

INFORMATION SHEET

PRESIDING: Commissioner Brown-Bland, Chairman Finley, Commissioners Beatty, Bailey, Dockham,
Patterson, Gray

PLACE: Dobbs Building, Raleigh, North Carolina

DATE: August 30, 2016

TIME: 1:35 p.m. to 4:35 p.m.

DOCKET NO.: G-5, Sub 565

COMPANY: Public Service Company of North Carolina, Inc.

DESCRIPTION: Application of Public Service Company of North Carolina, Inc.,
for a General Increase in its Rates and Charges

Vol. 6
APPEARANCES

FOR PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC

William R. Pittman, Esq.

B. Craig Collins, Esq.

Mary Lynne Grigg, Esq.

FOR THE NORTH CAROLINA ATTORNEY GENERAL

Margaret A. Force, Esq.

FOR EVERGREEN PACKAGING

Adam Olls, Esq.

Jeffrey D. McKinney, Esq.

FOR THE USING AND CONSUMING PUBLIC

Gina C. Holt, Esq.

William Grantmyre, Esq.

Heather Fennell, Esq.

WITNESSES

Robert B. Hevert (continued)

George B. Ratchford

Candace A. Paton

Sharon D. Boone

Rose M. Jackson

Prefiled Testimony of Julie G. Perry Entered - no live testimony

Michelle M. Boswell

Jan A. Larsen

FILED

SEP 02 2016

Clerk's Office
N.C. Utilities Commission

EXHIBITS

- ✓ Attorney General Hevert Cross Examination Exhibits 1-3 --/A
- ✓ Attorney General Hevert Cross Examination Exhibit 4 I/A
- ✓ Attorney General Hevert Cross Examination Exhibit 5 I/A
- ✓ Attorney General Hevert Cross Examination Exhibit 6 I/A
- ✓ Exhibits RBH 1-13 --/A
- ✓ Supplemental RBH 1-2 --/A
- ✓ Ratchford Exhibit 1 I/A
- ✓ Paton Exhibits 1-13 I/A
- ✓ Paton Supplemental Exhibits 1-2 I/A
- ✓ Attorney General Paton Cross Examination Exhibit 1 I/--
- ✓ Attorney General Paton Cross Examination Exhibit 2 I/---
- ✓ Boone Exhibits 1-7. I/A
- ✓ Public Service Company of North Carolina, Inc. Application ---/A
- ✓ Revised Boswell Exhibit 1 I/--
- ✓ Larson Exhibits A, B, Revised C I/A

COPIES ORDERED: Email:- Force, Boswell, Perry, Hoard, Larsen, Patel, Grantmyre, Holt, Fennell

REPORTED BY: Linda Garrett
TRANSCRIBED BY: Linda Garrett
DATE TRANSCRIBED: September 1, 2016

TRANSCRIPT PAGES: 135
PREFILED PAGES: 97-

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 8/30/16 DOCKET #: G.S., Sub 565
NAME AND TITLE OF ATTORNEY William R. Pittman
FIRM NAME _____
ADDRESS PO Box 706
CITY Raleigh ZIP 27602

APPEARING FOR: _____

APPLICANT COMPLAINANT _____ INTERVENOR _____
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC web site at [HTTP://NCUC.commerce.state.nc.us/ocohsron.html](http://ncuc.commerce.state.nc.us/ocohsron.html) under the respective docket number.

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Signature: _____

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 8/29/16 DOCKET #: G-5 SUB 565
NAME AND TITLE OF ATTORNEY CRAIG COLLINS, ASSOC. GEN. COUNSEL
FIRM NAME SCANA
ADDRESS MC 0222 220 OPERATION WAY
CITY CAYCE, SC ZIP 29033

APPEARING FOR:

APPLICANT	<input checked="" type="checkbox"/>	COMPLAINANT	<input type="checkbox"/>	INTERVENER	<input type="checkbox"/>
PROTESTANT	<input type="checkbox"/>	RESPONDENT	<input type="checkbox"/>	DEFENDANT	<input type="checkbox"/>

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Name: _____
Phone #: _____
Email: _____

Signature: *B. Craig Collins*

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/29/16 DOCKET #: 6-5 Sub 565
NAME AND TITLE OF ATTORNEY Mary Lynne Grigg
FIRM NAME McGuire Woods LLP
ADDRESS 2600 Two Towers Sq
CITY Raleigh ZIP 27601

APPEARING FOR:

APPLICANT COMPLAINANT _____ INTERVENER _____
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUIC web site at [HTTP://NCUIC.commerce.state.nc.us/ncuic/ncuic.asp](http://ncuic.commerce.state.nc.us/ncuic/ncuic.asp) under the respective docket number.

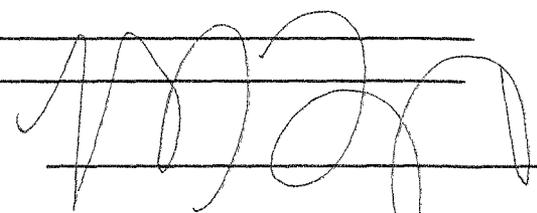
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Phone #: _____

Email: _____

Signature:  _____

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE Aug 29, 2015 DOCKET #: G-5, Sub 565
NAME AND TITLE OF ATTORNEY Margaret Force
FIRM NAME Attorney General's Office
ADDRESS P O Box 629
CITY Raleigh ZIP 27602

APPEARING FOR: The Usung and Consuming Public

APPLICANT	COMPLAINANT	INTERVENER	<input checked="" type="checkbox"/>
PROTESTANT	RESPONDENT	DEFENDANT	<input type="checkbox"/>

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUCC web site at <http://NCUCC.commerce.state.nc.us/occurson.html> under the respective docket number.

1 Number of Electronic Copies for regular transcript. There will be a charge of \$5.00 for each emailed copy. Please indicate your name, phone number and email below.

1 Number of copies of Confidential portion of regular transcript assuming a confidentiality agreement has been signed. This will be mailed.

Name: Margaret Force
Phone #: 919-716-6053
Email: P.force@ncdoj.gov

Signature: Margaret Force

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Signature: Margaret Force

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE August 30, 2016 DOCKET #: 6-5, Sub 565
NAME AND TITLE OF ATTORNEY Adam Olls, Attorney for Evergreen Packaging
FIRM NAME Bailey & Dixon, LLP
ADDRESS 434 Fayetteville Street, Suite 2500
CITY Raleigh ZIP 27601

APPEARING FOR: Blue Ridge Paper & Products, Inc & b/c Evergreen Packaging

APPLICANT _____	COMPLAINANT _____	INTERVENER <input checked="" type="checkbox"/>
PROTESTANT _____	RESPONDENT _____	DEFENDANT _____

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Name: _____
Phone #: _____
Email: _____

Signature: _____

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE Aug 30, 2016 DOCKET #: G-8, SUB 565
NAME AND TITLE OF ATTORNEY JEFFREY D. MCKINNEY
FIRM NAME BAILEY & DIXON, LLP
ADDRESS PO Box 1351
CITY RALPH ZIP 27602

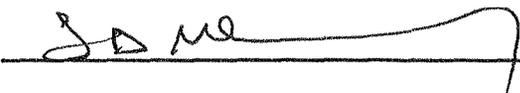
APPEARING FOR: BLUE RIDGE PAPER PRODUCTS INC., D/B/A
EVERGREEN PACKAGING
APPLICANT _____ COMPLAINANT _____ INTERVENER X
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

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Signature: 

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
PUBLIC STAFF - APPEARANCE SLIP

DATE August 29, 2016 DOCKET #: G-5, Sub 565

PUBLIC STAFF MEMBER Gina C. Holt */William Grantmyre/ Heather Fennell*

ORDER FOR TRANSCRIPT OF TESTIMONY TO BE **EMAILED** TO THE PUBLIC STAFF - PLEASE INDICATE YOUR DIVISION AS WELL AS YOUR EMAIL ADDRESS BELOW:

ACCOUNTING michelle.boswell@psncuc.nc.gov;

julie.perry@psncuc.nc.gov; jim.hoard@psncuc.nc.gov

WATER _____

COMMUNICATIONS _____

ELECTRIC _____

GAS jan.larsen@psncuc.nc.gov; neha.patel@psncuc.nc.gov

TRANSPORTATION _____

ECONOMICS _____

LEGAL william.grantmyre@psncuc.nc.gov;

gina.holt@psncuc.nc.gov; heather.fennell@psncuc.nc.gov;

CONSUMER SERVICES _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC web site at [HTTP://NCUC.commerce.state.nc.us/docksrch.html](http://NCUC.commerce.state.nc.us/docksrch.html) under the respective docket number.

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Signature of Public Staff Member

Public Service Company of North Carolina, Inc
 Docket No G-5, Sub 565
 Public Staff Cost of Capital Data Request No 2
 Response 2-21

SCANA	Dec-10		Mar-11		Jun-11		Sep-11	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$4,464,958,333	51.99%	\$4,558,291,667	51.39%	\$4,647,556,667	51.65%	\$4,646,306,667	51.25%
Short-Term Debt	419,732,000	4.89%	512,154,000	5.77%	546,024,000	6.07%	580,471,000	6.40%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	3,703,383,882	43.12%	3,800,105,524	42.84%	3,804,844,715	42.28%	3,838,390,170	42.34%
Total Capitalization	<u>\$8,588,174,215</u>	<u>100.00%</u>	<u>\$8,870,651,190</u>	<u>100.00%</u>	<u>\$8,998,525,382</u>	<u>100.00%</u>	<u>\$9,065,267,836</u>	<u>100.00%</u>

SCANA	Dec-11		Mar-12		Jun-12		Sep-12	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$4,638,106,667	50.52%	\$4,880,995,000	51.69%	\$4,873,395,000	51.01%	\$5,122,145,000	53.30%
Short-Term Debt	653,184,000	7.12%	585,041,000	6.20%	670,058,000	7.01%	393,662,000	4.10%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	3,888,857,698	42.36%	3,977,283,360	42.12%	4,010,130,619	41.97%	4,094,809,722	42.61%
Total Capitalization	<u>\$9,180,248,364</u>	<u>100.00%</u>	<u>\$9,443,419,360</u>	<u>100.00%</u>	<u>\$9,553,683,619</u>	<u>100.00%</u>	<u>\$9,610,716,722</u>	<u>100.00%</u>

SCANA	Dec-12		Mar-13		Jun-13		Sep-13	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$5,088,630,000	51.58%	\$5,079,268,333	50.43%	\$5,324,868,333	52.54%	\$5,323,618,333	51.69%
Short-Term Debt	622,968,000	6.31%	529,731,000	5.26%	303,590,000	3.00%	378,289,000	3.67%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	4,154,707,319	42.11%	4,462,848,637	44.31%	4,506,233,720	44.46%	4,597,483,352	44.64%
Total Capitalization	<u>\$9,866,405,319</u>	<u>100.00%</u>	<u>\$10,071,947,970</u>	<u>100.00%</u>	<u>\$10,134,792,053</u>	<u>100.00%</u>	<u>\$10,299,490,685</u>	<u>100.00%</u>

Public Service Company of North Carolina, Inc
Docket No G-5, Sub 565
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Response 2-21

SCANA	Dec-13		Mar-14		Jun-14		Sep-14	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$5,323,618,333	51.37%	\$5,316,951,667	49.76%	\$5,612,551,667	51.66%	\$5,612,551,667	50.80%
Short-Term Debt	376,164,000	3.63%	560,181,000	5.24%	397,112,000	3.66%	487,360,000	4.41%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	4,664,291,321	45.00%	4,808,512,285	45.00%	4,854,138,516	44.68%	4,947,491,566	44.78%
Total Capitalization	\$10,364,173,655	100.00%	\$10,685,744,952	100.00%	\$10,863,902,183	100.00%	\$11,047,503,233	100.00%

