5.98%	6.06%	8.14%	9.36%	11.08%
Proxy Group Median				3.04%	3.14%	5.75%	6.00%	7.00%	5.81%	6.12%	8.06%	9.42%	10.87%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of February 12, 2016
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [9])
[5] Source: Zacks
[6] Source: Yahoo! Finance
[7] Source: Value Line
[8] Source: Exhibit RBH-2, Value Line
[9] Equals Average([5], [6], [7], [8])
[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])
[11] Equals [4] + [9]
[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
90 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Retention Growth Estimate	[9] Average Earnings Growth	[10] Low ROE	[11] Mean ROE	[12] High ROE
Atmos Energy Corporation	ATO	$1.68	$62.93	2.67%	2.76%	6.60%	6.40%	7.00%	8.21%	7.05%	9.16%	9.82%	10.99%
Laclede Group, Inc. (The)	LG	$1.96	$58.86	3.33%	3.43%	4.80%	4.78%	10.00%	4.90%	6.12%	8.19%	9.55%	13.50%
New Jersey Resources Corporation	NJR	$0.96	$31.87	3.01%	3.10%	6.50%	6.50%	4.00%	5.81%	5.70%	7.07%	8.80%	9.61%
Northwest Natural Gas Company	NWN	$1.87	$49.19	3.80%	3.89%	4.00%	4.00%	7.00%	3.73%	4.68%	7.61%	8.57%	10.93%
South Jersey Industries, Inc.	SJI	$1.06	$24.38	4.33%	4.47%	NA	6.00%	7.00%	6.56%	6.52%	10.46%	10.99%	11.48%
Southwest Gas Corporation	SWX	$1.62	$57.11	2.84%	2.92%	5.00%	4.00%	7.00%	7.53%	5.88%	6.89%	8.80%	10.47%
WGL Holdings, Inc.	WGL	$1.95	$62.07	3.14%	3.24%	7.30%	8.00%	5.50%	5.11%	6.48%	8.33%	9.72%	11.27%
Proxy Group Mean				3.30%	3.40%	5.70%	5.67%	6.79%	5.98%	6.06%	8.24%	9.46%	11.18%
Proxy Group Median				3.14%	3.24%	5.75%	6.00%	7.00%	5.81%	6.12%	8.19%	9.55%	10.99%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of February 12, 2016
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [9])
[5] Source: Zacks
[6] Source: Yahoo! Finance
[7] Source: Value Line
[8] Source: Exhibit RBH-2, Value Line
[9] Equals Average([5], [6], [7], [8])
[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])
[11] Equals [4] + [9]
[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Constant Growth Discounted Cash Flow Model
180 Day Average Stock Price

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] First Call Earnings Growth	[7] Value Line Earnings Growth	[8] Retention Growth Estimate	[9] Average Earnings Growth	[10] Low ROE	[11] Mean ROE	[12] High ROE
Atmos Energy Corporation	ATO	$1.68	$58.64	2.86%	2.97%	6.60%	6.40%	7.00%	8.21%	7.05%	9.36%	10.02%	11.19%
Laclede Group, Inc. (The)	LG	$1.96	$55.96	3.50%	3.61%	4.80%	4.78%	10.00%	4.90%	6.12%	8.37%	9.73%	13.68%
New Jersey Resources Corporation	NJR	$0.96	$30.17	3.18%	3.27%	6.50%	6.50%	4.00%	5.81%	5.70%	7.25%	8.98%	9.79%
Northwest Natural Gas Company	NWN	$1.87	$46.50	4.02%	4.12%	4.00%	4.00%	7.00%	3.73%	4.68%	7.83%	8.80%	11.16%
South Jersey Industries, Inc.	SJI	$1.06	$24.55	4.30%	4.44%	NA	6.00%	7.00%	6.56%	6.52%	10.43%	10.96%	11.45%
Southwest Gas Corporation	SWX	$1.62	$56.04	2.89%	2.98%	5.00%	4.00%	7.00%	7.53%	5.88%	6.95%	8.86%	10.53%
WGL Holdings, Inc.	WGL	$1.95	$58.67	3.32%	3.43%	7.30%	8.00%	5.50%	5.11%	6.48%	8.51%	9.91%	11.46%
Proxy Group Mean				3.44%	3.54%	5.70%	5.67%	6.79%	5.98%	6.06%	8.38%	9.61%	11.32%
Proxy Group Median				3.32%	3.43%	5.75%	6.00%	7.00%	5.81%	6.12%	8.37%	9.73%	11.19%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals indicated number of trading day average as of February 12, 2016
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [9])
[5] Source: Zacks
[6] Source: Yahoo! Finance
[7] Source: Value Line
[8] Source: Exhibit RBH-2, Value Line
[9] Equals Average([5], [6], [7], [8])
[10] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8])) + Minimum([5], [6], [7], [8])
[11] Equals [4] + [9]
[12] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8])) + Maximum([5], [6], [7], [8])

Attachment 2

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Oct 10 2016

ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE	P/E RATIO	(Trailing / Median)	RELATIVE P/E RATIO	DIV'D YLD
62.38	19.4	Trailing: 20.2; Median: 15.0	1.08	2.7%

VALUE LINE

TIMELINESS **2** Raised 10/30/15
SAFETY **1** Raised 6/6/14
TECHNICAL **3** Raised 10/23/15
BETA .80 (1.00 = Market)

2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(+20%)	8%
Low	60	(-5%)	2%

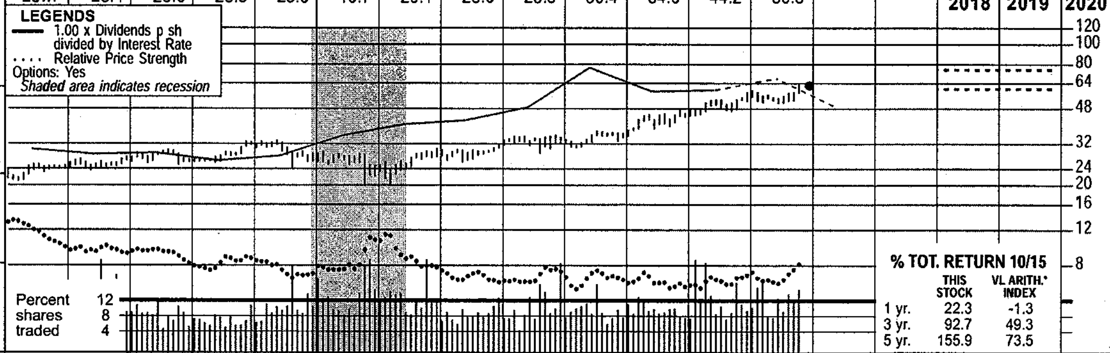
Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	6	1	0	0	0
to Sell	0	1	0	0	0	0	0	0	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	133	157	136
to Sell	142	132	134
Hld's(000)	68718	69286	68505

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
High:	27.6	30.0	33.1	33.5	29.3	30.3	32.0	35.6	37.3	47.4	58.2	63.8
Low:	23.4	25.0	25.5	23.9	19.7	20.1	25.9	28.5	30.4	34.9	44.2	50.8



% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	22.3	-1.3
3 yr.	92.7	49.3
5 yr.	155.9	73.5

Atmos Energy's history dates back to 1906 in the Texas Panhandle. Over the years, through various mergers, it became part of Pioneer Corporation, and, in 1981, Pioneer named its gas distribution division Energas. In 1983, Pioneer organized Energas as a separate subsidiary and distributed the outstanding shares of Energas to Pioneer shareholders. Energas changed its name to Atmos in 1988. Atmos acquired Trans Louisiana Gas in 1986, Western Kentucky Gas Utility in 1987, Greeley Gas in 1993, United Cities Gas in 1997, and others.

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
61.75	75.27	66.03	79.52	53.69	53.12	48.15	38.10	42.88	49.22	*40.80*	*41.50*	Revenues per sh A	*54.15*
3.90	4.26	4.14	4.19	4.29	4.64	4.72	4.76	5.14	5.42	*5.80*	*6.00*	"Cash Flow" per sh	*6.60*
1.72	2.00	1.94	2.00	1.97	2.16	2.26	2.10	2.50	2.96	3.09	*3.25*	Earnings per sh A B	*3.80*
1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.48	1.56	*1.68*	Div'ds Decl'd per sh C■	*1.95*
4.14	5.20	4.39	5.20	5.51	6.02	6.90	8.12	9.32	8.32	*9.60*	*9.80*	Cap'l Spending per sh	*10.00*
19.90	20.16	22.01	22.60	23.52	24.16	24.98	26.14	28.47	30.74	*31.50*	*31.35*	Book Value per sh	*36.65*
80.54	81.74	89.33	90.81	92.55	90.16	90.30	90.24	90.64	100.39	*101.50*	*107.00*	Common Shs Outst'g D	*120.00*
16.1	13.5	15.9	13.6	12.5	13.2	14.4	15.9	15.9	16.1	17.5		Avg Ann'l P/E Ratio	*17.5*
.86	.73	.84	.82	.83	.84	.90	1.01	.89	.84	.88		Relative P/E Ratio	*1.10*
4.5%	4.7%	4.2%	4.8%	5.3%	4.7%	4.2%	4.1%	3.5%	3.1%	2.9%		Avg Ann'l Div'd Yield	*3.0%*
4973.3	6152.4	5898.4	7221.3	4969.1	4789.7	4347.6	3438.5	3886.3	4940.9	4142.1	*4440*	Revenues ($mill) A	*6500*
135.8	162.3	170.5	180.3	179.7	201.2	199.3	192.2	230.7	289.8	315.1	*350*	Net Profit ($mill)	*460*
37.7%	37.6%	35.8%	38.4%	34.4%	38.5%	36.4%	33.8%	38.2%	39.2%	38.3%	*38.5%*	Income Tax Rate	*40.0%*
2.7%	2.6%	2.9%	2.5%	3.6%	4.2%	4.6%	5.6%	5.9%	5.9%	7.6%	*7.9%*	Net Profit Margin	*7.1%*
57.7%	57.0%	52.0%	50.8%	49.9%	45.4%	49.4%	45.3%	48.8%	44.3%	*43.5%*	*45.0%*	Long-Term Debt Ratio	*45.0%*
42.3%	43.0%	48.0%	49.2%	50.1%	54.6%	50.6%	54.7%	51.2%	55.7%	*56.5%*	*55.0%*	Common Equity Ratio	*55.0%*
3785.5	3828.5	4092.1	4172.3	4346.2	3987.9	4461.5	4315.5	5036.1	5542.2	*5650*	*6100*	Total Capital ($mill)	*8000*
3374.4	3629.2	3836.8	4136.9	4439.1	4793.1	5147.9	5475.6	6030.7	6725.9	*7430*	*8040*	Net Plant ($mill)	*10200*
5.3%	6.1%	5.9%	5.9%	5.9%	6.9%	6.1%	6.1%	5.9%	6.4%	*7.0%*	*7.0%*	Return on Total Cap'l	*7.0%*
8.5%	9.8%	8.7%	8.8%	8.3%	9.2%	8.8%	8.1%	8.9%	9.4%	*10.0%*	*10.5%*	Return on Shr. Equity	*10.5%*
8.5%	9.8%	8.7%	8.8%	8.3%	9.2%	8.8%	8.1%	8.9%	9.4%	*10.0%*	*10.5%*	Return on Com Equity	*10.5%*
2.3%	3.6%	3.0%	3.1%	2.7%	3.5%	3.3%	2.8%	4.0%	4.7%	*5.0%*	*5.0%*	Retained to Com Eq	*5.0%*
73%	63%	65%	65%	68%	62%	62%	65%	56%	51%	*51%*	*51%*	All Div'ds to Net Prof	*51%*