SCANA	Dec-14		Mar-15		Jun-15		Sep-15	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$5,576,701,667	48.57%	\$5,420,035,000	47.67%	\$5,915,635,000	51.26%	\$5,915,635,000	51.00%
Short-Term Debt	917,997,000	8.00%	625,218,000	5.50%	272,759,000	2.36%	263,759,000	2.27%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	4,986,591,238	43.43%	5,324,293,601	46.83%	5,351,800,801	46.37%	5,418,702,576	46.72%
Total Capitalization	\$11,481,389,905	100.00%	\$11,369,646,601	100.00%	\$11,540,294,801	100.00%	\$11,598,196,576	100.00%

SCANA	Dec-15		Mar-16		Jun-16	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$5,915,635,000	49.75%	\$5,908,968,333	47.79%	\$6,504,568,333	51.05%
Short-Term Debt	531,404,000	4.47%	916,806,000	7.41%	668,527,000	5.25%
Preferred Stock	100,000	0.00%	100,000	0.00%	100,000	0.00%
Common Equity	5,443,508,331	45.78%	5,539,531,675	44.80%	5,568,067,807	43.70%
Total Capitalization	\$11,890,647,331	100.00%	\$12,365,406,008	100.00%	\$12,741,263,140	100.00%

Public Service Company of North Carolina, Inc
Docket No G-5, Sub 565
Public Staff Cost of Capital Data Request No 2
Response 2-21

PSNC	Dec-10		Mar-11		Jun-11		Sep-11	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$54,075,652	6.26%	\$353,838,884	34.12%	\$349,610,059	34.11%	\$349,668,973	34.53%
* Short-Term Debt	154,089,652	17.85%	4,101,760	0.40%	4,428,448	0.43%	4,286,329	0.42%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Common Equity	655,255,551	75.89%	679,041,578	65.48%	670,884,856	65.46%	658,740,340	65.05%
Total Capitalization	<u>\$863,420,855</u>	<u>100.00%</u>	<u>\$1,036,982,222</u>	<u>100.00%</u>	<u>\$1,024,923,363</u>	<u>100.00%</u>	<u>\$1,012,695,642</u>	<u>100.00%</u>

PSNC	Dec-11		Mar-12		Jun-12		Sep-12	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$349,501,742	34.11%	\$349,242,618	33.66%	\$352,263,417	34.21%	\$352,000,814	34.53%
* Short-Term Debt	14,215,434	1.39%	4,231,743	0.41%	964,825	0.09%	977,958	0.10%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Common Equity	660,881,312	64.50%	684,121,619	65.93%	676,575,212	65.70%	666,303,221	65.37%
Total Capitalization	<u>\$1,024,598,488</u>	<u>100.00%</u>	<u>\$1,037,595,980</u>	<u>100.00%</u>	<u>\$1,029,803,454</u>	<u>100.00%</u>	<u>\$1,019,281,993</u>	<u>100.00%</u>

PSNC	Dec-12		Mar-13		Jun-13		Sep-13	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$351,734,636	32.73%	\$351,464,837	32.98%	\$351,191,364	33.10%	\$350,914,170	33.50%
* Short-Term Debt	33,291,270	3.10%	1,004,762	0.09%	1,018,439	0.10%	1,032,301	0.10%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Common Equity	689,618,076	64.17%	713,080,748	66.92%	708,804,832	66.80%	695,627,336	66.40%
Total Capitalization	<u>\$1,074,643,982</u>	<u>100.00%</u>	<u>\$1,065,550,347</u>	<u>100.00%</u>	<u>\$1,061,014,635</u>	<u>100.00%</u>	<u>\$1,047,573,807</u>	<u>100.00%</u>

* Short-term debt includes current portion of long-term debt

Public Service Company of North Carolina, Inc
Docket No G-5, Sub 565
Public Staff Cost of Capital Data Request No 2
Response 2-21

PSNC	Dec-13		Mar-14		Jun-14		Sep-14	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$350,633,206	33.14%	\$350,348,415	32.31%	\$350,059,747	32.40%	\$349,767,149	32.70%
* Short-Term Debt	1,046,350	0.10%	1,060,592	0.10%	1,075,028	0.10%	1,089,661	0.10%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Common Equity	706,511,147	66.77%	733,000,314	67.59%	729,197,779	67.50%	718,910,258	67.20%
Total Capitalization	<u>\$1,058,190,703</u>	<u>100.00%</u>	<u>\$1,084,409,321</u>	<u>100.00%</u>	<u>\$1,080,332,554</u>	<u>100.00%</u>	<u>\$1,069,767,068</u>	<u>100.00%</u>

PSNC	Dec-14		Mar-15		Jun-15		Sep-15	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$349,470,568	31.40%	\$349,169,949	31.53%	\$348,665,225	31.71%	\$349,143,190	31.65%
* Short-Term Debt	31,104,494	2.79%	1,119,529	0.10%	1,134,775	0.10%	16,856,810	1.53%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Common Equity	732,485,835	65.81%	757,002,188	68.37%	750,254,197	68.19%	737,055,692	66.82%
Total Capitalization	<u>\$1,113,060,897</u>	<u>100.00%</u>	<u>\$1,107,291,666</u>	<u>100.00%</u>	<u>\$1,100,254,197</u>	<u>100.00%</u>	<u>\$1,103,055,692</u>	<u>100.00%</u>

PSNC	Dec-15		Mar-16		Jun-16	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Long-Term Debt	\$349,424,938	29.70%	\$349,710,522	29.97%	\$450,000,000	36.85%
* Short-Term Debt	74,394,062	6.32%	37,389,478	3.20%	0	0.00%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%
Common Equity	752,513,413	63.97%	779,696,058	66.82%	771,186,591	63.15%
Total Capitalization	<u>\$1,176,332,413</u>	<u>100.00%</u>	<u>\$1,166,796,058</u>	<u>100.00%</u>	<u>\$1,221,186,591</u>	<u>100.00%</u>

SCANA CORP. NYSE:SCG				RECENT PRICE	59.63	P/E RATIO	15.4 (Trailing: 15.5 Median: 14.0)	RELATIVE P/E RATIO	0.87	DIV'D YLD	3.7%	VALUE LINE														
TIMELINESS 4 Lowered 11/13/15	High: 39.7	43.7	42.4	45.5	44.1	38.6	42.0	45.5	50.3	54.4	63.4	65.6	Target Price Range 2018 2019	2020												
SAFETY 2 Lowered 9/10/09	Low: 32.8	36.6	36.9	32.9	27.8	26.0	34.2	34.6	43.3	44.7	45.6	49.9	2018	2019												
TECHNICAL 2 Raised 11/20/15	LEGENDS --- 0.75 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area indicates recession																									
BETA .75 (1.00 = Market)	2018-20 PROJECTIONS Price Gain Ann'l Total Return High 65 (+10%) 6% Low 50 (-15%) Nil																									
Insider Decisions D J F M A M J J A 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 1 0 0 0 0 0 0																										
Institutional Decisions 4Q2014 1Q2015 2Q2015 to Buy 194 186 197 to Sell 172 199 181 Hld's(000) 81369 82049 82455																										
% TOT. RETURN 10/15 THIS STOCK VL ARITH. INDEX 1 yr. 12.4 -1.3 3 yr. 36.7 49.3 5 yr. 79.9 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																										
19.93	32.78	32.95	26.65	30.85	34.53	41.66	39.11	39.61	45.16	34.35	36.10	33.95	31.63	31.88	34.70	31.80	33.20	Revenues per sh	37.00							
3.15	4.43	4.55	4.56	4.95	5.28	7.43	5.68	5.73	5.86	5.63	5.91	6.01	6.30	6.53	6.91	7.15	7.15	"Cash Flow" per sh	8.25							
1.44	2.12	2.15	2.38	2.50	2.67	2.78	2.59	2.74	2.95	2.85	2.98	2.97	3.15	3.39	3.79	3.85	3.95	Earnings per sh ^A	4.50							
1.32	1.15	1.20	1.30	1.38	1.46	1.56	1.68	1.76	1.84	1.88	1.90	1.94	1.98	2.03	2.10	2.18	2.26	Div'd Decl'd per sh ^B	2.50							
2.37	3.28	4.99	6.41	6.94	4.86	3.38	4.52	6.21	7.68	7.41	6.87	6.81	8.16	7.84	7.65	10.95	13.40	Cap'l Spending per sh	8.75							
20.27	19.40	20.95	19.64	20.82	21.78	23.35	24.39	25.37	25.85	27.63	29.05	29.94	31.47	33.08	34.95	38.10	39.85	Book Value per sh ^C	46.50							
103.57	104.73	104.73	110.83	110.74	112.52	114.67	116.67	116.67	117.78	123.34	127.45	129.88	132.01	141.00	142.70	143.00	143.00	Common Shs Outst'g ^D	149.00							
17.5	12.5	12.6	12.2	13.0	13.6	14.4	15.4	15.0	12.7	11.6	12.9	13.7	14.8	14.4	13.7	13.7	13.7	Avg Ann'l P/E Ratio	13.0							
1.00	.81	.65	.67	.74	.72	.77	.83	.80	.76	.77	.82	.86	.94	.81	.72	10.0	10.0	Relative P/E Ratio	.80							
5.2%	4.3%	4.4%	4.5%	4.2%	4.0%	3.9%	4.2%	4.3%	4.9%	5.7%	4.9%	4.8%	4.2%	4.2%	4.1%	4.2%	4.1%	Avg Ann'l Div'd Yield	4.3%							
CAPITAL STRUCTURE as of 6/30/15 Total Debt \$6307 mill. Due in 5 Yrs \$1154 mill. LT Debt \$6018 mill. LT Interest \$285 mill. (LT interest earned: 3.4x)													4777.0	4563.0	4621.0	5319.0	4237.0	4601.0	4409.0	4176.0	4495.0	4951.0	4550	4750	Revenues (\$mill)	5500
Leases, Uncapitalized Annual rentals \$8 mill. Pension Assets-12/14 \$661.8 mill. Oblig. \$919.5 mill.													323.0	306.0	327.0	353.0	357.0	376.0	387.0	420.0	471.0	538.0	555	575	Net Profit (\$mill)	675
Pfd Stock None													--	26.5%	29.2%	35.4%	32.0%	29.8%	30.3%	30.2%	32.1%	31.6%	32.0%	32.0%	Income Tax Rate	33.5%
Common Stock 142,916,917 shs. as of 7/31/15 MARKET CAP: \$8.5 billion (Large Cap)													9%	2.6%	4.6%	8.5%	14.3%	8.0%	5.4%	7.6%	8.7%	9.1%	7.0%	16.0%	AFUDC % to Net Profit	3.0%
ELECTRIC OPERATING STATISTICS													51.4%	50.9%	48.4%	58.0%	56.8%	52.9%	54.3%	54.4%	53.6%	52.6%	52.0%	55.0%	Long-Term Debt Ratio	54.0%
% Change Retail Sales (KWH) -3.9 +3 +4.7 Avg. Indust. Use (MWH) 8055 8180 NA Avg. Indust. Revs per KWH (\$) 7.09 7.27 NA Capacity at Yearend (Mw) 5533 5237 5237 Peak Load, Summer (Mw) 4761 4574 4853 Annual Load Factor (%) 56.8 58.8 NA % Change Customers (yr-end) +9 +12 +14													5739.0	6027.0	5952.0	7519.0	7891.0	7854.0	8511.0	9103.0	10059	10518	11325	12675	Total Capital (\$mill)	15050
Fixed Charge Cov. (%) 2.81 2.93 3.07													6734.0	7007.0	7538.0	8305.0	9009.0	9662.0	10047	10896	11643	12232	12975	14450	Net Plant (\$mill)	17325
ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '12-'14 of change (per sh)													7.4%	6.8%	7.3%	6.2%	6.1%	6.5%	6.2%	6.3%	6.2%	6.6%	6.0%	6.0%	Return on Total Cap'l	6.0%
Revenues .5% -4.0% 2.0% "Cash Flow" 3.0% 3.0% 4.0% Earnings 3.0% 4.0% 4.5% Dividends 4.0% 2.0% 3.5% Book Value 5.0% 5.0% 6.0%													11.6%	10.3%	10.6%	11.2%	10.5%	10.2%	10.0%	10.1%	10.1%	10.8%	10.0%	10.0%	Return on Shr. Equity	10.0%
QUARTERLY REVENUES (\$mill.) Full Year													11.8%	10.5%	10.8%	11.4%	10.2%	10.2%	10.0%	10.1%	10.1%	10.8%	10.0%	10.0%	Return on Com Equity ^E	10.0%
Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year	BUSINESS: SCANA Corporation is a holding company for South Carolina Electric & Gas Company, which supplies electricity to 697,000 customers in South Carolina. Supplies gas and transmission service to 1.3 million customers in North and South Carolina and Georgia. Acquired PSNC Energy 2/00. Electric revenue breakdown: residential, 44%; commercial, 33%; industrial, 18%; other, 5%. Generating sources: coal, 48%; oil & gas, 28%; nuclear, 19%; hydro, 3%; purchased, 2%. Fuel costs: 53% of revenues. '14 reported depreciation rate: 2.8%. Has 5,900 employees. Chairman, CEO & President: Kevin B. Marsh. Incorporated: South Carolina. Address: 100 SCANA Parkway, Cayce, South Carolina 29033. Tel.: 803-217-9000. Internet: www.scana.com.																				
2012	1107	908	1038	1123	4176.0	SCANA's electric utility subsidiary has amended its agreement with contractors for the two nuclear units it is building. The units are still expected to come on line in 2019 and 2020, but in August of each year instead of June. The revised agreement calls for South Carolina Electric & Gas to pay an additional \$286 million, raising the current estimate of its 55% stake in the project to \$7.1 billion. The utility also obtained an option (through November 1, 2016) to convert the contract to a fixed price of \$7.6 billion, which would make the new contractor, Westinghouse, responsible for any overruns. The South Carolina regulators would still have to approve recovery of any amount above the currently authorized \$6.8 billion, which the commission approved in September.																				
2013	1311	1016	1051	1117	4495.0	SCE&G was granted its annual increase under the state's Base Load Review Act. Each year, the utility receives rate relief under this law in order to recover construction work in progress for the aforementioned nuclear units. This contributes to the company's earnings growth. Electric rates were raised by \$64.5 million (2.6%) in late October. This and previous increases were based on an 11.0% return on equity, but beginning next year, the allowed ROE will drop to 10.5%.																				
2014	1590	1026	1121	1214	4951.0	We have raised our 2015 earnings estimate by \$0.05 a share. Third-quarter profits were better than we had expected due to favorable weather patterns. Our revised estimate of \$3.85 is above the company's targeted range of \$3.60-\$3.80 because SCANA bases its guidance on normal weather conditions.																				
2015	1389	967	1068	1126	4550	We forecast a modest bottom-line increase in 2016. We assume normal weather conditions, compared with the favorable ones that have helped lift earnings in 2015. Our estimate of \$3.95 a share is within SCANA's guidance of \$3.90-\$4.10.																				
2016	1425	1025	1075	1225	4750	Public Service of North Carolina might file a rate case next year. The utility is earning an ROE well below the authorized 10.6%. New rates wouldn't help earnings until 2017, however.																				
Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year	This untimely stock's yield is average for a utility. The recent price is above the midpoint of our 2018-2020 Target Price Range, so total return potential is low.																				
2012	.91	.54	.91	.78	3.15	<i>Paul E. Debbas, CFA November 20, 2015</i>																				
2013	1.11	.60	.94	.73	3.39																					
2014	1.37	.68	1.01	.73	3.79																					
2015	1.39	.69	1.04	.73	3.85																					
2016	1.40	.70	1.10	.75	3.95																					
Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year	QUARTERLY DIVIDENDS PAID ^B																				
2011	.475	.485	.485	.485	1.93																					
2012	.485	.495	.495	.495	1.97																					
2013	.495	.507	.507	.507	2.02																					
2014	.508	.525	.525	.525	2.08																					
2015	.525	.545	.545	.545																						

(A) Diluted eps. Excl. nonrec. gains (losses): '99, 29¢; '00, 28¢; '01, \$3.00; '02, (\$3.72); '03, 31¢; '04, (23¢); '05, 3¢; '06, 9¢; '15, \$1.41; '12 & '13 EPS don't add due to rounding. Next earnings report due mid-Feb. (B) Div'ds historically paid in early Jan., Apr., July, & Oct. Net orig. cost. Rate allowed on com. eq. in SC: 10.25% elec. in '13, 10.25% gas in '05; in NC: 10.6% in '08; earned on avg. com. eq., '14: 11.1%. Regulatory Climate: Above Average. (C) Incl. intang. (D) In mill. (E) Rate base. Company's Financial Strength B++ Stock's Price Stability 100 Price Growth Persistence 55 Earnings Predictability 100

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Exhibit
3 I/A
Attorney General -
Cross Exhibit

ATMOS ENERGY CORP. NYSE-ATO		RECENT PRICE	62.38	P/E RATIO	19.4	(Trailing: 20.2 Median: 15.0)	RELATIVE P/E RATIO	1.08	DIV'D YLD	2.7%	VALUE LINE							
TIMELINESS	2 Raised 10/30/15	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	Target Price Range	2018	2019	2020	
SAFETY	1 Raised 6/6/14	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	120				
TECHNICAL	3 Raised 10/23/15	LEGENDS 1.00 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area indicates recession																
BETA	.80 (1.00 = Market)	2018-20 PROJECTIONS Price Gain 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 0 Options 0 0 0 0 6 1 0 0 0 0 to Sell 0 1 0 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																
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				
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: 4.7%; 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)		81.75	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			
CURRENT POSITION (SMILL.)		3.90	4.26	4.14	4.19	4.29	4.64	4.72	5.14	5.42	5.80	6.00	"Cash Flow" per sh	6.60				
ANNUAL RATES of change (per sh)		1.72	2.00	1.94	2.00	1.97	2.16	2.26	2.10	2.50	2.96	3.09	Earnings per sh ^{A B}	3.80				
Fiscal Year Ends		1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.48	1.56	Div'ds Decl'd per sh ^C	1.95				
QUARTERLY REVENUES (\$mill.) ^A		4.14	5.20	4.39	5.20	5.51	6.02	6.90	8.12	9.32	8.32	9.60	Cap'l Spending per sh	10.00				
EARNINGS PER SHARE ^{A B E}		19.90	20.16	22.01	22.60	23.52	24.16	24.98	26.14	28.47	30.74	31.50	Book Value per sh	36.65				
Fiscal Year Ends		80.54	81.74	89.33	90.81	92.55	90.16	90.30	90.24	90.64	100.39	101.50	Common Shs Outst'g ^D	120.00				
QUARTERLY DIVIDENDS PAID ^C		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				
Fiscal Year Ends		.86	.73	.84	.82	.83	.84	.90	.89	.84	.88		Relative P/E Ratio	1.10				
Fiscal Year Ends		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%				
Fiscal Year Ends		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			
Fiscal Year Ends		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			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		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			
Fiscal Year Ends		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			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		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%			
Fiscal Year Ends		73%	63%	65%	65%	68%	62%	62%	65%	56%	51%	51%	51%	All Div'ds to Net Prof	51%			
Fiscal Year Ends		66.2	42.3	43.2	617.1	733.5	573.4	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.										
Fiscal Year Ends		241.6	311.6	227.3	368.0	196.7	252.0	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.										
Fiscal Year Ends		368.9	402.4	437.3	978.5	910.7	916.6	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.										
Fiscal Year Ends		537%	637%	645%	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.													
Fiscal Year Ends		1084.0	1225.5	576.4	552.6	3438.5	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											
Fiscal Year Ends		1034.2	1309.0	857.9	685.2	3886.3	resources will continue to be deployed to improve the safety and reliability of Atmos' distribution and transportation systems.											
Fiscal Year Ends		1255.1	1964.3	942.7	778.8	4940.9	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.											
Fiscal Year Ends		1258.8	1540.1	686.4	656.8	4142.1	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.											
Fiscal Year Ends		1275	1675	725	765	4440	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											
Fiscal Year Ends		.68	1.12	.31	---	2.10	resources will continue to be deployed to improve the safety and reliability of Atmos' distribution and transportation systems.											
Fiscal Year Ends		.85	1.23	.36	.08	2.50	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.											
Fiscal Year Ends		.95	1.38	.45	.23	2.96	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.											
Fiscal Year Ends		.96	1.35	.55	.23	3.09	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											
Fiscal Year Ends		1.00	1.45	.54	.26	3.25	resources will continue to be deployed to improve the safety and reliability of Atmos' distribution and transportation systems.											
Calendar		.34	.34	.34	.345	1.37	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.											
Calendar		.345	.345	.345	.35	1.39	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.											
Calendar		.35	.35	.35	.37	1.42	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											
Calendar		.37	.37	.37	.39	1.50	resources will continue to be deployed to improve the safety and reliability of Atmos' distribution and transportation systems.											
Calendar		.39	.39	.42			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.											

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '06, d18¢; '07, a2¢; '09, 12¢; '10, 5¢; '11, (1¢). Excludes discontinued operations: '11, 10¢; '12, 27¢; '13, 14¢. (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.

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	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		Target Price Range			
SAFETY	2	Raised 6/20/03	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		2018 2019 2020			
TECHNICAL	3	Lowered 11/27/15	LEGENDS 1.00 x Dividends p sh divided by Interest Rate Relative Price Strong Options: Yes Shaded area indicates recession																
BETA	.70	(1.00 = Market)	2018-20 PROJECTIONS Ann'l Total High Price 75 (+30%) Low Price 55 (-5%) Gain 10% Return 2%																
Insider Decisions			J F M A M J J A S to Buy 0 0 0 0 0 0 0 0 0 to Sell 0 0 0 0 0 0 0 0 0 Options 0 0 0 0 0 0 0 0 0																
Institutional Decisions			4Q2014 1Q2015 2Q2015 to Buy 85 116 115 to Sell 99 69 77 Hlds(000) 34804 35230 35958 Percent shares traded 15 10 5																
% TOT. RETURN 10/15 THIS STOCK VS. 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	2.98	2.98	3.81	3.87	4.22	4.56	4.11	4.82	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	15.5	Avg Ann'l P/E Ratio	19.5
.90	.97	.74	1.09	.78	.83	.86	.73	.75	.86	.89	.87	.82	.92	1.20	1.04	.83	.83	Relative P/E Ratio	15.5
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%	3.5%	Avg Ann'l Div'd Yield	3.5%
CAPITAL STRUCTURE as of 9/30/15				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		
Total Debt \$2189.5 mill. Due in 5 Yrs \$525.0 mill.				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		
LT Debt \$1771.5 mill. LT Interest \$70.0 mill.				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%		
(Total interest coverage: 4.1x)				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%		
Leases, Uncapitalized Annual rentals \$12.0 mill.				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%		
Pension Assets-9/14 \$506.6 mill.				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%		
Pfd Stock None				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		
Common Stock 43,350,411 shs. as of 10/20/15				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		
MARKET CAP: \$2.5 billion (Mid Cap)				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%		
CURRENT POSITION				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%		
(\$MILL)				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%		
Cash Assets				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%		
Other				72%	59%	63%	56%	53%	64%	56%	59%	81%	73%	58%	56%	All Div'ds to Net Prof	52%		
Current Assets				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 terms 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.															
Accts Payable				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 the 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. <i>John E. Seibert III December 4, 2015</i>															
Debt Due				ANNUAL RATES of change (per sh) Revenues -2.5% "Cash Flow" 3.0% Earnings 4.0% Dividends 2.5% Book Value 7.0%															
Other				Past 10 Yrs. -2.5% Past 5 Yrs. -15.5% Past Est'd '12-'14 to '18-'20 7.0%															
Current Liab.				Past 10 Yrs. 3.0% Past 5 Yrs. -2.0% Past Est'd '12-'14 to '18-'20 8.5%															
Fix. Chg. Cov.				Past 10 Yrs. 4.0% Past 5 Yrs. -2.0% Past Est'd '12-'14 to '18-'20 10.0%															
				Past 10 Yrs. 2.5% Past 5 Yrs. 3.0% Past Est'd '12-'14 to '18-'20 4.5%															
				Past 10 Yrs. 7.0% Past 5 Yrs. 7.5% Past Est'd '12-'14 to '18-'20 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} 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															