CAPITAL STRUCTURE as of 6/30/15
Total Debt $2707.3 mill. **Due in 5 Yrs** $950.0 mill.
LT Debt $2455.3 mill. **LT Interest** $145.0 mill.
(LT interest earned: 4.7x; total interest coverage: 4.7x)
Leases, Uncapitalized Annual rentals $16.7 mill.
Pfd Stock None
Pension Assets-9/14 $434.8 mill.
Oblig. $493.6 mill.
Common Stock 101,369,699 shs.
as of 7/31/15
MARKET CAP: $6.3 billion (Large Cap)

CURRENT POSITION ($MILL.)	2013	2014	6/30/15
Cash Assets	66.2	42.3	43.2
Other	617.1	733.5	573.4
Current Assets	683.3	775.8	616.6
Accts Payable	241.6	311.6	227.3
Debt Due	368.0	196.7	252.0
Other	368.9	402.4	437.3
Current Liab.	978.5	910.7	916.6
Fix. Chg. Cov.	537%	637%	645%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	.5%	-8.0%	*4.0%*
"Cash Flow"	5.0%	4.0%	*4.5%*
Earnings	5.0%	5.0%	*7.0%*
Dividends	1.5%	2.0%	*5.0%*
Book Value	6.0%	4.5%	*4.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	1084.0	1225.5	576.4	552.6	3438.5
2013	1034.2	1309.0	857.9	685.2	3886.3
2014	1255.1	1964.3	942.7	778.8	4940.9
2015	1258.8	1540.1	686.4	656.8	4142.1
2016	*1275*	*1675*	*725*	*765*	*4440*

Fiscal Year Ends	EARNINGS PER SHARE A B E Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	.68	1.12	.31	--	2.10
2013	.85	1.23	.36	.08	2.50
2014	.95	1.38	.45	.23	2.96
2015	.96	1.35	.55	.23	3.09
2016	*1.00*	*1.45*	*.54*	*.26*	*3.25*

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.34	.34	.34	.345	1.37
2012	.345	.345	.345	.35	1.39
2013	.35	.35	.35	.37	1.42
2014	.37	.37	.37	.39	1.50
2015	.39	.39	.39	.42	

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to roughly three million customers through six regulated natural gas utility operations: Louisiana Division, West Texas Division, Mid-Tex Division, Mississippi Division, Colorado-Kansas Division, and Kentucky/Mid-States Division. Gas sales breakdown for 2014: 65%, residential; 30%, commercial; 3%, industrial; and 2% other. 2014 depreciation rate 3.0%. Has around 4,760 employees. Officers and directors own 1.6% of common stock (12/14 Proxy). President and Chief Executive Officer: Kim R. Cocklin. Incorporated: Texas. Address: Three Lincoln Centre, Suite 1800, 5430 LBJ Freeway, Dallas, Texas 75240. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

Good things appear to be in store for Atmos Energy Corporation in fiscal 2016 (began October 1st). The natural gas distribution operation, generating the biggest portion of revenues, stands to benefit from a rise in throughput, assuming that both the weather and economic climate are generally favorable (resulting in a boost in consumption levels). Furthermore, if natural gas prices remain persistently low, purchasing costs could go down, which may lead to less bad-debt expense. Meanwhile, we look for reasonably decent showings from the Dallas-based company's other segments, including the regulated pipeline unit. At this juncture, full-year earnings might advance around 5%, to $3.25 a share, versus the fiscal 2015 total of $3.09. Regarding fiscal 2017, the bottom line stands to grow at a similar percentage rate, to $3.40 a share, as operating margins expand.

The fiscal 2016 capital expenditures budget is anticipated to be between $1 billion and $1.1 billion. That would be almost 8% higher than the previous year's figure, assuming the midpoint of that range is used. A meaningful portion of the resources will continue to be deployed to improve the safety and reliability of Atmos' distribution and transportation systems.

The quarterly common stock dividend was increased a few pennies, to $0.42 a share. Furthermore, our 2018-2020 projections indicate that additional, steady hikes in the distribution will probably take place. The payout ratio over that span ought to be in the 50% vicinity, which should not put a major financial strain on the company.

The equity has climbed to its highest level ever in recent months. We attribute that movement partly to takeover activity in the pipeline and utility space. Fundamentally, though, Atmos is on track to achieve the type of steady earnings and dividend growth it has set out for itself. Overall, the Timeliness rank of these shares has been raised one notch, to 2 (Above Average). Other good qualities include the 1 (Highest) Safety rank and excellent score for Price Stability. All things considered, we think various kinds of investors will find something to like here.

Frederick L. Harris, III *December 4, 2015*

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '06, d18¢; '07, d2¢; '09, 12¢; '10, 5¢; '11, (1¢). Excludes discontinued operations: '11, 10¢; '12, 27¢; '13, 14¢. Next egs. rpt. due early Feb.
(C) Dividends historically paid in early March, June, Sept., and Dec. ■ Div. reinvestment plan. Direct stock purchase plan avail.
(D) In millions.
(E) Qtrs may not add due to change in shrs outstanding.

Company's Financial Strength	A
Stock's Price Stability	95
Price Growth Persistence	75
Earnings Predictability	95

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Oct 10 2016

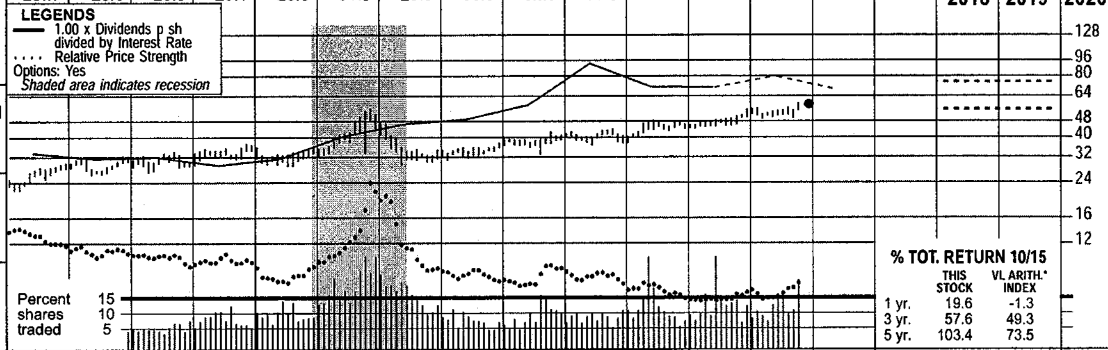
LACLEDE GROUP NYSE-LG

RECENT PRICE 58.27 | P/E RATIO 17.8 (Trailing: 18.4 / Median: 14.0) | RELATIVE P/E RATIO 0.99 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Raised 10/16/15
SAFETY 2 Raised 6/20/03
TECHNICAL 3 Lowered 11/27/15
BETA .70 (1.00 = Market)

High:	32.5	34.3	37.5	36.0	55.8	48.3	37.8	42.8	44.0	48.5	55.2	59.4	
Low:	26.0	26.9	29.1	28.8	31.9	29.3	30.8	32.9	36.5	37.4	44.0	49.1	

Target Price Range 2018 | 2019 | 2020



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(+30%)	10%
Low	55	(-5%)	2%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	85	116	115
to Sell	99	69	77
Hld's(000)	34804	35230	35958

Percent shares traded 15 10 5

% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	19.6	-1.3
3 yr.	57.6	49.3
5 yr.	103.4	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
26.04	29.99	53.08	39.84	54.95	59.59	75.43	93.51	93.40	100.44	85.49	77.83	71.48	49.90	31.10	37.68	46.64	53.50	Revenues per sh A	60.00
2.56	2.68	3.00	2.56	3.15	2.79	2.98	3.81	3.87	4.22	4.56	4.11	4.62	4.58	3.12	3.87	5.07	5.30	"Cash Flow" per sh	6.35
1.47	1.37	1.61	1.18	1.82	1.82	1.90	2.37	2.31	2.64	2.92	2.43	2.86	2.79	2.02	2.35	3.16	3.40	Earnings per sh A B	4.20
1.34	1.34	1.34	1.34	1.34	1.35	1.37	1.40	1.45	1.49	1.53	1.57	1.61	1.66	1.70	1.76	1.84	1.96	Div'ds Decl'd per sh C ■	2.20
2.58	2.77	2.51	2.80	2.67	2.45	2.84	2.97	2.72	2.57	2.36	2.56	3.02	4.83	4.00	3.96	4.59	7.00	Cap'l Spending per sh	6.65
14.96	14.99	15.26	15.07	15.65	16.96	17.31	18.85	19.79	22.12	23.32	24.02	25.56	26.67	32.00	34.93	36.34	39.60	Book Value per sh D	48.10
18.88	18.88	18.88	18.96	19.11	20.98	21.17	21.36	21.65	21.99	22.17	22.29	22.43	22.55	32.70	43.18	43.30	43.00	Common Shs Outst'g E	45.00
15.8	14.9	14.5	20.0	13.6	15.7	16.2	13.6	14.2	14.3	13.4	13.7	13.0	14.5	21.3	19.8	16.5		Avg Ann'l P/E Ratio	15.5
.90	.97	.74	1.09	.78	.83	.86	.73	.75	.86	.89	.87	.82	.92	1.20	1.04	.83		Relative P/E Ratio	.95
5.8%	6.6%	5.7%	5.7%	5.4%	4.7%	4.4%	4.3%	4.4%	3.9%	3.9%	4.7%	4.3%	4.1%	4.0%	3.8%	3.5%		Avg Ann'l Div'd Yield	3.5%

CAPITAL STRUCTURE as of 9/30/15
Total Debt $2189.5 mill. **Due in 5 Yrs** $525.0 mill.
LT Debt $1771.5 mill. **LT Interest** $70.0 mill.
(Total interest coverage: 4.1x)

Leases, Uncapitalized Annual rentals $12.0 mill.
Pension Assets-9/14 $506.6 mill. **Oblig.** $692.5 mill.