(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. (D) Dividend reinvestment plan available. (E) In millions. (F) Qly. eqs. may not sum due to rounding or change in shares outstanding. (G) Dividend yield based on current price. (H) Dividend yield based on current price. (I) Dividend yield based on current price. (J) Dividend yield based on current price. (K) Dividend yield based on current price. (L) Dividend yield based on current price. (M) Dividend yield based on current price. (N) Dividend yield based on current price. (O) Dividend yield based on current price. (P) Dividend yield based on current price. (Q) Dividend yield based on current price. (R) Dividend yield based on current price. (S) Dividend yield based on current price. (T) Dividend yield based on current price. (U) Dividend yield based on current price. (V) Dividend yield based on current price. (W) Dividend yield based on current price. (X) Dividend yield based on current price. (Y) Dividend yield based on current price. (Z) Dividend yield based on current price. © 2015 Value Line, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product. **To subscribe call 1-800-VALUELINE**

NEW JERSEY RES. NYSE-NJR										RECENT PRICE	P/E RATIO	Trailing: 19.3 Median: 18.0	RELATIVE P/E RATIO	DIV'D YLD	VALUE LINE																																																																																																																																																																																																																													
TIMELINESS 3	Lowered 10/31/14	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			Target Price Range																																																																																																																																																																																																																												
SAFETY 1	Raised 9/15/06	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			2018 2019 2020																																																																																																																																																																																																																												
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Insider Decisions		<table border="1"> <tr><th>J</th><th>F</th><th>M</th><th>A</th><th>M</th><th>J</th><th>J</th><th>A</th><th>S</th></tr> <tr><td>to Buy</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Options</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>to Sell</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </table>														J	F	M	A	M	J	J	A	S	to Buy	0	0	0	0	0	0	0	0	Options	0	0	0	0	0	0	0	0	to Sell	0	0	0	0	0	0	0	0																																																																																																																																																																																									
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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. (LT interest earned: 7.5x; total interest coverage: 7.5x) Pension Assets-9/15 \$256.4 mill. Oblig. \$394.4 mill. Pfd Stock None																																																																																																																																																																																																																																										
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QUARTERLY DIVIDENDS PAID ^C		<table border="1"> <thead> <tr> <th>Cal-endar</th><th>Mar.31</th><th>Jun.30</th><th>Sep.30</th><th>Dec.31</th><th>Full Year</th> </tr> </thead> <tbody> <tr> <td>2011</td><td>.18</td><td>.18</td><td>.18</td><td>.18</td><td>.72</td> </tr> <tr> <td>2012</td><td>.19</td><td>.19</td><td>.19</td><td>.40</td><td>.97</td> </tr> <tr> <td>2013</td><td>--</td><td>.20</td><td>.20</td><td>.20</td><td>.60</td> </tr> <tr> <td>2014</td><td>.21</td><td>.21</td><td>.21</td><td>.23</td><td>.86</td> </tr> <tr> <td>2015</td><td>.23</td><td>.23</td><td>.23</td><td>.24</td><td></td> </tr> </tbody> </table>															Cal-endar	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																																																																																																																																																																																									
Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year																																																																																																																																																																																																																																							
2011	.18	.18	.18	.18	.72																																																																																																																																																																																																																																							
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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 emp. 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 slow-down 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. Qly eggs 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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N.W. NAT'L GAS NYSE-MW		RECENT PRICE	PIE RATIO	Trailings: 25.0 (Median: 18.0)	RELATIVE PIE RATIO	DIV'D YLD	3.9%	VALUE LINE																		
TIMELINESS 3 Raised 12/4/15	High: 34.1 Low: 27.5	39.6	43.7	52.8	55.2	46.5	50.9	49.0	50.8	46.6	52.6	52.3	Target Price Range 2018 2019 2020													
SAFETY 1 Raised 3/18/05	LEGENDS 1.10 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area indicates recession																									
TECHNICAL 3 Lowered 12/4/15	2018-20 PROJECTIONS Ann'l Total High Price 60 Gain (+25%) 9% Low Price 50 Gain (+5%) 5%																									
BETA .65 (1.00 = Market)	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 Percent shares traded 15 10 5																										
© VALUE LINE PUB. LLC 18-20																										
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Revenues per sh	31.25							
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	"Cash Flow" per sh	6.45							
3.70	3.68	3.86	3.65	3.85	3.92	4.34	4.76	5.41	5.31	5.20	5.18	5.00	4.74	5.04	5.05	4.50	5.00	Earnings per sh A	3.30							
1.72	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	Div'ds Decl'd per sh B	2.10							
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	Cap'l Spending per sh	6.80							
4.78	3.46	3.23	3.11	4.90	5.52	3.48	3.56	4.48	3.92	5.09	9.35	3.78	4.91	5.13	4.40	5.80	6.15	Book Value per sh D	33.85							
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	Common Shs Outst'g C	28.00							
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	Avg Ann'l P/E Ratio	17.0							
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	20.7	20.7	Relative P/E Ratio	1.05							
83	.81	.66	.94	.90	.88	.91	.86	.89	1.09	1.01	1.08	1.19	1.34	1.09	1.09	1.09	1.09	Avg Ann'l Div'd Yield	3.7%							
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%	4.1%	4.1%	Bold figures are Value Line estimates								
CAPITAL STRUCTURE as of 9/30/15													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
Total Debt \$846.9 mill. Due in 5 Yrs \$360.0 mill.													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
LT Debt \$621.7 mill. LT Interest \$45.0 mill.													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%
(Total interest coverage: 3.0x)													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%
Pension Assets-12/14 \$279.2 mill.													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%
Oblig. \$487.3 mill.													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%
Pfd Stock None													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
Common Stock 27,371,642 shares as of 10/23/15													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
MARKET CAP \$1.3 billion (Mid Cap)													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%
CURRENT POSITION (SMILL) 2013 2014 9/30/15													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%
Cash Assets 9.5 9.5 5.2													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%
Other 321.0 353.1 272.7													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%
Current Assets 330.5 362.6 277.9													63%	59%	52%	59%	56%	61%	73%	80%	81%	85%	104%	87%	All Div'ds to Net Prof	64%
Accts Payable 96.1 91.4 54.4													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.													
Debt Due 248.2 274.7 225.2													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.													
Other 88.5 103.3 105.7													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.													
Current Liab. 432.8 469.4 385.3													John E. Seibert III December 4, 2015													
Fix. Chg. Cov. 316% 321% 298%													Company's Financial Strength A													
ANNUAL RATES (per sh) Past 5 Yrs. Est'd '12-'14 to '18-'20													Stock's Price Stability 100													
Revenues 1.0% -6.5% 2.0%													Price Growth Persistence 30													
"Cash Flow" 3.0% -1.0% 4.5%													Earnings Predictability 95													
Earnings 2.5% -4.0% 7.0%																										
Dividends 3.5% 3.5% 2.5%																										
Book Value 3.5% 3.0% 3.5%																										
Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year																										
2012 309.6 104.0 87.5 229.5 730.8																										
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 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 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																										

(A) Diluted earnings per share. Excludes non-recurring 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.
(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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SOUTH JERSEY INDS. NYSE-SJ										RECENT PRICE	P/E RATIO		Trailing: 18.3 Median: 17.0		RELATIVE P/E RATIO	Div'd YLD	4.6%	VALUE LINE						
TIMELINESS	4	Lowered 9/18/15	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				Target Price Range	2018	2019	2020			
SAFETY	2	Lowered 1/4/91	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										
TECHNICAL	3	Raised 11/20/15	LEGENDS 0.80 x Dividends p sh divided by Interest Rate Relative Price Strength 2-for-1 split 7/05 2-for-1 split 5/15 Options: Yes Shaded area indicates recession																					
BETA	.80	(1.00 = Market)	2018-20 PROJECTIONS Ann'l Total High Price 35 (+50%) Low Price 25 (+5%) Gain 15% Return 7%																					
Insider Decisions			to Buy: 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Options: 0 to Sell: 0 0 1 2 1 2 1 0 0										% TOT. RETURN 10/15 1 yr. -6.0 3 yr. 16.3 5 yr. 23.8											
Institutional Decisions			4Q2014 1Q2015 2Q2015 to Buy: 97 107 83 to Sell: 60 64 79 Hld's(000): 42328 40934 42248										Percent shares traded: 15, 10, 5											
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	© VALUE LINE PUB. LLC 11-8-20						
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	11.83	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%					
CAPITAL STRUCTURE as of 9/30/15			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							
Total Debt \$1366.7 mill. Due in 5 Yrs \$868.5 mill.			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							
LT Debt \$937.4 mill. LT Interest \$22.0 mill.			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%							
(Total interest coverage: 4.0x)			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%							
Leases, Uncapitalized Annual rentals \$.7 mill.			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%							
Pension Assets-12/14 \$180.5 mill.			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%							
Obblig. \$265.4 mill.			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							
Pfd Stock None			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							
Common Stock 69,294,447 shs.			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%							
as of 11/2/15, adj. for 2-for-1 split			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%							
MARKET CAP: \$1.6 billion (Mid Cap)			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%							
CURRENT POSITION 2013 2014 9/30/15			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%							
(SMILL)			50% 37% 48% 49% 51% 50% 52% 55% 59% 61% 71% 69%										All Div'ds to Net Prof				59%							
Cash Assets 3.8			479.1 562.5 476.8										Other				482.9 566.7 478.9							
Current Assets 482.9			259.8 273.0 189.1										Debt Due 374.9				395.6 429.3							
Accs Payable 259.8			130.3 181.6 188.6										Current Liab. 765.0				850.2 807.0							
Debt Due 374.9			370% 432% 475%										Fix. Chg. Cov. 370%				432% 475%							
Other 130.3			ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '12-'14 to '18-'20										Revenues -1.0%				-5.5% 7.0%							
Current Liab. 765.0			"Cash Flow" 8.0%										Earnings 8.0%				6.5% 7.0%							
Fix. Chg. Cov. 370%			Dividends 8.5%										Book Value 8.5%				8.0% 6.5%							
QUARTERLY REVENUES (\$mill.)			Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year										2012 274.8				121.9 112.0 197.6 706.3							
EARNINGS PER SHARE A			Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year										2012 .83				.14 .07 .49 1.52							
QUARTERLY DIVIDENDS PAID B			Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year										2012 --				.183 .183 .384 .75							
2013 255.6			2013 .76										.16 .02 .62 1.52											
2014 350.2			2014 1.01										.15 .05 .47 1.57											
2015 383.0			2015 .86										.03 .07 .63 1.45											
2016 405			2016 .90										.05 Nil .65 1.60											

(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, \$1.26; '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 sh. (D) In mill., adj. for split.