Pfd Stock None

Common Stock 43,350,411 shs. as of 10/20/15

MARKET CAP: $2.5 billion (Mid Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
1597.0	1997.6	2021.6	2209.0	1895.2	1735.0	1603.3	1125.5	1017.0	1627.2	1976.4	2300	Revenues ($mill) A	2700
40.1	50.5	49.8	57.6	64.3	54.0	63.8	62.6	52.8	84.6	136.9	145	Net Profit ($mill)	190
34.1%	32.5%	33.4%	31.3%	33.6%	33.4%	31.4%	29.6%	25.0%	27.6%	28.0%	28.0%	Income Tax Rate	30.0%
2.5%	2.5%	2.5%	2.6%	3.4%	3.1%	4.0%	5.6%	5.2%	5.2%	6.9%	6.4%	Net Profit Margin	7.0%
48.1%	49.5%	45.3%	44.4%	42.9%	40.5%	38.9%	36.1%	46.6%	55.1%	54.5%	53.0%	Long-Term Debt Ratio	51.0%
51.8%	50.4%	54.6%	55.5%	57.1%	59.5%	61.1%	63.9%	53.4%	44.9%	45.5%	47.0%	Common Equity Ratio	49.0%
707.9	798.9	784.5	876.1	906.3	899.9	937.7	941.0	1959.0	3359.4	3345.1	3645	Total Capital ($mill)	4400
679.5	763.8	793.8	823.2	855.9	884.1	928.7	1019.3	1776.6	2759.7	2927.5	3045	Net Plant ($mill)	3520
7.6%	8.4%	8.5%	8.1%	8.7%	7.4%	8.1%	7.9%	3.3%	3.1%	4.0%	4.5%	Return on Total Cap'l	5.0%
10.9%	12.5%	11.6%	11.8%	12.4%	10.1%	11.1%	10.4%	5.0%	5.6%	8.7%	8.5%	Return on Shr. Equity	8.5%
10.9%	12.5%	11.6%	11.8%	12.4%	10.1%	11.1%	10.4%	5.0%	5.6%	8.7%	8.5%	Return on Com Equity	8.5%
3.1%	5.1%	4.3%	5.2%	5.9%	3.6%	4.9%	4.3%	1.0%	1.5%	3.7%	3.5%	Retained to Com Eq	4.0%
72%	59%	63%	56%	53%	64%	56%	59%	81%	73%	58%	56%	All Div'ds to Net Prof	52%

CURRENT POSITION ($MILL.)

	2013	2014	9/30/15
Cash Assets	53.0	16.1	13.8
Other	422.9	588.8	516.3
Current Assets	475.9	604.9	530.1
Accts Payable	140.2	176.7	146.5
Debt Due	74.0	287.1	418.0
Other	139.0	319.0	289.3
Current Liab.	353.2	782.8	853.8
Fix. Chg. Cov.	337%	423%	409%

ANNUAL RATES

of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	-2.5%	-15.5%	7.0%
"Cash Flow"	3.0%	-2.0%	8.5%
Earnings	4.0%	-2.0%	10.0%
Dividends	2.5%	3.0%	4.5%
Book Value	7.0%	7.5%	7.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	410.9	358.2	186.9	169.5	1125.5
2013	307.0	397.6	165.3	147.1	1017.0
2014	468.6	694.5	241.8	222.3	1627.2
2015	619.6	877.4	275.2	204.2	1976.4
2016	700	900	350	350	2300

Fiscal Year Ends	EARNINGS PER SHARE A B F Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	1.12	1.32	.38	d.03	2.79
2013	1.14	1.34	.25	d.30	2.02
2014	1.09	1.59	.33	d.35	2.35
2015	1.09	2.18	.32	d.43	3.16
2016	1.15	2.20	.35	d.30	3.40

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.415	.415	.415	.415	1.66
2013	.425	.425	.425	.425	1.70
2014	.44	.44	.44	.44	1.76
2015	.46	.46	.46	.46	
2016	.49				

BUSINESS: Laclede Group, Inc., is a holding company for Laclede Gas, which distributes natural gas across Missouri, including the cities of St. Louis and Kansas City. Has roughly 1.6 million customers. Purchased SM&P Utility Resources, 1/02; divested, 3/08. Acquired Missouri Gas 9/13, Alabama Gas Co 9/14. Utility therms sold and transported in fiscal 2014: 2.0 bill. Revenue mix for regulated operations: residential, 66%; commercial and industrial, 24%; transportation, 2%; other, 8%. Has around 3,152 employees. Officers and directors own 3.2% of common shares (1/15 proxy). Chairman: William E. Nasser; CEO: Suzanne Sitherwood. Inc.: Missouri. Address: 700 Market Street, St. Louis, Missouri 63101. Telephone: 314-342-0500. Internet: www.thelacledegroup.com.

Laclede Group had worse-than-expected fiscal year-end results (ended September 30th). Fourth-quarter revenues fell to $204.2 million, hurt by lower natural gas prices and a severe decrease in gas marketing revenues. However, the Alagasco purchase helped to partially offset warmer fall weather conditions. Losses expanded to $0.43 a share, hurt by lower gross contributions and a sizable increase in maintenance and depreciation expense.

Fiscal 2016 should be a banner year for the company. Laclede has received positive outcomes for rate cases, which went into effect December 1st. These include $4.4 million in new Laclede Gas spending and $1.9 million at Missouri Gas. These should boost recoveries and allow for better system reliability. Capital expenditures are expected to be around $315 million this year, with recovery methods in place that should allow for better earnings. This should total around $1.6 billion in capital spending out to decade's end. Laclede has ample liquidity to fund spending plans. The company will look to capitalize on natural gas conversions for industrial processes, including more volume in its Spire natural gas fuel station. In addition, Laclede could look to purchase municipal gas utilities over the coming quarters, though nothing specific has been mentioned as of yet. All told, we believe the company will be able to earn $3.40 a share in fiscal 2016.

The dividend remains a top draw. Indeed, management at Laclede recently raised the quarterly dividend by 6.5%, to $0.49 a share. This remains well covered by earnings, and dividend increases appear poised to outgrow others in the industry over the coming years, as management has set a target a payout ratio of around 55%-65%. We think that payouts will reach $2.20 a share over the long haul.

Shares of Laclede Group are neutrally ranked for Timeliness. These shares do not stand out for total-return potential, but maintain a solid yield with ample room for growth over the coming years. Laclede has an Above-Average Safety rank and a below-market-average Beta. Conservative, long-term investors would be best served waiting for a dip in price.

John E. Seibert III *December 4, 2015*

(A) Fiscal year ends Sept. 30th. (B) Based on diluted shares outstanding. Excludes nonrecurring loss: '06, 7¢. Excludes gain from discontinued operations: '08, 94¢. Next earnings report due late January. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges. In '14: $383.8 mill., $8.85/sh. (E) In millions. (F) Qtly. egs. may not sum due to rounding or change in shares outstanding.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	40
Earnings Predictability	80

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Oct 10 2016

NEW JERSEY RES. NYSE-NJR

RECENT PRICE 31.10 | P/E RATIO 18.4 (Trailing: 19.3 Median: 16.0) | RELATIVE P/E RATIO 1.03 | DIV'D YLD 3.1% | VALUE LINE

TIMELINESS 3 Lowered 10/31/14
SAFETY 1 Raised 9/15/06
TECHNICAL 2 Raised 11/20/15
BETA .80 (1.00 = Market)

High:	14.9	16.4	17.7	18.8	20.6	21.2	22.0	25.2	25.1	23.8	32.1	33.7
Low:	12.2	13.6	13.8	15.2	12.3	15.0	16.7	19.8	19.3	19.5	21.9	26.8

Target Price Range 2018 | 2019 | 2020

2018-20 PROJECTIONS

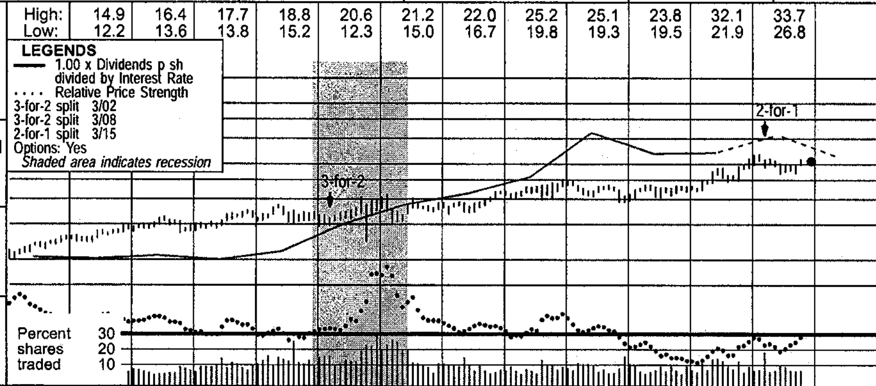
	Price	Gain	Ann'l Total Return
High	30	(-5%)	2%
Low	25	(-20%)	-2%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	107	117	103
to Sell	99	96	113
Hld's(000)	51530	51597	50230



% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	11.9	-1.3
3 yr.	58.2	49.3
5 yr.	85.7	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
11.33	14.71	25.61	22.06	31.14	30.44	38.10	39.81	36.31	45.37	31.17	32.05	36.30	27.08	38.38	44.40	32.09	*35.90*	Revenues per sh A	*39.20*
.93	1.00	1.06	1.07	1.19	1.25	1.31	1.37	1.22	1.81	1.58	1.63	1.70	1.86	1.93	2.73	2.50	*2.40*	"Cash Flow" per sh	*2.75*
.55	.60	.65	.70	.79	.85	.88	.93	.78	1.35	1.20	1.23	1.29	1.36	1.37	2.10	1.78	*1.65*	Earnings per sh B	*1.95*
.37	.38	.39	.40	.41	.43	.45	.48	.51	.56	.62	.68	.72	.77	.81	.86	.93	*.96*	Div'ds Decl'd per sh C■	*1.00*
.60	.62	.55	.51	.57	.72	.64	.64	.73	.86	.90	1.05	1.13	1.26	1.33	1.52	1.65	*1.70*	Cap'l Spending per sh	*1.80*
3.79	4.14	4.40	4.35	5.13	5.62	5.30	7.50	7.75	8.64	8.29	8.81	9.36	9.80	10.65	11.47	12.99	*13.65*	Book Value per sh D	*16.35*
79.83	79.17	79.99	83.00	81.70	83.22	82.64	82.88	83.22	84.12	83.17	82.35	82.89	83.05	83.32	84.20	85.19	*85.00*	Common Shs Outst'g E	*85.00*
15.2	14.7	14.2	14.7	14.0	15.3	16.8	16.1	21.6	12.3	14.9	15.0	16.8	16.8	16.0	11.6	16.6		Avg Ann'l P/E Ratio	*14.0*
.87	.96	.73	.80	.80	.81	.89	.87	1.15	.74	.99	.95	1.05	1.07	.90	.60	.91		Relative P/E Ratio	*.90*
4.5%	4.4%	4.2%	3.9%	3.7%	3.3%	3.1%	3.2%	3.0%	3.3%	3.5%	3.7%	3.3%	3.4%	3.7%	3.5%	3.1%		Avg Ann'l Div'd Yield	*3.5%*