Jersey Exploration, Marina Energy, South Jersey Energy Service Plus, and SJ 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 per-

formance 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*

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

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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	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										
SAFETY 3 Lowered 1/4/91	LEGENDS 1.25 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area indicates recession											
TECHNICAL 1 Raised 11/20/15												
BETA 80 (1.00 = Market)	2018-20 PROJECTIONS Price: High 80 (+40%) Low 55 (-5%) Gain: +40% Ann'l Total Return: 11% 3%											
Insider Decisions to Buy: 0 0 0 0 0 0 0 0 0 0 0 0 to Sell: 0 0 3 0 0 0 0 0 0 0 0 0 Options: 0 0 5 0 0 0 0 0 0 0 0 0												
Institutional Decisions 4Q2014 1Q2015 2Q2015 to Buy: 83 94 109 to Sell: 87 81 80 Hld's(000): 35979 36094 36799 Percent shares traded: 15 10 5												
% TOT. RETURN 10/15 THIS STOCK VL ARITHL 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												
REVENUES PER SH 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 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 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 .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												
INCOME PER SH 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 16.31 16.82 17.27 17.91 18.42 19.18 19.10 21.58 22.96 23.49 24.44 25.62 26.66 28.35 30.47 31.95 33.35 34.70 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												
MARKET CAP: \$2.7 billion (Mid Cap)												
CURRENT POSITION (SMILL) 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 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%												
QUARTERLY REVENUES (\$mill) P Cal-endar 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												
EARNINGS PER SHARE A Cal-endar 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												
QUARTERLY DIVIDENDS PAID B+† Cal-endar 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 1.57												
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. <i>Michael Napoli, CFA December 4, 2015</i>												
Company's Financial Strength B++ Stock's Price Stability 95 Price Growth Persistence 85 Earnings Predictability 80												

(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.
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DOW JONES	NASDAQ	S&P 500
120 98 (0.66%)	19 57 (0.37%)	12 79 (0.59%)
18 516 38	5 238 49	2 181 83
Last Close 18 395	Last Close 5 219	Last Close 2 169

Today's Stock Movers

Gainers	Losers
Macrocare Ltd	89 26%
Skypeople Fruit Juice Inc	43 17%
Conatus Pharmaceuticals Inc	15 79%
Joint Corp	14 10%
Staffing 360 Solutions Inc	12 74%

Market

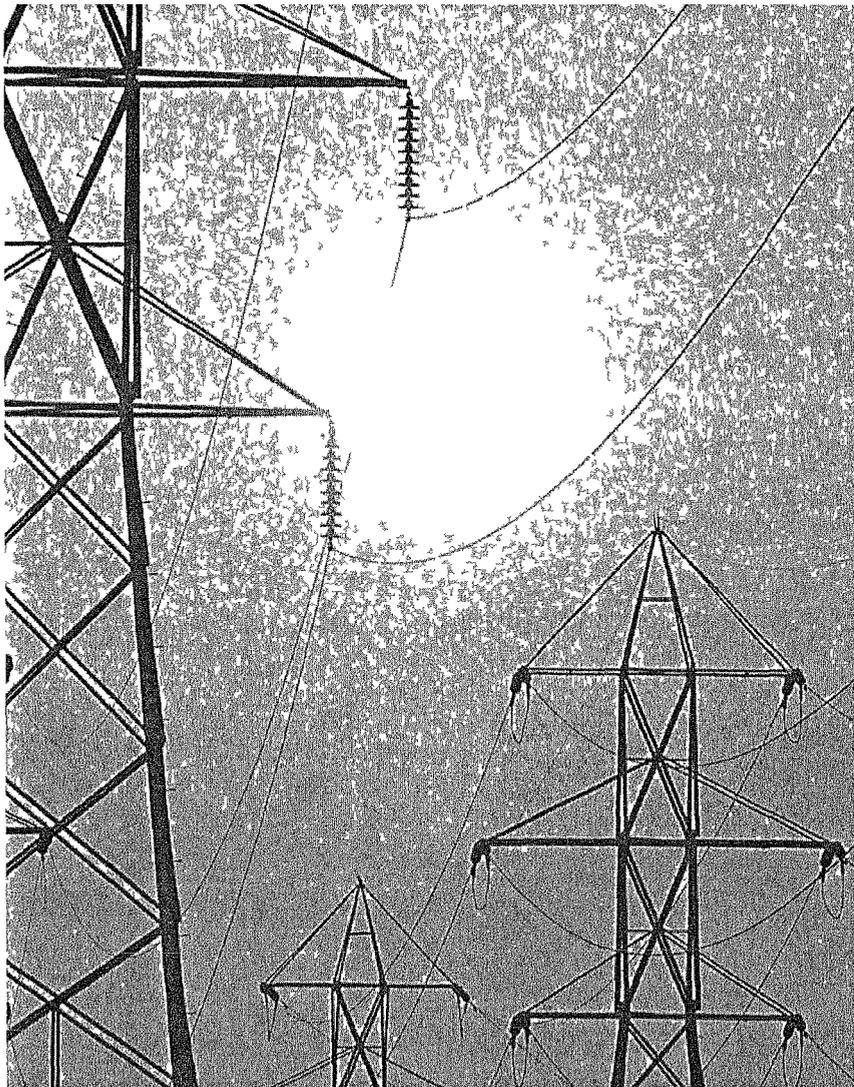
Utility stocks, um, party like it's 1999

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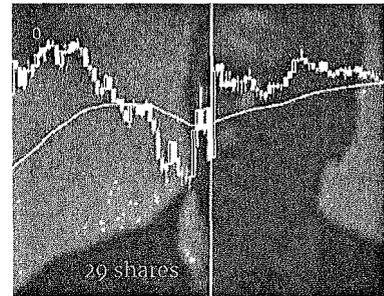
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Duff & Phelps Increases Recommended U.S. Equity Risk Premium from 5.0% to 5.5%

Duff & Phelps regularly reviews fluctuations in global economic and financial market conditions that warrant periodic reassessments of the recommended Equity Risk Premium (ERP). Based upon current market conditions, Duff & Phelps recommends an increase in the U.S. ERP to 5.5% when developing discount rates as of **January 31, 2016** and thereafter (until further guidance is issued). The prior Duff & Phelps recommended U.S. ERP was 5.0%, established as of February 28, 2013. Both of these ERP estimates were measured relative to a normalized yield of 4.0% on 20-year U.S. Treasury bonds. Click here to read the report.

Note that for valuations performed as of **December 31, 2015**, the Duff & Phelps U.S. ERP recommendation remained at 5.0% matched with a normalized risk-free rate of 4.0%.

The ERP is a key input used to calculate the cost of equity capital within the context of the Capital Asset Pricing Model (CAPM) and other models. The ERP is used as a building block when estimating a company's discount rate and is an essential ingredient of any business valuation.

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Docket No. G-5 Sub 565

CAPM using Duff & Phelps

[1]	[2]	[3]	[4]
Risk Free Rate	Avg Beta	Duff & Phelps	MRP
4.00%	0.634	5.50%	7.49%
4.00%	0.757	5.50%	8.16%

IJA

Constant Growth Discounted Cash Flow Model
30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	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

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	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]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	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])

I/A

Retention Growth Estimate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]
Company	Ticker	Projected Earnings per share 2018 20	Projected Dividend Declared per share 2018 20	Retention Ratio (B)	Projected Book Value per Share 2018 20	Return on Book Value (R)	B x R	Projected Common Shares Outstanding 2016	Projected Common Shares Outstanding 2018 20	Common Shares Growth Rate	2015 High Price	2015 Low Price	2015 price midpoint	Projected Book Value per Share 2015	Market/ Book Ratio	"S	V	S x V	BR + SV
Atmos Energy Corporation	ATO	3.80	1.95	48.68%	36.65	10.37%	5.05%	107.00	120.00	3.86%	\$ 63.80	\$ 50.80	\$ 57.30	31.50	1.82	7.01%	45.03%	3.16%	8.21%
Laclede Group Inc (The)	LG	4.20	2.20	47.62%	48.10	8.73%	4.16%	43.00	45.00	1.51%	\$ 59.40	\$ 49.10	\$ 54.25	36.34	1.49	2.26%	33.01%	0.74%	4.90%
New Jersey Resources Corporation	NJR	1.95	1.00	48.72%	16.35	11.93%	5.81%	85.00	85.00	0.00%	\$ 33.70	\$ 26.80	\$ 30.25	12.99	2.33	0.00%	57.06%	0.00%	5.81%
Northwest Natural Gas Company	NWN	3.30	2.10	36.36%	33.85	9.75%	3.55%	27.75	28.00	0.30%	\$ 52.30	\$ 42.00	\$ 47.15	28.75	1.64	0.49%	39.02%	0.19%	3.73%
South Jersey Industries Inc	SJI	2.30	1.35	41.30%	18.40	12.50%	5.16%	72.00	76.00	1.80%	\$ 30.40	\$ 22.90	\$ 26.65	15.00	1.78	3.20%	43.71%	1.40%	6.58%
Southwest Gas Corporation	SWX	4.50	2.10	53.33%	39.40	11.42%	6.09%	49.00	52.00	1.98%	\$ 63.70	\$ 51.30	\$ 57.50	33.35	1.72	3.41%	42.00%	1.43%	7.53%
WGL Holdings Inc	WGL	3.55	1.99	43.94%	30.55	11.62%	5.11%	50.00	50.00	0.00%	\$ 63.20	\$ 50.90	\$ 57.05	24.97	2.28	0.00%	56.23%	0.00%	5.11%
																		Average	5.98%

Notes

- [1] Source Value Line
- [2] Source Value Line
- [3] Equals 1 - [2] / [1]
- [4] Source Value Line
- [5] Equals [1] / [4]
- [6] Equals [3] x [5]
- [7] Source Value Line
- [8] Source Value Line
- [9] Equals ([8] / [7]) ^ 0.25 - 1
- [10] Source Value Line
- [11] Source Value Line
- [12] Equals Average ([10] [11])
- [13] Source Value Line
- [14] Equals [12] / [13]
- [15] Equals [9] x [14]
- [16] Equals 1 - (1 / [14])
- [17] Equals [15] x [16]
- [18] Equals [6] + [17]

I/A

Mult-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates			Long-Term			Payout Ratio			Iterative Solution		Terminal	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$65.65	6.80%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.14%	18.64	3.51			
Laclede Group Inc (The)	LG	\$61.14	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	58.00%	52.00%	67.67%	(\$0.00)	8.40%	23.11	4.35			
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.01%	15.17	2.85			
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	84.00%	67.67%	\$0.00	8.51%	22.31	4.20			
South Jersey Industries Inc	SJI	\$24.21	NA	6.00%	7.00%	6.58%	6.52%	5.31%	69.00%	59.00%	67.67%	(\$0.00)	10.78%	13.03	2.45			
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	5.88%	5.31%	65.00%	48.00%	67.67%	(\$0.00)	9.35%	17.64	3.32			
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	56.00%	67.67%	(\$0.00)	8.78%	20.51	3.85			
												Mean	9.28%					
												Max	10.78%					
												M/n	8.40%					
Projected Annual Earnings per Share																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.17	\$3.39	\$3.63	\$3.89	\$4.16	\$4.46	\$4.76	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79
Laclede Group Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.28	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.46	\$4.70
South Jersey Industries, Inc	SJI	\$1.67	\$1.67	\$1.78	\$1.90	\$2.02	\$2.16	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$3.76	\$3.96
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21
WGL Holdings, Inc	WGL	\$2.88	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.66	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74
Projected Annual Dividend Payout Ratio																		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	56.67%	53.33%	51.00%	53.38%	55.78%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.28%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	80.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows																		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.65	\$2.94	\$3.25	\$3.58	\$3.93	\$4.29	\$4.51	\$4.75	\$5.01	\$5.27	\$145.2	
Laclede Group Inc (The)	LG	\$1.48	\$1.54	\$1.59	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$3.89	\$132.67	
New Jersey Resources Corporation	NJR	\$1.36	\$1.38	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$3.36	\$75.24	
Northwest Natural Gas Company	NWN	\$2.06	\$1.97	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$104.83	
South Jersey Industries, Inc	SJI	\$1.23	\$1.25	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$2.68	\$51.62	
Southwest Gas Corporation	SWX	\$1.86	\$1.86	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$4.88	\$127.26	
WGL Holdings, Inc	WGL	\$1.82	\$1.90	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$138.16	
Projected Annual Data Investor Cash Flows																		
Company	Ticker	Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$65.65)	\$0.00	\$1.63	\$1.79	\$1.98	\$2.12	\$2.28	\$2.65	\$2.94	\$3.25	\$3.58	\$3.93	\$4.29	\$4.51	\$4.75	\$5.01	\$150.50
Laclede Group Inc (The)	LG	(\$61.14)	\$0.00	\$1.31	\$1.53	\$1.59	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$136.56
New Jersey Resources Corporation	NJR	(\$34.36)	\$0.00	\$1.20	\$1.40	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$78.60
Northwest Natural Gas Company	NWN	(\$51.25)	\$0.00	\$1.82	\$2.11	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$108.01
South Jersey Industries, Inc	SJI	(\$24.21)	\$0.00	\$1.09	\$1.27	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$54.30
Southwest Gas Corporation	SWX	(\$57.43)	\$0.00	\$1.84	\$1.91	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$132.14
WGL Holdings, Inc	WGL	(\$64.08)	\$0.00	\$1.61	\$1.88	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$142.72