CAPITAL STRUCTURE as of 9/30/15
Total Debt $921.1 mill. **Due In 5 Yrs** $321.9 mill.
LT Debt $843.6 mill. **LT Interest** $25.4 mill.
Incl. $53.2 mill. capitalized leases.
(LT interest earned: 7.5x; total interest coverage: 7.5x)
Pension Assets-9/15 $256.4 mill. **Oblig.** $394.4 mill.
Pfd Stock None

Common Stock 85,796,206 shs.
as of 11/20/15
MARKET CAP: $2.7 billion (Mid Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
3148.3	3299.6	3021.8	3816.2	2592.5	2639.3	3009.2	2248.9	3198.1	3738.2	2734.0	*3050*	Revenues ($mill) A	*3335*
74.4	78.5	65.3	113.9	101.0	101.8	106.5	112.4	113.7	176.9	151.5	*140*	Net Profit ($mill)	*165*
39.1%	38.9%	38.8%	37.8%	27.1%	41.4%	30.2%	7.1%	25.4%	35.0%	*32.0%*	*32.0%*	Income Tax Rate	*32.0%*
2.4%	2.4%	2.2%	3.0%	3.9%	3.9%	3.5%	5.0%	3.6%	4.7%	5.5%	*4.6%*	Net Profit Margin	*5.0%*
42.0%	34.8%	37.3%	38.5%	39.8%	37.2%	35.5%	39.2%	36.6%	38.2%	43.2%	*43.5%*	Long-Term Debt Ratio	*42.0%*
58.0%	65.2%	62.7%	61.5%	60.2%	62.8%	64.6%	60.8%	63.4%	61.8%	56.8%	*56.5%*	Common Equity Ratio	*58.0%*
755.3	954.0	1028.0	1182.1	1144.8	1154.4	1203.1	1339.0	1400.3	1564.4	1950.6	*2060*	Total Capital ($mill)	*2390*
905.1	934.9	970.9	1017.3	1064.4	1135.7	1295.9	1484.9	1643.1	1884.1	2128.6	*2170*	Net Plant ($mill)	*2305*
11.2%	9.6%	7.7%	10.7%	9.7%	9.7%	9.7%	9.2%	9.0%	12.5%	*8.5%*	*8.0%*	Return on Total Cap'l	*8.0%*
17.0%	12.6%	10.1%	15.7%	14.6%	14.0%	13.7%	13.8%	12.8%	18.3%	13.7%	*12.0%*	Return on Shr. Equity	*12.0%*
17.0%	12.6%	10.1%	15.7%	14.6%	14.0%	13.7%	13.8%	12.8%	18.3%	13.7%	*12.0%*	Return on Com Equity	*12.0%*
8.5%	6.3%	3.6%	9.5%	7.2%	6.7%	6.2%	6.2%	5.2%	11.0%	6.8%	*5.0%*	Retained to Com Eq	*5.5%*
50%	50%	64%	40%	50%	52%	55%	55%	59%	40%	51%	*58%*	All Div'ds to Net Prof	*51%*

CURRENT POSITION ($MILL.)	2013	2014	9/30/15
Cash Assets	3.0	2.2	4.9
Other	742.9	680.5	539.6
Current Assets	745.9	682.7	544.5
Accts Payable	332.8	330.3	273.2
Debt Due	434.2	335.5	77.5
Other	84.8	125.3	85.4
Current Liab.	851.8	791.1	436.1
Fix. Chg. Cov.	658%	1007%	750%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '18-'20
Revenues	2.5%	-3.5%	*1.5%*
"Cash Flow"	5.0%	4.5%	*4.5%*
Earnings	6.5%	5.5%	*4.0%*
Dividends	6.5%	8.5%	*3.5%*
Book Value	8.0%	4.5%	*7.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	642.4	612.9	425.1	568.5	2248.9
2013	736.0	960.9	767.5	733.7	3198.1
2014	878.4	1579.6	688.3	591.9	3738.2
2015	824.1	1013.1	458.5	438.3	2734.0
2016	*905*	*1085*	*540*	*520*	*3050*

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	.55	.90	.05	d.14	1.36
2013	.43	.82	.12	d.01	1.37
2014	.47	1.81	.05	d.23	2.10
2015	.65	1.16	.03	d.06	1.78
2016	*.62*	*1.13*	*Nil*	*d.10*	*1.65*

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.18	.18	.18	.18	.72
2012	.19	.19	.19	.40	.97
2013	--	.20	.20	.20	.60
2014	.21	.21	.21	.23	.86
2015	.23	.23	.23	.24	

BUSINESS: New Jersey Resources Corp. is a holding company providing retail/wholesale energy svcs. to customers in New Jersey, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had about 504,300 customers at 9/30/14 in Monmouth and Ocean Counties, and other N.J. Counties. Fiscal 2014 volume: 260 bill. cu. ft. (4% interruptible, 27% residential and commercial and electric utility, 69% incentive programs). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2014 dep. rate: 3.0%. Has 968 empls. Off./dir. own about 1.4% of common (12/14 Proxy). Chrmn., CEO & Pres.: Laurence M. Downes. Inc.: NJ Addr.: 1415 Wyckoff Road, Wall, NJ 07719. Tel.: 732-938-1480. Web: www.njresources.com.

New Jersey Resources faced a difficult operating environment this past fiscal year (ended September 30th). Indeed, the annual top line declined about 27%, on a year-over-year basis, to roughly $2.73 billion. We consider this more of a technicality due to lower natural gas pricing when viewed against 2014's comparable figures and not necessarily a slowdown in NJR's overall business operations. This is evident in the New Jersey Natural Gas (NJNG) division's penchant for consistently adding new customer accounts. In fact, that division saw its average active customer meters rise by approximately 7,860 last year. At the same time, total system throughput also advanced nicely over the course of fiscal 2015, rising 31%, to 341 bcf for the year. However, on the downside, the sharp drop in top-line volumes did weigh on both fixed- and variable-cost absorption. To that end, operating expenses increased 400 basis points as a function of revenues. On balance, these factors equated to a 15% bottom line decline, to $1.78 a share, for the year.

The company appears poised to log a mid-single-digit earnings decline this year. Natural gas and other petroleum commodity prices could remain depressed in fiscal 2016, as well. Many of the OPEC nations are in talks to reduce the glut of supply on the market but individually no one wants to reduce output and thus market share. This is weighing on the wholesale natural gas arm, or Energy Services unit, which has been having a tough time over the past year. On the upside, the NJNG regulated utility division continues to grow nicely, likely as a reflection of a firming up in the residential new construction market in its service territory. Additional contributions should stem from the Clean Energy Ventures unit, which is benefiting from solar installations that are coming on line.

At their recent quotation, these neutrally ranked shares are not overly compelling. As an income vehicle, NJR is also lacking, considering the dividend yield is below the industry average of about 3.2%. Meanwhile, the stock is trading above our Target Price Range, suggesting it offers little to no appreciation potential for the pull to 2018-2020.

Bryan J. Fong *December 4, 2015*

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Qtly egs may not sum to total due to change in shares outstanding. Next earnings report due late Jan.
(C) Dividends historically paid in early Jan., April, July, and October. 1Q '13 div'd paid in 4Q '12. ■ Dividend reinvestment plan available.
(D) Includes regulatory assets in 2014: $377.6 million, $4.48/share.
(E) In millions, adjusted for splits.

Company's Financial Strength	A+
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	60

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Oct 10 2016

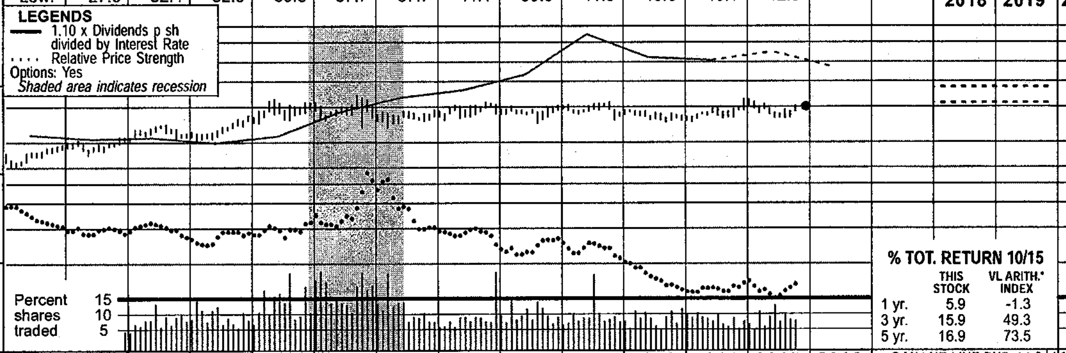
N.W. NAT'L GAS NYSE-NWN

RECENT PRICE 47.99 | P/E RATIO 24.2 (Trailing: 25.0; Median: 18.0) | RELATIVE P/E RATIO 1.35 | DIV'D YLD 3.9% | VALUE LINE

TIMELINESS 3 Raised 12/4/15
SAFETY 1 Raised 3/18/05
TECHNICAL 3 Lowered 12/4/15
BETA .65 (1.00 = Market)

High:	34.1	39.6	43.7	52.8	55.2	46.5	50.9	49.0	50.8	46.6	52.6	52.3
Low:	27.5	32.4	32.8	39.8	37.7	37.7	41.1	39.6	41.0	40.0	40.1	42.0

Target Price Range 2018 | 2019 | 2020



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+25%)	9%
Low	50	(+5%)	5%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	3	0	0	1	0	0	0
to Sell	2	0	4	1	0	1	0	0	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	79	93	80
to Sell	66	55	76
Hld's(000)	16761	17253	16711

% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.9	-1.3
3 yr.	15.9	49.3
5 yr.	16.9	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
18.17	21.09	25.78	25.07	23.57	25.69	33.01	37.20	39.13	39.16	38.17	30.56	31.72	27.14	28.02	27.64	**26.90**	**28.10**	Revenues per sh	**31.25**
3.72	3.68	3.86	3.65	3.85	3.92	4.34	4.76	5.41	5.31	5.20	5.18	5.00	4.94	5.04	5.05	**4.50**	**5.00**	"Cash Flow" per sh	**6.45**
1.70	1.79	1.88	1.62	1.76	1.86	2.11	2.35	2.76	2.57	2.83	2.73	2.39	2.22	2.24	2.16	**1.80**	**2.20**	Earnings per sh A	**3.30**
1.23	1.24	1.25	1.26	1.27	1.30	1.32	1.39	1.44	1.52	1.60	1.68	1.75	1.79	1.83	1.85	**1.87**	**1.91**	Div'ds Decl'd per sh B■	**2.10**
4.78	3.46	3.23	3.11	4.90	5.52	3.48	3.56	4.48	3.92	5.09	9.35	3.76	4.91	5.13	4.40	**5.80**	**6.15**	Cap'l Spending per sh	**6.80**
17.12	17.93	18.56	18.88	19.52	20.64	21.28	22.01	22.52	23.71	24.88	26.08	26.70	27.23	27.77	28.12	**28.75**	**29.85**	Book Value per sh D	**33.85**
25.09	25.23	25.23	25.59	25.94	27.55	27.58	27.24	26.41	26.50	26.53	26.58	26.76	26.92	27.08	27.28	**27.50**	**27.75**	Common Shs Outst'g C	**28.00**
14.5	12.4	12.9	17.2	15.8	16.7	17.0	15.9	16.7	18.1	15.2	17.0	19.0	21.1	19.4	20.7	*Bold figures are*	*Value Line*	Avg Ann'l P/E Ratio	**17.0**
.83	.81	.66	.94	.90	.88	.91	.86	.89	1.09	1.01	1.08	1.19	1.34	1.09	1.09		*estimates*	Relative P/E Ratio	**1.05**
5.0%	5.6%	5.1%	4.5%	4.6%	4.2%	3.7%	3.7%	3.1%	3.3%	3.7%	3.6%	3.9%	3.8%	4.2%	4.1%			Avg Ann'l Div'd Yield	**3.7%**
						910.5	1013.2	1033.2	1037.9	1012.7	812.1	848.8	730.6	758.5	754.0	**740**	**780**	Revenues ($mill)	**875**
						58.1	65.2	74.5	68.5	75.1	72.7	63.9	59.9	60.5	58.7	**49.0**	**61.0**	Net Profit ($mill)	**92.5**
						36.0%	36.3%	37.2%	36.9%	38.3%	40.5%	40.4%	42.4%	40.8%	41.5%	**43.0%**	**40.0%**	Income Tax Rate	**38.0%**
						6.4%	6.4%	7.2%	6.6%	7.4%	8.9%	7.5%	8.2%	8.0%	7.8%	**6.7%**	**7.8%**	Net Profit Margin	**10.6%**
						47.0%	46.3%	46.3%	44.9%	47.7%	46.1%	47.3%	48.5%	47.6%	44.8%	**44.5%**	**44.5%**	Long-Term Debt Ratio	**44.0%**
						53.0%	53.7%	53.7%	55.1%	52.3%	53.9%	52.7%	51.5%	52.4%	55.2%	**55.5%**	**55.5%**	Common Equity Ratio	**56.0%**
						1108.4	1116.5	1106.8	1140.4	1261.8	1284.8	1356.2	1424.7	1433.6	1389.0	**1435**	**1495**	Total Capital ($mill)	**1685**
						1373.4	1425.1	1495.9	1549.1	1670.1	1854.2	1893.9	1973.6	2062.9	2121.6	**2205**	**2295**	Net Plant ($mill)	**2580**
						6.5%	7.1%	8.5%	7.7%	7.3%	7.0%	6.2%	5.7%	5.8%	5.8%	**4.5%**	**5.5%**	Return on Total Cap'l	**6.5%**
						9.9%	10.9%	12.5%	10.9%	11.4%	10.5%	8.9%	8.2%	8.1%	7.6%	**6.5%**	**7.5%**	Return on Shr. Equity	**10.0%**
						9.9%	10.9%	12.5%	10.9%	11.4%	10.5%	8.9%	8.2%	8.1%	7.6%	**6.5%**	**7.5%**	Return on Com Equity	**10.0%**
						3.7%	4.5%	6.0%	4.5%	5.0%	4.0%	2.4%	1.6%	1.5%	1.1%	**Nil**	**1.0%**	Retained to Com Eq	**3.5%**
						63%	59%	52%	59%	56%	61%	73%	80%	81%	85%	**104%**	**87%**	All Div'ds to Net Prof	**64%**

CAPITAL STRUCTURE as of 9/30/15
Total Debt $846.9 mill. **Due in 5 Yrs** $360.0 mill.
LT Debt $621.7 mill. **LT Interest** $45.0 mill.

(Total interest coverage: 3.0x)

Pension Assets-12/14 $279.2 mill.
Oblig. $487.3 mill.

Pfd Stock None

Common Stock 27,371,642 shares as of 10/23/15

MARKET CAP $1.3 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2013	2014	9/30/15
Cash Assets	9.5	9.5	5.2
Other	321.0	353.1	272.7
Current Assets	330.5	362.6	277.9
Accts Payable	96.1	91.4	54.4
Debt Due	248.2	274.7	225.2
Other	88.5	103.3	105.7
Current Liab.	432.8	469.4	385.3
Fix. Chg. Cov.	316%	321%	298%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	1.0%	-6.5%	*2.0%*
"Cash Flow"	3.0%	-1.0%	*4.5%*
Earnings	2.5%	-4.0%	*7.0%*
Dividends	3.5%	3.5%	*2.5%*
Book Value	3.5%	3.0%	*3.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	309.6	104.0	87.5	229.5	730.6
2013	277.9	131.7	88.2	260.7	758.5
2014	293.4	133.1	87.2	240.3	754.0
2015	261.7	138.3	91.3	***248.7***	***740***
2016	***270***	***145***	***95.0***	***270***	***780***

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	1.51	.05	d.39	1.05	2.22
2013	1.40	.08	d.31	1.07	2.24
2014	1.40	.04	d.32	1.04	2.16
2015	1.04	.08	d.24	***.92***	***1.80***
2016	***1.20***	***.10***	***d.20***	***1.10***	***2.20***

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.435	.435	.435	.445	1.75
2012	.445	.445	.445	.455	1.79
2013	.455	.455	.455	.460	1.83
2014	.460	.460	.460	.465	1.85
2015	.465	.465	.465	.4675	

BUSINESS: Northwest Natural Gas Co. distributes natural gas to 90 communities, 704,000 customers, in Oregon (89% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 2.5 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Rev. breakdown: residential, 35%; commercial, 22%; industrial, gas transportation, and other, 43%. Employs 1,092. BlackRock Inc. owns 9.2% of shares; officers and directors, 2.1% (4/15 proxy). CEO: Gregg S. Kantor. Inc.: Oregon. Address: 220 NW 2nd Ave., Portland, OR 97209. Telephone: 503-226-4211. Internet: www.nwnatural.com.

Northwest Natural Gas reported decent third-quarter results. A loss of $0.24 a share was better than our expectations, aided by higher utility margins and additional customer gains. Utility margins increased due to gas cost incentive sharing. Results were hampered by lower gas storage revenues. The fourth quarter appears likely to show another year-over-year decline as the El Nino weather pattern usually causes weather extremes including more high-temperature days. Thus, we have lowered our fourth-quarter estimate by $0.11 a share to $0.92.

The operating environment continues to gradually improve for Northwest Natural Gas. The Portland area population is increasing at a decent rate, as employment is rising and new home sales are driving natural gas usage higher. Too, incentives are driving natural gas conversions in home heating through its oil-to-gas furnace replacement program. These should drive revenues higher over the long haul.

The Mist storage facility remains on track. Northwest Natural filed an amendment toward the Mist site certificate. In addition, the cost of the expansion is approximately $125 million and the facility is still expected to be put into service during the winter of 2018-2019. This project should be a long-term plus.

Northwest Natural Gas raised its quarterly dividend slightly, to $0.4675. Through this is lower than we expected, it is the 60th annual raise for this dividend aristocrat. The small increase may signal a need for capital near term. While the yield remains attractive at nearly 4%, we expect that the payout growth rate will likely be lower than others in the industry over the coming years. Still, payout growth could accelerate, possibly once the Mist project comes on line.

Northwest Natural Gas shares are neutrally ranked for Timeliness. These shares have unspectacular total-return potential, as they are trading just below our 3- to 5-year Target Price Range. Still, they carry our Highest Safety rank (1) and the company has a Financial Strength rating of A. Most conservative, income-seeking accounts should find these shares appealing.

John E. Seibert III *December 4, 2015*

(A) Diluted earnings per share. Excludes nonrecurring items: '00, $0.11; '06, ($0.06); '08, ($0.03); '09, 6¢; May not sum due to rounding. Next earnings report due in early February.

(B) Dividends historically paid in mid-February, May, August, and November.
■ Dividend reinvestment plan available.
(C) In millions.

(D) Includes intangibles. In 2014: $368.9 million, $13.52/share.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	30
Earnings Predictability	95

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Oct 10 2016

SOUTH JERSEY INDS. NYSE-SJ

RECENT PRICE 23.47 | P/E RATIO 15.5 (Trailing: 18.3 Median: 17.0) | RELATIVE P/E RATIO 0.87 | DIV'D YLD 4.6% | VALUE LINE

TIMELINESS 4 Lowered 9/18/15
SAFETY 2 Lowered 1/4/91
TECHNICAL 3 Raised 11/20/15
BETA .80 (1.00 = Market)

High:	13.3	16.2	17.1	20.6	20.3	20.4	27.1	29.0	29.0	31.1	30.6	30.4
Low:	9.8	12.5	12.8	15.6	12.6	16.0	18.6	21.4	22.9	25.3	25.9	22.9

Target Price Range 2018 | 2019 | 2020

2018-20 PROJECTIONS

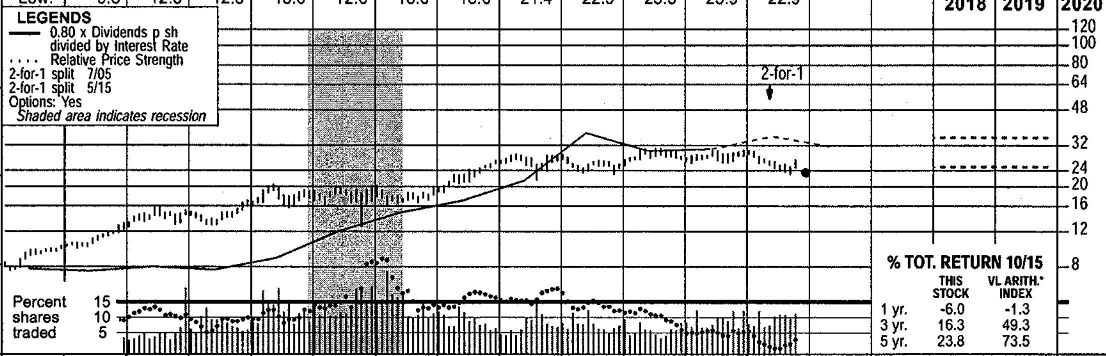
	Price	Gain	Ann'l Total Return
High	35	(+50%)	15%
Low	25	(+5%)	7%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	1	0	0	0	0	1	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	1	2	1	2	1	0	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	97	107	83
to Sell	60	64	79
Hld's(000)	42328	40934	42248



% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-6.0	-1.3
3 yr.	16.3	49.3
5 yr.	23.8	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
8.80	11.22	17.65	10.35	13.17	14.75	15.89	15.88	16.15	16.18	14.19	15.48	13.71	11.16	11.18	12.98	14.15	14.60	Revenues per sh	17.75
.92	.97	.95	1.06	1.12	1.22	1.25	1.75	1.60	1.74	1.86	2.10	2.23	2.34	2.48	2.67	2.45	2.70	"Cash Flow" per sh	3.75
.50	.54	.57	.61	.68	.79	.86	1.23	1.05	1.14	1.19	1.35	1.45	1.52	1.52	1.57	1.45	1.60	Earnings per sh A	2.30
.36	.37	.37	.38	.39	.41	.43	.46	.51	.56	.61	.68	.75	.83	.90	.96	1.02	1.10	Div'ds Decl'd per sh B ■	1.35
1.09	1.11	1.41	1.74	1.18	1.34	1.60	1.26	.94	1.04	1.83	2.79	3.20	4.01	4.84	5.01	4.30	4.50	Cap'l Spending per sh	5.00
3.37	3.62	3.91	4.84	5.63	6.20	6.75	7.55	8.12	8.67	9.12	9.54	10.33	11.63	12.64	13.65	15.00	15.95	Book Value per sh C	18.40
44.61	46.00	47.44	48.83	52.92	55.52	57.96	58.65	59.22	59.46	59.59	59.75	60.43	63.31	65.43	68.33	70.00	72.00	Common Shs Outst'g D	76.00
13.3	13.0	13.6	13.5	13.3	14.1	16.6	11.9	17.2	15.9	15.0	16.8	18.4	16.9	18.9	18.0	Bold figures are	Value Line estimates	Avg Ann'l P/E Ratio	14.0
.76	.85	.70	.74	.76	.74	.88	.64	.91	.96	1.00	1.07	1.15	1.08	1.06	.95			Relative P/E Ratio	.90
5.4%	5.2%	4.7%	4.6%	4.3%	3.7%	3.0%	3.2%	2.8%	3.1%	3.4%	3.0%	2.8%	3.2%	3.1%	3.4%			Avg Ann'l Div'd Yield	4.2%
						921.0	931.4	956.4	962.0	845.4	925.1	828.6	706.3	731.4	887.0	990	1050	Revenues ($mill)	1350
						48.6	72.0	61.8	67.7	71.3	81.0	87.0	93.3	97.1	104.0	100	115	Net Profit ($mill)	175
						41.5%	41.3%	41.9%	47.7%	23.0%	15.2%	22.4%	10.8%	10.8%	20.0%	20.0%	22.0%	Income Tax Rate	25.0%
						5.3%	7.7%	6.5%	7.0%	8.4%	8.8%	10.5%	13.2%	13.3%	11.7%	10.1%	11.0%	Net Profit Margin	13.0%
						44.9%	44.7%	42.7%	39.2%	36.5%	37.4%	40.5%	45.0%	45.1%	48.0%	47.5%	47.5%	Long-Term Debt Ratio	47.0%
						55.1%	55.3%	57.3%	60.8%	63.5%	62.6%	59.5%	55.0%	54.9%	52.0%	52.5%	52.5%	Common Equity Ratio	53.0%
						710.3	801.1	839.0	848.0	856.4	910.1	1048.3	1337.6	1507.4	1791.9	2000	2200	Total Capital ($mill)	2650
						877.3	920.0	948.9	982.6	1073.1	1193.3	1352.4	1578.0	1859.1	2134.1	2350	2450	Net Plant ($mill)	2800
						8.3%	10.1%	8.6%	8.9%	9.0%	9.5%	8.9%	7.4%	6.8%	6.4%	5.5%	6.0%	Return on Total Cap'l	7.0%
						12.4%	16.3%	12.8%	13.1%	13.1%	14.2%	13.9%	12.7%	11.7%	11.2%	9.5%	10.0%	Return on Shr. Equity	12.5%
						12.4%	16.3%	12.8%	13.1%	13.1%	14.2%	13.9%	12.7%	11.7%	11.2%	9.5%	10.0%	Return on Com Equity	12.5%
						6.2%	10.2%	6.7%	6.7%	6.4%	7.1%	6.7%	5.8%	4.8%	4.3%	2.5%	3.0%	Retained to Com Eq	5.0%
						50%	37%	48%	49%	51%	50%	52%	55%	59%	61%	71%	69%	All Div'ds to Net Prof	59%

CAPITAL STRUCTURE as of 9/30/15
Total Debt $1366.7 mill. **Due in 5 Yrs** $868.5 mill.
LT Debt $937.4 mill. **LT Interest** $22.0 mill.
(Total interest coverage: 4.0x)

Leases, Uncapitalized Annual rentals $.7 mill.
Pension Assets-12/14 $180.5 mill. **Oblig.** $265.4 mill.

Pfd Stock None

Common Stock 69,294,447 shs.
as of 11/2/15, adj. for 2-for-1 split

MARKET CAP: $1.6 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2013	2014	9/30/15
Cash Assets	3.8	4.2	2.1
Other	479.1	562.5	476.8
Current Assets	482.9	566.7	478.9
Accts Payable	259.8	273.0	189.1
Debt Due	374.9	395.6	429.3
Other	130.3	181.6	188.6
Current Liab.	765.0	850.2	807.0
Fix. Chg. Cov.	370%	432%	475%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	-1.0%	-5.5%	7.0%
"Cash Flow"	8.0%	7.5%	7.0%
Earnings	8.0%	6.5%	7.0%
Dividends	8.5%	10.0%	7.0%
Book Value	8.5%	8.0%	6.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	274.8	121.9	112.0	197.6	706.3
2013	255.6	122.6	128.8	224.4	731.4
2014	350.2	133.3	122.4	281.1	887.0
2015	383.0	177.7	141.1	288.2	990
2016	405	175	155	315	1050

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.83	.14	.07	.49	1.52
2013	.76	.16	d.02	.62	1.52
2014	1.01	.15	d.05	.47	1.57
2015	.86	.03	d.07	.63	1.45
2016	.90	.05	Nil	.65	1.60

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	--	.183	.183	.384	.75
2012	--	.202	.202	.423	.83
2013	--	.222	.222	.458	.90
2014	--	.237	.237	.488	.96
2015	--	.251	.251	.251	

BUSINESS: South Jersey Industries, Inc. is a holding company. Its subsidiary, South Jersey Gas Co., distributes natural gas to 366,854 customers in New Jersey's southern counties. Gas revenue mix '14: residential, 43%; commercial, 19%; cogeneration and electric generation, 17%; industrial, 21%. Non-utility operations include: South Jersey Energy, South Jersey Resources Group, South Jersey Exploration, Marina Energy, South Jersey Energy Service Plus, and SJI Midstream. Has about 700 employees. Off./dir. own .8% of common shares; BlackRock, Inc., 9.5%; The Vanguard Group, Inc., 6.9% (3/15 proxy). Pres. & CEO: Michael J. Renna. Inc.: NJ. Address: 1 South Jersey Plaza, Folsom, NJ 08037. Tel.: 609-561-9000. Internet: www.sjindustries.com.

Shares of South Jersey Industries are once again trading near a multiyear low. The stock has declined in recent weeks, following a nice rebound in price that occurred in September and October. The company reported mixed results for the September interim. The top line advanced approximately 15%, on a year-to-year basis. Utility revenues increased at a strong pace, and growth from the non-utility operations was fairly healthy, as well. That said, operating expenses increased, too, and South Jersey Industries reported a share deficit of $0.07 for the recent period.

The company's core businesses should continue to perform well going forward. Utility South Jersey Gas ought to benefit from significant infrastructure investment and healthy customer growth. This mainstay line recently received approval from the New Jersey Board of Public Utilities to lower customer rates. This reduces customer bills, but will not hurt earnings. Elsewhere, prospects for the company's nonutility operations also appear favorable. SJ Energy Services will probably benefit from the improving performance of its solar assets and contributions from its Combined Heat and Power facilities. Commodity marketing business SJ Energy Group ought to gain from additional contracts scheduled to come on line in 2016 and 2017. Moreover, the company's interest in the Penn East pipeline should contribute to earnings growth by the latter part of the decade.

This issue is ranked to trail the broader market averages for the coming six to 12 months. Looking further out, we project solid growth in revenues, earnings, and dividends for the company over the pull to 2018-2020. Healthy performance from the utility operation, along with contributions from commodity marketing and new fuel supply contracts on the nonutility side, should both drive growth and improve earnings quality in the coming years. On top of that, SJI earns good marks for Safety, Financial Strength, Price Stability, and Earnings Predictability. The healthy dividend yield is another inducement. All things considered, this equity offers solid total return potential, on a risk-adjusted basis.

Michael Napoli, CFA *December 4, 2015*

(A) Based on GAAP egs. through 2006, economic egs. thereafter. GAAP EPS: '07, $1.05; '08, $1.29; '09, $0.97; '10, $1.11; '11, $1.49; '12, $1.49; '13, $1.28; '14, $1.46. Excl. non-recur. gain (loss): '01, $0.07; '08, $0.16; '09, ($0.22); '10, ($0.24); '11, $0.04; '12, ($0.03); '13, ($0.24); '14, ($0.11). Earnings may not sum due to rounding. Next egs. report due late February. (B) Div'ds paid early April, July, Oct., and late Dec. ■ Div. reinvest. plan avail. (C) Incl. reg. assets. In 2014: $357.2 mill., $5.23 per shr. (D) In mill., adj. for split.

Company's Financial Strength	A
Stock's Price Stability	95
Price Growth Persistence	50
Earnings Predictability	80

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Oct 10 2016

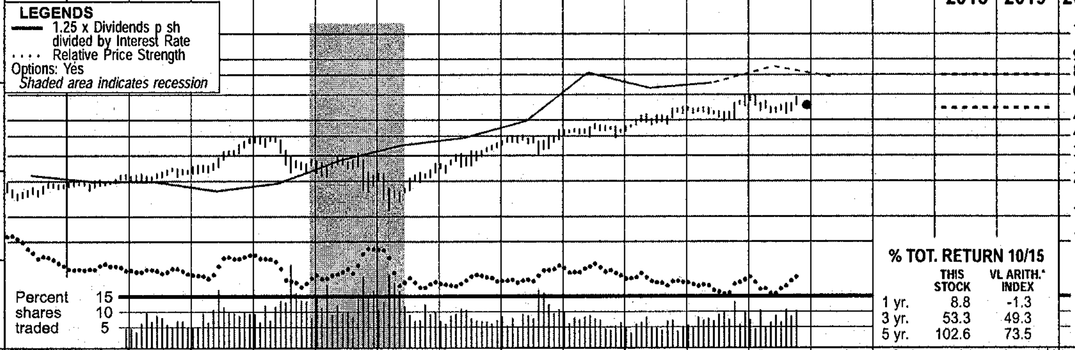
SOUTHWEST GAS NYSE-SWX

RECENT PRICE **56.73** | P/E RATIO **18.8** (Trailing: 20.4 Median: 16.0) | RELATIVE P/E RATIO **1.05** | DIV'D YLD **3.0%** | VALUE LINE

TIMELINESS 3 Lowered 6/12/15
SAFETY 3 Lowered 1/4/91
TECHNICAL 1 Raised 11/20/15
BETA .80 (1.00 = Market)

High:	26.2	28.1	39.4	39.9	33.3	29.5	37.3	43.2	46.1	56.0	64.2	63.7
Low:	21.5	23.5	26.0	26.5	21.1	17.1	26.3	32.1	39.0	42.0	47.2	51.3

Target Price Range
2018 | 2019 | 2020



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	80	(+40%)	11%
Low	55	(-5%)	3%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	3	0	0	0	0	0	0
to Sell	0	0	5	0	0	0	0	3	0

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	83	94	109
to Sell	87	81	80
Hld's(000)	35979	36094	36799

% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	8.8	-1.3
3 yr.	53.3	49.3
5 yr.	102.6	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
30.24	32.61	42.98	39.68	35.96	40.14	43.59	48.47	50.28	48.53	42.00	40.18	41.07	41.77	42.08	45.61	*50.50*	*51.55*	Revenues per sh	*55.75*
4.45	4.57	4.79	5.07	5.11	5.57	5.20	5.97	6.21	5.76	6.16	6.46	6.81	7.73	8.24	8.47	*8.45*	*9.00*	"Cash Flow" per sh	*11.25*
1.27	1.21	1.15	1.16	1.13	1.66	1.25	1.98	1.95	1.39	1.94	2.27	2.43	2.86	3.11	3.01	*2.85*	*3.20*	Earnings per sh A	*4.50*
.82	.82	.82	.82	.82	.82	.82	.82	.86	.90	.95	1.00	1.06	1.18	1.32	1.46	*1.62*	*1.74*	Div'ds Decl'd per sh B■†	*2.10*
7.41	7.04	8.17	8.50	7.03	8.23	7.49	8.27	7.96	6.79	4.81	4.73	8.29	8.57	7.86	8.53	*9.40*	*9.80*	Cap'l Spending per sh	*11.55*
16.31	16.82	17.27	17.91	18.42	19.18	19.10	21.58	22.98	23.49	24.44	25.62	26.66	28.35	30.47	31.95	*33.35*	*34.70*	Book Value per sh	*39.40*
30.99	31.71	32.49	33.29	34.23	36.79	39.33	41.77	42.81	44.19	45.09	45.56	45.96	46.15	46.36	46.52	*48.00*	*49.00*	Common Shs Outst'g C	*52.00*
21.1	16.0	19.0	19.9	19.2	14.3	20.6	15.9	17.3	20.3	12.2	14.0	15.7	15.0	15.8	17.9	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*15.0*
1.20	1.04	.97	1.09	1.09	.76	1.10	.86	.92	1.22	.81	.89	.98	.95	.89	.94			Relative P/E Ratio	*.95*
3.1%	4.2%	3.8%	3.6%	3.8%	3.5%	3.2%	2.6%	2.6%	3.2%	4.0%	3.2%	2.8%	2.8%	2.7%	2.7%			Avg Ann'l Div'd Yield	*3.1%*

CAPITAL STRUCTURE as of 9/30/15
Total Debt $1560.2 mill. **Due in 5 Yrs** $405.0 mill.
LT Debt $1540.4 mill. **LT Interest** $72.0 mill.
(Total interest coverage: 3.8x) (50% of Cap'l)
Leases, Uncapitalized Annual rentals $6.0 mill.
Pension Assets-12/14 $799.7 mill. **Oblig.** $1132.4 mill.

Pfd Stock None

Common Stock 47,375,398 shs.
as of 10/28/15

MARKET CAP: $2.7 billion (Mid Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		18-20
1714.3	2024.7	2152.1	2144.7	1893.8	1830.4	1887.2	1927.8	1950.8	2121.7	*2425*	*2525*	Revenues ($mill)	*2900*
48.1	80.5	83.2	61.0	87.5	103.9	112.3	133.3	145.3	141.1	*135*	*155*	Net Profit ($mill)	*235*
29.7%	37.3%	36.5%	40.1%	34.0%	34.7%	36.2%	36.2%	35.0%	35.7%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
2.8%	4.0%	3.9%	2.8%	4.6%	5.7%	6.0%	6.9%	7.4%	6.7%	*5.6%*	*6.1%*	Net Profit Margin	*8.1%*
63.8%	60.6%	58.1%	55.3%	53.5%	49.1%	43.2%	49.2%	49.4%	52.4%	*49.5%*	*49.5%*	Long-Term Debt Ratio	*47.5%*
36.2%	39.4%	41.9%	44.7%	46.5%	50.9%	56.8%	50.8%	50.6%	47.6%	*50.5%*	*50.5%*	Common Equity Ratio	*52.5%*
2076.0	2287.8	2349.7	2323.3	2371.4	2291.7	2155.9	2576.9	2793.7	3123.9	*3175*	*3350*	Total Capital ($mill)	*3900*
2489.1	2668.1	2845.3	2983.3	3034.5	3072.4	3218.9	3343.8	3486.1	3658.4	*3850*	*4050*	Net Plant ($mill)	*4500*
4.3%	5.5%	5.5%	4.5%	5.4%	6.1%	6.4%	6.4%	6.3%	5.7%	*5.5%*	*5.5%*	Return on Total Cap'l	*7.0%*
6.4%	8.9%	8.5%	5.9%	7.9%	8.9%	9.2%	10.2%	10.3%	9.5%	*8.5%*	*9.0%*	Return on Shr. Equity	*11.5%*
6.4%	8.9%	8.5%	5.9%	7.9%	8.9%	9.2%	10.2%	10.3%	9.5%	*8.5%*	*9.0%*	Return on Com Equity	*11.5%*
2.2%	5.2%	4.8%	2.1%	4.1%	5.1%	5.3%	6.1%	6.1%	5.0%	*3.5%*	*4.0%*	Retained to Com Eq	*6.0%*
65%	42%	44%	63%	48%	43%	43%	40%	41%	47%	*58%*	*55%*	All Div'ds to Net Prof	*46%*

CURRENT POSITION ($MILL.)	2013	2014	9/30/15
Cash Assets	41.1	39.6	33.0
Other	453.6	567.2	445.6
Current Assets	494.7	606.8	478.6
Accts Payable	183.5	168.0	129.3
Debt Due	11.1	24.2	19.8
Other	239.6	277.9	345.6
Current Liab.	434.2	470.1	494.7
Fix. Chg. Cov.	430%	395%	383%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	1.0%	-1.5%	4.5%
"Cash Flow"	4.5%	6.0%	5.5%
Earnings	8.5%	11.0%	7.0%
Dividends	5.0%	8.0%	8.0%
Book Value	5.0%	5.0%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) D Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	657.6	409.8	371.8	488.6	1927.8
2013	613.5	411.6	387.3	538.4	1950.8
2014	608.4	453.2	432.5	627.7	2121.7
2015	734.2	538.6	505.4	*646.8*	*2425*
2016	*760*	*560*	*520*	*685*	*2525*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	1.70	d.08	d.09	1.33	2.86
2013	1.73	.22	d.06	1.22	3.11
2014	1.51	.21	.04	1.25	3.01
2015	1.53	.10	d.10	*1.32*	*2.85*
2016	*1.60*	*.20*	*Nil*	*1.40*	*3.20*

Cal-endar	QUARTERLY DIVIDENDS PAID B■† Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.250	.265	.265	.265	1.05
2012	.265	.295	.295	.295	1.15
2013	.295	.330	.330	.330	1.29
2014	.330	.365	.365	.365	1.43
2015	.365	.405	.405	.405	

BUSINESS: Southwest Gas Corporation is a regulated gas distributor serving approximately 1.9 million customers in sections of Arizona, Nevada, and California. Comprised of two business segments: natural gas operations and construction services. 2014 margin mix: residential and small commercial, 85%; large commercial and industrial, 4%; transportation, 11%. Total throughput: 1.9 billion therms. Has 6,232 employees. Off. & Dir. own 1.5% of common stock; BlackRock Inc., 9.6%; The Vanguard Group, Inc., 6.9%; GAMCO Investors, Inc., 6.8%; T. Rowe Price Assoc., Inc., 6.5% (3/15 Proxy). Chairman: Michael J. Melarkey. Pres. & CEO: John Hester. Inc.: CA. Address: 5241 Spring Mountain Road, Las Vegas, Nevada 89193. Tel.: 702-876-7237. Internet: www.swgas.com.

Shares of Southwest Gas have pulled back in price in recent weeks, following a nice rally in September and October. The company reported mixed results for the September interim. Revenues advanced roughly 17%, on a year-to-year basis. Construction services revenue increased significantly, thanks to additional pipe replacement work and acquisitions completed in the fourth quarter of last year. This business reported net income of $14.2 million, up about 6% from the prior-year figure. But despite support from growth in the customer base and rate relief, utility revenues decreased roughly 3%. Moreover, performance here was hurt by a reduction in the cash surrender value of company-owned life insurance policies, due to weakness in equity markets during the quarter. Greater employee-related costs also affected results, and the utility reported a net loss of $18.9 million. Overall, Southwest Gas posted a deficit of $0.10 per share for the recent period.

We envision solid performance in the coming quarters. The construction services line appears well positioned for growth with a strong base of utility clients and multiyear pipeline replacement programs. This line ought to experience healthy demand, given the need to replace aging infrastructure. Strength in the U.S. dollar may present a near-term headwind for this unit's Canadian business, though. Elsewhere, the natural gas utility operation should continue to benefit from customer growth, infrastructure tracker mechanisms, and expansion projects. Greater operating expenses may well be at least a partial offset here, though. Overall, we anticipate further top-line growth and a nice share-earnings rebound for Southwest Gas in 2016.

This issue is neutrally ranked for year-ahead performance. However, we do anticipate decent total returns for the stock over the pull to late decade. This should be supported by healthy growth in revenues and share earnings for the company in the coming years. The dividend yield is decent for a gas utility, and prospects for growth in the payout are very good. Moreover, Southwest Gas earns good marks for Price Stability, Price Growth Persistence, and Earnings Predictability.