Multi-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
Low EPS Growth Rate Estimate In First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]						
	Stock	EPS Growth Rate Estimates			Long-Term			Payout Ratio		Iterative Solution		Terminal	Terminal							
Company	Ticker	Price	Zacks	First Cal	Line	Growth	Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio					
Atmos Energy Corporation	ATO	\$65.65	6.60%	6.40%	7.00%	8.21%	6.40%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	8.96%	19.53	3.68					
Laclede Group, Inc (The)	LG	\$61.14	4.80%	4.78%	10.00%	4.90%	4.78%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	8.11%	25.51	4.80					
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	9.47%	17.13	3.22					
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.28%	23.98	4.51					
South Jersey Industries, Inc	SJI	\$24.21	NA	6.00%	7.00%	6.55%	6.00%	5.31%	69.00%	59.00%	67.67%	(\$0.00)	10.59%	13.52	2.54					
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	(\$0.00)	8.84%	20.20	3.80					
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	56.00%	67.67%	(\$0.00)	8.46%	22.67	4.27					
													Mean	8.98%						
													Max	10.59%						
													Min	8.11%						
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	\$2.96	\$3.15	\$3.35	\$3.57	\$3.79	\$4.04	\$4.29	\$4.55	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39		
Laclede Group, Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15		
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32		
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35		
South Jersey Industries, Inc	SJI	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80		
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.26	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19		
WGL Holdings, Inc	WGL	\$2.68	\$2.82	\$2.96	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03		
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO			51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group, Inc (The)	LG			58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR			58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN			87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI			69.00%	65.87%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX			55.00%	52.00%	49.00%	46.00%	48.10%	52.19%	55.28%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL			60.00%	58.67%	57.33%	56.00%	57.87%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO			\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.48	\$4.91	\$5.34	\$5.80	\$144.4	
Laclede Group, Inc (The)	LG			\$1.44	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$3.09	\$3.34	\$3.61	\$3.91	\$131.48	
New Jersey Resources Corporation	NJR			\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$74.03	
Northwest Natural Gas Company	NWN			\$2.02	\$1.91	\$1.79	\$1.65	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$104.31	
South Jersey Industries, Inc	SJI			\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$51.34	
Southwest Gas Corporation	SWX			\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.78	\$4.19	\$4.65	\$125.13		
WGL Holdings, Inc	WGL			\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.59	\$3.88	\$4.19	\$4.54	\$136.82	
Projected Annual Data Investor Cash Flows				[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial		2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	
Atmos Energy Corporation	ATO	(\$65.65)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.48	\$4.91	\$5.34	\$5.80	\$149.41	
Laclede Group, Inc (The)	LG	(\$61.14)	\$0.00	\$1.28	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$3.09	\$3.34	\$3.61	\$3.91	\$134.96	
New Jersey Resources Corporation	NJR	(\$34.36)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$76.95	
Northwest Natural Gas Company	NWN	(\$51.25)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$107.26	
South Jersey Industries, Inc	SJI	(\$24.21)	\$0.00	\$1.06	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$53.91	
Southwest Gas Corporation	SWX	(\$57.43)	\$0.00	\$1.58	\$1.63	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.78	\$4.19	\$4.65	\$129.32		
WGL Holdings, Inc	WGL	(\$64.08)	\$0.00	\$1.57	\$1.82	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.59	\$3.88	\$4.19	\$4.54	\$140.90	

Multi-Stage Growth Discounted Cash Flow Model
30 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates			Long-Term			Payout Ratio			Iterative Solution		Terminal	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Retention	High	Growth	Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio	
Atmos Energy Corporation	ATO	\$65.65	6.60%	6.40%	7.00%	8.21%	8.21%	5.31%	51.00%	51.00%	67.67%	67.67%	67.67%	(\$0.00)	9.46%	17.20	3.24	
Laclede Group Inc (The)	LG	\$61.14	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	58.00%	52.00%	67.67%	67.67%	67.67%	(\$0.00)	9.37%	17.57	3.31	
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	6.50%	5.31%	58.00%	51.00%	67.67%	67.67%	67.67%	(\$0.00)	10.28%	14.35	2.70	
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	64.00%	67.67%	67.67%	67.67%	(\$0.00)	9.11%	18.79	3.54	
South Jersey Industries Inc	SJI	\$24.21	NA	6.00%	7.00%	6.56%	7.00%	5.31%	69.00%	59.00%	67.67%	67.67%	67.67%	\$0.00	10.87%	12.61	2.37	
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	55.00%	46.00%	67.67%	67.67%	67.67%	(\$0.00)	8.84%	15.73	2.96	
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.53%	5.11%	8.00%	5.31%	60.00%	59.00%	67.67%	67.67%	67.67%	(\$0.00)	9.16%	18.39	3.46	
													Mean	9.74%				
													Max	10.97%				
													Mn	9.11%				
Projected Annual Earnings per Share																		
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.75	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54
Laclede Group Inc (The)	LG	\$2.35	\$2.59	\$2.84	\$3.13	\$3.44	\$3.78	\$4.16	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.38	\$2.54	\$2.70	\$2.88	\$3.06	\$3.26	\$3.46	\$3.66	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66
South Jersey Industries Inc	SJI	\$1.57	\$1.69	\$1.80	\$1.92	\$2.06	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.48	\$3.74	\$4.02	\$4.33	\$4.65	\$4.99	\$5.32	\$5.66	\$6.01	\$6.35	\$6.69	\$7.04	\$7.42	\$7.81	\$8.22
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.19	\$6.51	\$6.86	\$7.22	\$7.60
Projected Annual Dividend Payout Ratio																		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG	58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.96%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.96%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.28%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows																		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.77	\$1.91	\$2.07	\$2.24	\$2.44	\$2.65	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$5.11	\$5.54	\$5.98	\$146.8	
Laclede Group Inc (The)	LG	\$1.59	\$1.71	\$1.84	\$1.97	\$2.16	\$2.37	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.96	\$5.31	\$137.01	
New Jersey Resources Corporation	NJR	\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$75.87	
Northwest Natural Gas Company	NWN	\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$106.35	
South Jersey Industries Inc	SJI	\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$51.68	
Southwest Gas Corporation	SWX	\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$129.40	
WGL Holdings, Inc	WGL	\$1.88	\$1.98	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$139.85	
Projected Annual Data Investor Cash Flows																		
Company	Ticker	Initial	2/12/16	6/30/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$65.65)	\$0.00	\$1.66	\$1.84	\$2.07	\$2.24	\$2.44	\$2.65	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$5.11	\$5.54	\$152.56
Laclede Group Inc (The)	LG	(\$61.14)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.16	\$2.37	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.96	\$142.28
New Jersey Resources Corporation	NJR	(\$34.36)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$79.45
Northwest Natural Gas Company	NWN	(\$51.25)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$110.18
South Jersey Industries Inc	SJI	(\$24.21)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$54.66
Southwest Gas Corporation	SWX	(\$57.43)	\$0.00	\$1.69	\$1.99	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$134.96
WGL Holdings, Inc	WGL	(\$64.08)	\$0.00	\$1.65	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$145.00

Multi Stage Growth Discounted Cash Flow Model
60 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	
	Stock	EPS Growth Rate Estimates				Long-Term			Payout Ratio			Iterative Solution		Terminal	Terminal
		Value	Retention	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio		
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio
Atmos Energy Corporation	ATO	\$62.93	6.60%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.29%	17.90	3.37
Laclede Group Inc (The)	LG	\$58.86	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	8.51%	22.27	4.19
New Jersey Resources Corporation	NJR	\$31.87	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.37%	14.10	2.65
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.65%	21.38	4.02
South Jersey Industries Inc	SJI	\$24.38	NA	6.00%	7.00%	6.56%	6.52%	5.31%	69.00%	59.00%	67.67%	\$0.00	10.74%	13.13	2.47
Southwest Gas Corporation	SWX	\$57.11	5.00%	4.00%	7.00%	7.53%	5.88%	5.31%	55.00%	48.00%	67.67%	(\$0.00)	9.36%	17.54	3.30
WGL Holdings, Inc	WGL	\$52.07	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	56.00%	67.67%	(\$0.00)	8.90%	19.88	3.74
												Mean	9.41%		
												Max	10.74%		
												Min	6.51%		

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.17	\$3.39	\$3.63	\$3.89	\$4.16	\$4.46	\$4.76	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79
Laclede Group Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.67	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.26	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.48	\$4.70
South Jersey Industries Inc	SJI	\$1.57	\$1.67	\$1.78	\$1.90	\$2.02	\$2.15	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$3.76	\$3.96
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21
WGL Holdings, Inc	WGL	\$2.68	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.66	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%
Laclede Group Inc (The)	LG	58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
Atmos Energy Corporation	ATO	\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.84	\$3.05	\$3.28	\$3.51	\$3.75	\$4.00	\$4.26	\$4.53	\$139.5
Laclede Group Inc (The)	LG	\$1.48	\$1.54	\$1.59	\$1.64	\$1.62	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.43	\$3.70	\$3.99	\$4.28	\$127.85
New Jersey Resources Corporation	NJR	\$1.36	\$1.38	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.97	\$3.23	\$3.49	\$3.76	\$69.95
Northwest Natural Gas Company	NWN	\$2.05	\$1.97	\$1.86	\$1.74	\$1.63	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$100.49
South Jersey Industries Inc	SJI	\$1.23	\$1.25	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.34	\$2.50	\$2.66	\$2.83	\$51.88
Southwest Gas Corporation	SWX	\$1.86	\$1.88	\$1.85	\$1.84	\$2.06	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.38	\$4.80	\$5.24	\$5.68	\$126.56
WGL Holdings, Inc	WGL	\$1.82	\$1.90	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$133.91

Projected Annual Data Investor Cash Flows	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]		
Company	Ticker	Initial	Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$62.93)	\$0.00	\$1.53	\$1.79	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.84	\$3.05	\$3.28	\$3.51	\$3.75	\$4.00	\$4.26	\$4.53	\$144.72
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.31	\$1.53	\$1.59	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.43	\$3.70	\$3.99	\$4.28	\$131.74
New Jersey Resources Corporation	NJR	(\$31.87)	\$0.00	\$1.20	\$1.40	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.97	\$3.23	\$3.49	\$3.76	\$73.31
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.82	\$2.11	\$1.85	\$1.74	\$1.63	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$103.67
South Jersey Industries Inc	SJI	(\$24.38)	\$0.00	\$1.09	\$1.27	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.34	\$2.50	\$2.66	\$2.83	\$54.66
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.64	\$1.91	\$1.85	\$1.84	\$2.06	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.38	\$4.80	\$5.24	\$5.68	\$131.44
WGL Holdings, Inc	WGL	(\$52.07)	\$0.00	\$1.81	\$1.88	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$138.47

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]		[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
					EPS Growth Rate Estimates										
					Value	Retention									
Company	Ticker	Price	Zacks	First Call	Line	Growth	Low Growth	Long-Term Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio
Atmos Energy Corporation	ATO	\$62.93	6.60%	6.40%	7.00%	6.21%	6.40%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.11%	18.75	3.63
Laclede Group, Inc (The)	LG	\$58.86	4.80%	4.78%	10.00%	4.90%	4.78%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	8.21%	24.58	4.63
New Jersey Resources Corporation	NJR	\$31.87	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	9.79%	15.91	2.99
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.41%	22.88	4.33
South Jersey Industries Inc	SJI	\$24.38	NA	6.00%	7.00%	6.56%	6.00%	5.31%	69.00%	59.00%	67.67%	(\$0.00)	10.55%	13.61	2.56
Southwest Gas Corporation	SWX	\$57.11	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	(\$0.00)	8.86%	20.09	3.78
WGL Holdings, Inc	WGL	\$62.07	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	58.00%	67.67%	(\$0.00)	8.56%	21.97	4.14
												Mean	9.07%		
												Max	10.65%		
												Min	8.21%		

Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.15	\$3.35	\$3.57	\$3.79	\$4.04	\$4.29	\$4.56	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39
Laclede Group, Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35
South Jersey Industries Inc	SJI	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.26	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19
WGL Holdings, Inc	WGL	\$2.68	\$2.82	\$2.96	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03

Projected Annual Dividend Payout Ratio	[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%
Laclede Group, Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.18%	55.26%	58.34%	61.42%	64.50%	67.67%	67.67%	67.67%	67.67%	67.67%
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%

Projected Annual Cash Flows	[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	Terminal Value
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
Atmos Energy Corporation	ATO	\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.42	\$4.81	\$5.24	\$5.70	\$138.6
Laclede Group, Inc (The)	LG	\$1.44	\$1.48	\$1.51	\$1.54	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.15	\$2.24	\$2.34	\$126.66
New Jersey Resources Corporation	NJR	\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$68.75
Northwest Natural Gas Company	NWN	\$2.02	\$1.91	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$59.97
South Jersey Industries Inc	SJI	\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$51.71
Southwest Gas Corporation	SWX	\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$4.19	\$124.43
WGL Holdings, Inc	WGL	\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$4.08	\$132.57

Projected Annual Data Investor Cash Flows	[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	
Company	Ticker	Initial Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$52.93)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.28	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.42	\$4.81	\$5.24	\$138.64
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.28	\$1.48	\$1.51	\$1.54	\$1.59	\$1.64	\$1.70	\$1.76	\$1.83	\$1.90	\$1.98	\$2.06	\$2.15	\$2.24	\$130.14
New Jersey Resources Corporation	NJR	(\$31.87)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$71.68
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$102.92
South Jersey Industries, Inc	SJI	(\$24.38)	\$0.00	\$1.08	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$51.28
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.58	\$1.83	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$128.63
WGL Holdings, Inc	WGL	(\$62.07)	\$0.00	\$1.57	\$1.82	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$136.66

Multi-Stage Growth Discounted Cash Flow Model
90 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
	Stock	EPS Growth Rate Estimates				Long-Term		Payout Ratio			Iterative Solution	Terminal	Terminal					
Company	Ticker	Price	Zacks	First Call	Line	Growth	High	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$62.93	6.60%	6.40%	7.00%	8.21%	8.21%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.63%	16.52	3.11			
Laclede Group, Inc (The)	LG	\$58.86	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	9.52%	16.95	3.19			
New Jersey Resources Corporation	NJR	\$31.67	6.50%	6.50%	4.00%	5.81%	6.50%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.65%	13.34	2.61			
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	64.00%	67.67%	(\$0.00)	9.27%	18.02	3.39			
South Jersey Industries, Inc	SJI	\$24.38	NA	6.00%	7.00%	6.56%	7.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	10.93%	12.70	2.39			
Southwest Gas Corporation	SWX	\$57.11	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	55.00%	46.00%	67.67%	(\$0.00)	9.87%	15.65	2.95			
WGL Holdings, Inc	WGL	\$62.07	7.30%	8.00%	5.50%	5.11%	8.00%	5.31%	60.00%	58.00%	67.67%	(\$0.00)	9.31%	17.83	3.36			
													Mean	9.88%				
													Max	10.93%				
													Mm	9.27%				
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.76	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54
Laclede Group, Inc (The)	LG	\$2.35	\$2.59	\$2.84	\$3.13	\$3.44	\$3.78	\$4.15	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.38	\$2.54	\$2.70	\$2.88	\$3.05	\$3.26	\$3.46	\$3.66	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66
South Jersey Industries, Inc	SJI	\$1.57	\$1.68	\$1.80	\$1.92	\$2.06	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.48	\$3.74	\$4.02	\$4.33	\$4.65	\$4.98	\$5.32	\$5.66	\$6.01	\$6.35	\$6.69	\$7.04	\$7.42	\$7.81	\$8.22
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	\$7.60
Projected Annual Dividend Payout Ratio			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group, Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.96%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	68.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.77	\$1.91	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$141.0	
Laclede Group, Inc (The)	LG	\$1.59	\$1.71	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$5.28	\$132.16	
New Jersey Resources Corporation	NJR	\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$70.57	
Northwest Natural Gas Company	NWN	\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$102.00	
South Jersey Industries, Inc	SJI	\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$52.24	
Southwest Gas Corporation	SWX	\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$128.70	
WGL Holdings, Inc	WGL	\$1.88	\$1.98	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$135.60	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$62.93)	\$0.00	\$1.56	\$1.84	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$146.78
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$137.43
New Jersey Resources Corporation	NJR	(\$31.67)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$74.15
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$105.83
South Jersey Industries, Inc	SJI	(\$24.38)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$55.03
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.69	\$1.98	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$134.26
WGL Holdings, Inc	WGL	(\$62.07)	\$0.00	\$1.66	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$140.74

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
	Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal							
		Value	Retention																
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio				
Atmos Energy Corporation	ATO	\$58.64	6.60%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.57%	16.73	3.15				
Laclede Group, Inc (The)	LG	\$55.96	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	8.67%	21.20	3.99				
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.64%	13.37	2.52				
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.84%	20.18	3.80				
South Jersey Industries, Inc	SJI	\$24.55	NA	6.00%	7.00%	6.56%	6.52%	5.31%	69.00%	59.00%	67.67%	\$0.00	10.71%	13.22	2.49				
Southwest Gas Corporation	SWX	\$56.04	5.00%	4.00%	7.00%	7.53%	5.88%	5.31%	55.00%	48.00%	67.67%	(\$0.00)	9.45%	17.23	3.24				
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	58.00%	67.67%	(\$0.00)	9.10%	18.81	3.54				
													Mean	9.57%					
													Max	10.71%					
													Min	8.67%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO	\$2.96	\$3.17	\$3.39	\$3.63	\$3.89	\$4.16	\$4.46	\$4.76	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79	
Laclede Group, Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74	
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96	
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.28	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.46	\$4.70	
South Jersey Industries, Inc	SJI	\$1.57	\$1.67	\$1.78	\$1.90	\$2.02	\$2.15	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.38	\$3.57	\$3.76	\$3.96	
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21	
WGL Holdings, Inc	WGL	\$2.68	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.66	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74	
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO			61.00%	61.00%	61.00%	61.00%	63.38%	65.76%	68.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	
Laclede Group, Inc (The)	LG			56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.96%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%	
New Jersey Resources Corporation	NJR			58.00%	56.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	
Northwest Natural Gas Company	NWN			87.00%	79.33%	71.67%	64.00%	64.62%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%	
South Jersey Industries, Inc	SJI			69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.96%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%	
Southwest Gas Corporation	SWX			55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.28%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%	
WGL Holdings, Inc	WGL			60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%	
Projected Annual Cash Flows				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
Atmos Energy Corporation	ATO			\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.65	\$2.94	\$3.25	\$3.58	\$3.93	\$4.29	\$4.61	\$4.75	\$5.01	\$5.27	\$130.3
Laclede Group, Inc (The)	LG			\$1.48	\$1.54	\$1.59	\$1.64	\$1.62	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$3.89	\$121.70
New Jersey Resources Corporation	NJR			\$1.36	\$1.38	\$1.40	\$1.41	\$1.65	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$3.36	\$66.33
Northwest Natural Gas Company	NWN			\$2.06	\$1.97	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$94.85
South Jersey Industries, Inc	SJI			\$1.23	\$1.25	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$2.68	\$52.34
Southwest Gas Corporation	SWX			\$1.86	\$1.86	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$4.88	\$124.29
WGL Holdings, Inc	WGL			\$1.82	\$1.90	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$126.73
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.63	\$1.79	\$1.98	\$2.12	\$2.38	\$2.65	\$2.94	\$3.25	\$3.58	\$3.93	\$4.29	\$4.51	\$4.75	\$5.01	\$136.62	
Laclede Group, Inc (The)	LG	(\$55.96)	\$0.00	\$1.31	\$1.63	\$1.59	\$1.64	\$1.62	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$125.59	
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.20	\$1.40	\$1.40	\$1.41	\$1.66	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$68.69	
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.82	\$2.11	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$98.03	
South Jersey Industries, Inc	SJI	(\$24.55)	\$0.00	\$1.09	\$1.27	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$55.02	
Southwest Gas Corporation	SWX	(\$56.04)	\$0.00	\$1.64	\$1.91	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$129.17	
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.61	\$1.88	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$131.29	

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates			Value	Retention	Low	Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$58.64	6.60%	6.40%	7.00%	8.21%	6.40%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.38%	17.62	3.30			
Laclede Group, Inc (The)	LG	\$55.96	4.80%	4.78%	10.00%	4.90%	4.78%	5.31%	56.00%	52.00%	67.67%	(\$0.00)	8.36%	23.39	4.40			
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.04%	15.07	2.84			
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.60%	21.69	4.08			
South Jersey Industries, Inc	SJI	\$24.55	NA	6.00%	7.00%	6.56%	6.00%	5.31%	69.00%	59.00%	67.67%	(\$0.00)	10.51%	13.71	2.58			
Southwest Gas Corporation	SWX	\$58.04	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	(\$0.00)	8.93%	19.72	3.71			
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	56.00%	67.67%	(\$0.00)	8.74%	20.78	3.91			
												Mean	9.22%					
												Max	10.51%					
												Min	8.36%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.86	\$3.15	\$3.35	\$3.67	\$3.79	\$4.04	\$4.29	\$4.56	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39
Laclede Group, Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35
South Jersey Industries, Inc	SJI	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.26	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19
WGL Holdings, Inc	WGL	\$2.66	\$2.82	\$2.96	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03
Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group, Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	56.67%	55.33%	54.00%	56.24%	58.48%	60.72%	62.95%	65.19%	67.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%			
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%			
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%			
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%			
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.76	\$5.00	\$129.5	
Laclede Group, Inc (The)	LG	\$1.44	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$3.49	\$120.62	
New Jersey Resources Corporation	NJR	\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$65.15	
Northwest Natural Gas Company	NWN	\$2.02	\$1.91	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$94.33	
South Jersey Industries, Inc	SJI	\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$52.07	
Southwest Gas Corporation	SWX	\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$4.19	\$122.17	
WGL Holdings, Inc	WGL	\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$4.08	\$125.40	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.76	\$5.00
Laclede Group, Inc (The)	LG	(\$55.96)	\$0.00	\$1.28	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$3.49
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94
South Jersey Industries, Inc	SJI	(\$24.55)	\$0.00	\$1.08	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57
Southwest Gas Corporation	SWX	(\$56.04)	\$0.00	\$1.58	\$1.83	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$4.19
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.57	\$1.82	\$1.86	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$4.08

Multi-Stage Growth Discounted Cash Flow Model
180 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
	Stock	EPS Growth Rate Estimates				Value	Retention	High	Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Growth	Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$58.64	6.00%	6.40%	7.00%	8.21%	8.21%	5.31%	51.00%	51.00%	67.67%	(\$0.00)	9.93%	15.45	2.91			
Laclede Group Inc (The)	LG	\$55.96	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	58.00%	52.00%	67.67%	(\$0.00)	9.72%	16.16	3.04			
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	6.50%	5.31%	58.00%	51.00%	67.67%	(\$0.00)	10.94%	12.66	2.38			
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	64.00%	67.67%	(\$0.00)	9.50%	17.02	3.20			
South Jersey Industries Inc	SJI	\$24.55	NA	6.00%	7.00%	6.56%	7.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	10.89%	12.78	2.41			
Southwest Gas Corporation	SWX	\$56.04	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	55.00%	46.00%	67.67%	(\$0.00)	9.95%	15.37	2.89			
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	8.00%	5.31%	60.00%	56.00%	67.67%	(\$0.00)	9.53%	16.89	3.18			
												Mean	10.07%					
												Max	10.94%					
												Mn	9.50%					
Projected Annual Earnings per Share	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.75	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54
Laclede Group Inc (The)	LG	\$2.35	\$2.69	\$2.84	\$3.13	\$3.44	\$3.78	\$4.16	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.38	\$2.54	\$2.70	\$2.88	\$3.06	\$3.26	\$3.46	\$3.65	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66
South Jersey Industries Inc	SJI	\$1.57	\$1.68	\$1.80	\$1.92	\$2.05	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.48	\$3.74	\$4.02	\$4.33	\$4.65	\$4.98	\$5.32	\$5.66	\$6.01	\$6.35	\$6.69	\$7.04	\$7.41	\$7.81	\$8.22
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.18	\$6.51	\$6.85	\$7.22	\$7.60
Projected Annual Dividend Payout Ratio			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO		51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	
Laclede Group Inc (The)	LG		56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%	
New Jersey Resources Corporation	NJR		58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	
Northwest Natural Gas Company	NWN		87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%	
South Jersey Industries Inc	SJI		69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%	
Southwest Gas Corporation	SWX		55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%	
WGL Holdings, Inc	WGL		60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%	
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value
Atmos Energy Corporation	ATO		\$1.77	\$1.91	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$131.9
Laclede Group Inc (The)	LG		\$1.59	\$1.71	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$5.28	\$125.98
New Jersey Resources Corporation	NJR		\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$96.95
Northwest Natural Gas Company	NWN		\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$96.34
South Jersey Industries Inc	SJI		\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$52.60
Southwest Gas Corporation	SWX		\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$126.42
WGL Holdings, Inc	WGL		\$1.88	\$1.98	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$128.40
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.56	\$1.84	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$131.65
Laclede Group Inc (The)	LG	(\$55.96)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$131.25
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$70.53
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$100.18
South Jersey Industries Inc	SJI	(\$24.55)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$55.39
Southwest Gas Corporation	SWX	(\$56.04)	\$0.00	\$1.69	\$1.99	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$131.98
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.66	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$133.54