Michael Napoli, CFA *December 4, 2015*

(A) Diluted earnings. Excl. nonrec. gains (losses): '02, (10¢); '05, (11¢); '06, 7¢. Next egs. report due late February. (B) Dividends historically paid early March, June, September, and December. ■† Div'd reinvestment and stock purchase plan avail. (C) In millions. (D) Totals may not sum due to rounding.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	85
Earnings Predictability	80

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Oct 10 2016

WGL HOLDINGS NYSE-WGL

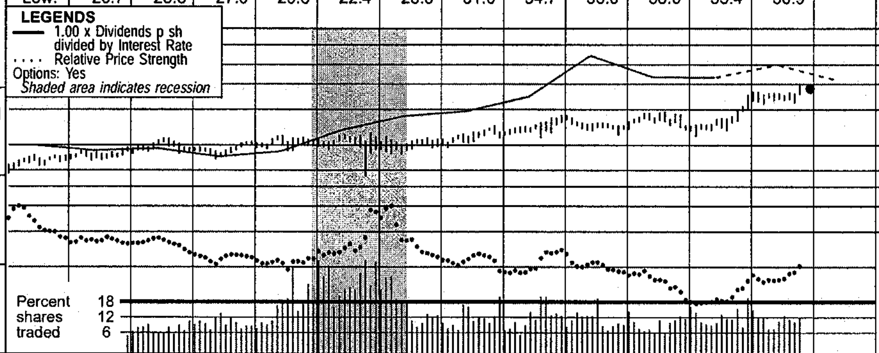
RECENT PRICE 61.03 | P/E RATIO 19.6 (Trailing: 19.3, Median: 15.0) | RELATIVE P/E RATIO 1.09 | DIV'D YLD 3.0% | VALUE LINE

TIMELINESS 3 Raised 3/27/15
SAFETY 1 Raised 4/2/93
TECHNICAL 2 Raised 11/20/15
BETA .75 (1.00 = Market)

High:	31.4	34.8	33.6	35.9	37.1	35.5	40.0	45.0	45.0	47.0	56.8	63.2
Low:	26.7	28.8	27.0	29.8	22.4	28.6	31.0	34.7	36.0	38.0	35.4	50.9

Target Price Range 2018 | 2019 | 2020

LEGENDS
— 1.00 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



2018-20 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(Nil)	3%
Low	50	(-20%)	-1%

Insider Decisions

	J	F	M	A	M	J	J	A	S
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	1	0	0	0	0	0	0
to Sell	0	1	1	0	0	0	0	0	1

Institutional Decisions

	4Q2014	1Q2015	2Q2015
to Buy	94	116	117
to Sell	116	99	104
Hld's(000)	31806	31712	32440

Percent shares traded 18 12 6

% TOT. RETURN 10/15

	THIS STOCK	VL ARITH.* INDEX
1 yr.	36.8	-1.3
3 yr.	73.7	49.3
5 yr.	93.9	73.5

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
20.92	22.19	29.80	32.63	42.45	42.93	44.94	53.96	53.51	52.65	53.98	53.60	53.75	47.07	47.70	53.73	53.42	54.00	Revenues per sh A	59.00
2.74	3.20	3.24	2.63	4.00	3.87	3.97	3.84	3.89	4.34	4.44	4.11	4.01	4.53	4.29	4.83	5.60	5.30	"Cash Flow" per sh	5.80
1.47	1.79	1.88	1.14	2.30	1.98	2.13	1.94	2.09	2.44	2.53	2.27	2.25	2.68	2.31	2.68	3.16	3.10	Earnings per sh B	3.55
1.22	1.24	1.26	1.27	1.28	1.30	1.32	1.35	1.37	1.41	1.47	1.50	1.55	1.59	1.66	1.72	1.83	1.87	Div'ds Decl'd per sh C■	1.99
3.42	2.67	2.68	3.34	2.65	2.33	2.32	3.27	3.33	2.70	2.77	2.57	3.94	4.87	6.04	7.63	9.32	16.70	Cap'l Spending per sh	20.00
14.72	15.31	16.24	15.78	16.25	16.95	17.80	18.86	19.83	20.99	21.89	22.82	23.49	24.64	24.65	24.08	24.97	26.35	Book Value per sh D	30.55
46.47	46.47	48.54	48.56	48.63	48.67	48.65	48.89	49.45	49.92	50.14	50.54	51.20	51.52	51.70	51.76	49.79	50.00	Common Shs Outst'g E	50.00
17.3	14.6	14.7	23.1	11.1	14.2	14.7	15.5	15.6	13.7	12.6	15.1	17.0	15.3	18.2	15.2	17.0		Avg Ann'l P/E Ratio	15.0
.99	.95	.75	1.26	.63	.75	.78	.84	.83	.82	.84	.96	1.07	.97	1.02	.80	.93		Relative P/E Ratio	.95
4.8%	4.8%	4.6%	4.8%	5.0%	4.6%	4.2%	4.5%	4.2%	4.2%	4.6%	4.4%	4.1%	3.9%	3.9%	4.2%	3.4%		Avg Ann'l Div'd Yield	4.0%

CAPITAL STRUCTURE as of 9/30/15
Total Debt $1301.2 mill. **Due in 5 Yrs** $95.0 mill.
LT Debt $944.2 mill. **LT Interest** $37.7 mill.
(LT interest earned: 6.2x; total interest coverage: 5.7x) (43% of Total Capital)
Pension Assets-9/14 $1,218.7 mill.
Oblig. $1,247.4 mill.
Preferred Stock $28.2 mill. **Pfd. Div'd** $1.3 mill.

Common Stock 49,831,775 shs.
as of 10/31/15

MARKET CAP: $3.0 billion (Mid Cap)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC	18-20
2186.3	2637.9	2646.0	2628.2	2706.9	2708.9	2751.5	2425.3	2466.1	2780.9	2659.8	2700	Revenues ($mill) A	2950
104.8	96.0	102.9	122.9	128.7	115.0	115.5	138.4	119.7	139.0	158.2	155	Net Profit ($mill)	175
37.4%	39.0%	39.1%	37.1%	39.1%	38.7%	42.4%	40.1%	30.2%	29.0%	39.0%	39.0%	Income Tax Rate	39.0%
4.8%	3.6%	3.9%	4.7%	4.8%	4.2%	4.2%	5.7%	4.9%	5.0%	6.0%	5.8%	Net Profit Margin	6.0%
39.5%	37.8%	37.9%	35.9%	33.3%	33.4%	32.3%	31.2%	28.7%	34.8%	42.6%	43.0%	Long-Term Debt Ratio	47.5%
58.6%	60.4%	60.3%	62.4%	65.0%	65.0%	66.2%	67.3%	69.8%	63.8%	56.1%	56.0%	Common Equity Ratio	51.5%
1478.1	1526.1	1625.4	1679.5	1687.7	1774.4	1818.1	1886.9	1826.8	1954.0	2215.6	2345	Total Capital ($mill)	2955
1969.7	2067.9	2150.4	2208.3	2269.1	2346.2	2489.9	2667.4	2907.5	3314.4	3672.7	4070	Net Plant ($mill)	5535
8.5%	7.6%	7.6%	8.5%	8.8%	7.6%	7.5%	8.3%	7.5%	8.1%	8.3%	8.0%	Return on Total Cap'l	7.5%
11.7%	10.1%	10.2%	11.4%	11.4%	9.7%	9.4%	10.7%	9.2%	10.9%	12.7%	12.0%	Return on Shr. Equity	12.0%
12.0%	10.3%	10.4%	11.6%	11.6%	9.9%	9.5%	10.8%	9.3%	11.0%	12.7%	12.0%	Return on Com Equity	12.0%
4.6%	3.2%	3.5%	5.0%	5.0%	3.3%	3.4%	4.8%	2.6%	4.3%	5.4%	4.5%	Retained to Com Eq	5.0%
62%	69%	66%	57%	57%	67%	64%	56%	72%	62%	57%	60%	All Div'ds to Net Prof	56%

CURRENT POSITION ($MILL.)	2013	2014	9/30/15
Cash Assets	3.5	8.8	6.7
Other	816.5	826.7	774.7
Current Assets	820.0	835.5	781.4
Accts Payable	270.7	313.2	325.1
Debt Due	440.1	473.5	357.0
Other	239.3	233.6	300.8
Current Liab.	950.1	1020.3	982.9
Fix. Chg. Cov.	535%	535%	535%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '12-'14 to '18-'20
Revenues	2.5%	-1.5%	3.0%
"Cash Flow"	2.5%	1.5%	4.0%
Earnings	3.5%	1.5%	5.5%
Dividends	2.5%	3.0%	3.0%
Book Value	4.0%	3.0%	4.0%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	727.7	839.4	438.3	419.8	2425.3
2013	686.7	891.4	478.1	409.9	2466.1
2014	680.5	1174.0	467.5	458.9	2780.9
2015	749.2	1001.7	441.2	467.7	2659.8
2016	760	1010	450	480	2700

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2012	1.13	1.58	.08	d.11	2.68
2013	1.14	1.75	d.03	d.55	2.31
2014	.99	1.84	.02	d.17	2.68
2015	1.16	2.02	.22	d.23	3.16
2016	1.14	2.00	.20	d.24	3.10

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.378	.39	.39	.39	1.55
2012	.39	.40	.40	.40	1.59
2013	.40	.42	.42	.42	1.66
2014	.42	.44	.44	.44	1.74
2015	.44	.463	.463	.463	

BUSINESS: WGL Holdings, Inc. is the parent of Washington Gas Light, a natural gas distributor in Washington, D.C. and adjacent areas of VA and MD to resident'l and comm'l users (1,126,300 meters). Hampshire Gas, a federally regulated sub., operates an underground gas-storage facility in WV. Non-regulated subs.: Wash. Gas Energy Svcs. sells and delivers natural gas and provides energy-related products in the D.C. metro area; Wash. Gas Energy Sys. designs/installs comm'l heating, ventilating, and air cond. systems. American Century owns 9.4% of common stock; Off./dir. less than 1% (1/15 proxy). Chrmn. & CEO: Terry D. McCallister. Inc.: D.C. and VA. Addr.: 101 Const. Ave., N.W., Washington, D.C. 20080. Tel.: 202-624-6410. Internet: www.wglholdings.com.

Since our September review, shares of WGL Holdings are trading 10% higher in price. This advance likely reflects WGL's healthy bottom-line gain for fiscal 2015 (ended September 30th). At the same time, the broader market averages also staged a nice rebound.

Annual results for the recently completed year were a bit mixed. Indeed, the top line declined roughly 4.5%, to $2.65 billion. This stemmed from an 8% decline in utility revenues and a 0.5% reduction in nonutility volumes. That said, we do view this as a technicality due to lower year-over-year natural gas prices, and not a result of reduced system throughput. In fact, the utility segment added 12,800 active customer meters last year. Overall operating expenses declined 270 basis points as a function of revenues. Combined, these factors equated to a solid, almost 18% earnings increase, to $3.16 a share, last year. This was markedly above our earlier expectation.

Nonetheless, we have left our fiscal 2016 top- and bottom-line estimates unchanged for the time being. WGL Holdings' utility operations should continue to benefit from rising customer accounts and increased volumes as a result of its accelerated investment program, which should boost system capacity and reliability. However, depressed commodity prices will likely continue to make for difficult year-to-year comparisons.

A healthy capital budget augurs well for prospects. The company has about $835 million worth of growth projects budgeted for 2016. Moreover, that figure jumps to $3.3 billion for all projects planned from 2016-2020. Some of the most notable ones are the Constitution Pipeline, Central Penn Line, and Mountain Valley Pipeline projects. New compressed natural gas fueling stations and an expansion of its solar capabilities should also complement existing operations.

At the moment, these neutrally ranked shares are an average selection for income generation. WGL's dividend yield is in line with the industry average. However, the issue was trading above our Target Price Range, suggesting little-to-no capital appreciation potential for the pull to 2018-2020.

Bryan J. Fong — *December 4, 2015*

(A) Fiscal years end Sept. 30th.
(B) Based on diluted shares. Excludes nonrecurring losses: '01, (13¢); '02, (34¢); '07, (4¢); '08, (14¢) discontinued operations: '06, (15¢). Qtly egs. may not sum to total, due to change in shares outstanding. Next earnings report due late Jan. (C) Dividends historically paid early February, May, August, and November. ■ Dividend reinvestment plan available.
(D) Includes deferred charges and intangibles. '14: $720.5 million, $14.49/sh.
(E) In millions.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	75