Multi-Stage DCF Notes

-
- [1] Source Bloomberg, based on 30-, 90-, and 180-day historical average as of February 12, 2016
 - [2] Source Zacks
 - [3] Source Yahoo! Finance
 - [4] Source Value Line
 - [5] Source Exhibit RBH-2, Value Line
 - [6] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4], [5]
 - [7] Source Federal Reserve, Bureau of Economic Analysis
 - [8] Source Value Line
 - [9] Source Value Line
 - [10] Source Bloomberg Professional
 - [11] Equals Column [1] + Column [65]
 - [12] Equals result of Excel Solver function, goal Column [11] equals \$0.00
 - [13] Equals Column [64] / Column [31]
 - [14] Equals Column [13] / (Column [7] x 100)
 - [15] Source Value Line
 - [16] Equals Column [15] x (1 + Column [6])
 - [17] Equals Column [16] x (1 + Column [6])
 - [18] Equals Column [17] x (1 + Column [6])
 - [19] Equals Column [18] x (1 + Column [6])
 - [20] Equals Column [19] x (1 + Column [6])
 - [21] Equals Column [20] x (1 + Column [6])
 - [22] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2021 - 2019)))) x Column [21]
 - [23] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2022 - 2019)))) x Column [22]
 - [24] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2023 - 2019)))) x Column [23]
 - [25] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [24]
 - [26] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [25]
 - [27] Equals Column [26] x (1 + Column [7])
 - [28] Equals Column [27] x (1 + Column [7])
 - [29] Equals Column [28] x (1 + Column [7])
 - [30] Equals Column [29] x (1 + Column [7])
 - [31] Equals Column [30] x (1 + Column [7])
 - [32] Equals Column [8]
 - [33] Equals Column [32] + ((Column [35] - Column [32]) / 3)
 - [34] Equals Column [33] + ((Column [35] - Column [32]) / 3)
 - [35] Equals Column [9]
 - [36] Equals Column [35] + ((Column [42] - Column [35]) / 7)
 - [37] Equals Column [36] + ((Column [42] - Column [35]) / 7)
 - [38] Equals Column [37] + ((Column [42] - Column [35]) / 7)
 - [39] Equals Column [38] + ((Column [42] - Column [35]) / 6)
 - [40] Equals Column [39] + ((Column [42] - Column [35]) / 6)
 - [41] Equals Column [40] + ((Column [42] - Column [35]) / 7)
 - [42] Equals Column [10]
 - [43] Equals Column [10]
 - [44] Equals Column [10]
 - [45] Equals Column [10]
 - [46] Equals Column [10]
 - [47] Equals Column [17] x Column [32]
 - [48] Equals Column [18] x Column [33]
 - [49] Equals Column [19] x Column [34]
 - [50] Equals Column [20] x Column [35]
 - [51] Equals Column [21] x Column [36]
 - [52] Equals Column [22] x Column [37]
 - [53] Equals Column [23] x Column [38]
 - [54] Equals Column [24] x Column [39]
 - [55] Equals Column [25] x Column [40]
 - [56] Equals Column [26] x Column [41]
 - [57] Equals Column [27] x Column [42]
 - [58] Equals Column [28] x Column [43]
 - [59] Equals Column [29] x Column [44]
 - [60] Equals Column [30] x Column [45]
 - [61] Equals Column [31] x Column [46]
 - [62] Equals (Column [61] x (1 + Column [7])) / (Column [12] - Column [7])
 - [63] Equals negative net present value, discount rate equals Column [12], cash flows equal Column [64] through Column [79]
 - [64] Equals \$0.00
 - [65] Equals Column [47] x (12/31/2016 - 2/12/2016) / 365
 - [66] Equals Column [47] x (1 + (0.5 x Column [6]))
 - [67] Equals Column [49]
 - [68] Equals Column [50]
 - [69] Equals Column [51]
 - [70] Equals Column [52]
 - [71] Equals Column [53]
 - [72] Equals Column [54]
 - [73] Equals Column [55]
 - [74] Equals Column [56]
 - [75] Equals Column [57]
 - [76] Equals Column [58]
 - [77] Equals Column [59]
 - [78] Equals Column [60]
 - [79] Equals Column [61] + [62]

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
30 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs	[1] Stock	[2]	[3]	[4]			[5]			[6]			[7]			[8]			[9]			[10]			[11]			[12]			[13]			[14]				
				Price	Zacks	Fst Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio	Iterative Solution	Terminal																			
Company	Ticker	Price	Zacks	Fst Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio																							
Atmos Energy Corporation	ATO	\$65.65	6.60%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	\$0.00	9.87%	21.12	3.98																							
Laclede Group Inc (The)	LG	\$61.14	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	58.00%	52.00%	67.67%	\$0.00	7.86%	21.12	3.98																							
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	\$0.00	11.90%	21.12	3.98																							
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	84.00%	67.67%	\$0.00	8.18%	21.12	3.98																							
South Jersey Industries Inc	SJI	\$24.21	NA	6.00%	7.00%	6.56%	6.52%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.45%	21.12	3.98																							
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	5.88%	5.31%	55.00%	46.00%	67.67%	\$0.00	10.41%	21.12	3.98																							
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	56.00%	67.67%	\$0.00	8.96%	21.12	3.98																							
													Mean	10.09%																								
													Max	13.45%																								
													Min	7.86%																								
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]																				
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030																				
Atmos Energy Corporation	ATO	\$2.96	\$3.17	\$3.39	\$3.63	\$3.88	\$4.16	\$4.46	\$4.78	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79																				
Laclede Group Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74																				
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96																				
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.26	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.46	\$4.70																				
South Jersey Industries Inc	SJI	\$1.57	\$1.67	\$1.78	\$1.90	\$2.02	\$2.15	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$3.76	\$3.96																				
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21																				
WGL Holdings, Inc	WGL	\$2.88	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.65	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74																				
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]																				
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030																						
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
Laclede Group Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	64.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%	67.67%																					
Projected Annual Cash Flows				[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]																			
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value																					
Atmos Energy Corporation	ATO	\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.84	\$3.05	\$3.26	\$3.48	\$3.71	\$3.94	\$4.18	\$4.43	\$4.68	\$4.94	\$5.20	\$5.46	\$5.72	\$5.98	\$6.24	\$6.50	\$6.76	\$7.02	\$7.28	\$7.54	\$7.80	\$8.06	\$8.32	\$8.58	\$8.84	\$9.10	\$9.36	\$9.62		
Laclede Group Inc (The)	LG	\$1.48	\$1.54	\$1.59	\$1.64	\$1.68	\$1.73	\$1.78	\$1.83	\$1.88	\$1.93	\$1.98	\$2.03	\$2.08	\$2.13	\$2.18	\$2.23	\$2.28	\$2.33	\$2.38	\$2.43	\$2.48	\$2.53	\$2.58	\$2.63	\$2.68	\$2.73	\$2.78	\$2.83	\$2.88	\$2.93	\$2.98	\$3.03	\$3.08	\$3.13	\$3.18	\$3.23	
New Jersey Resources Corporation	NJR	\$1.36	\$1.38	\$1.40	\$1.41	\$1.42	\$1.43	\$1.44	\$1.45	\$1.46	\$1.47	\$1.48	\$1.49	\$1.50	\$1.51	\$1.52	\$1.53	\$1.54	\$1.55	\$1.56	\$1.57	\$1.58	\$1.59	\$1.60	\$1.61	\$1.62	\$1.63	\$1.64	\$1.65	\$1.66	\$1.67	\$1.68	\$1.69	\$1.70	\$1.71	\$1.72	\$1.73	\$1.74
Northwest Natural Gas Company	NWN	\$2.06	\$1.97	\$1.86	\$1.74	\$1.63	\$1.51	\$1.39	\$1.27	\$1.15	\$1.03	\$0.91	\$0.79	\$0.67	\$0.55	\$0.43	\$0.31	\$0.19	\$0.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
South Jersey Industries Inc	SJI	\$1.23	\$1.25	\$1.26	\$1.27	\$1.28	\$1.29	\$1.30	\$1.31	\$1.32	\$1.33	\$1.34	\$1.35	\$1.36	\$1.37	\$1.38	\$1.39	\$1.40	\$1.41	\$1.42	\$1.43	\$1.44	\$1.45	\$1.46	\$1.47	\$1.48	\$1.49	\$1.50	\$1.51	\$1.52	\$1.53	\$1.54	\$1.55	\$1.56	\$1.57	\$1.58	\$1.59	\$1.60
Southwest Gas Corporation	SWX	\$1.86	\$1.86	\$1.85	\$1.84	\$2.08	\$2.34	\$2.60	\$2.86	\$3.12	\$3.38	\$3.64	\$3.90	\$4.16	\$4.42	\$4.68	\$4.94	\$5.20	\$5.46	\$5.72	\$5.98	\$6.24	\$6.50	\$6.76	\$7.02	\$7.28	\$7.54	\$7.80	\$8.06	\$8.32	\$8.58	\$8.84	\$9.10	\$9.36	\$9.62	\$9.88	\$10.14	
WGL Holdings, Inc	WGL	\$1.82	\$1.90	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.99	\$4.27	\$4.55	\$4.83	\$5.11	\$5.39	\$5.67	\$5.95	\$6.23	\$6.51	\$6.79	\$7.07	\$7.35	\$7.63	\$7.91	\$8.19	\$8.47	\$8.75	\$9.03	\$9.31	\$9.59	\$9.87	\$10.15	\$10.43	\$10.71	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]																				
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/2																					

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
30 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]				
	Stock	EPS Growth Rate Estimates				Long Term	Payout Rate			Iterative Solution	Terminal	Terminal						
		Price	Zacks	First Call	Line	Retention	Low	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Company	Ticker																	
Atmos Energy Corporation	ATO	\$65.65	6.60%	6.40%	7.00%	8.21%	6.40%	5.31%	51.00%	51.00%	67.67%	\$0.00	9.43%	21.12	3.98			
Laclede Group Inc (The)	LG	\$81.14	4.80%	4.78%	10.00%	4.90%	4.78%	5.31%	58.00%	52.00%	67.67%	\$0.00	6.96%	21.12	3.98			
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	\$0.00	10.69%	21.12	3.98			
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	7.53%	21.12	3.98			
South Jersey Industries Inc	SJI	\$24.21	NA	6.00%	7.00%	6.56%	6.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.08%	21.12	3.98			
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	\$0.00	9.11%	21.12	3.98			
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	56.00%	67.67%	\$0.00	8.03%	21.12	3.98			
												Mean	9.26%					
												Max	13.05%					
												Min	6.96%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.15	\$3.35	\$3.67	\$3.79	\$4.04	\$4.29	\$4.56	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39
Laclede Group Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35
South Jersey Industries Inc	SJI	\$1.67	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.26	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19
WGL Holdings, Inc	WGL	\$2.68	\$2.82	\$2.98	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03
Projected Annual Dividend Payout Ratio			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG	58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.96%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.28%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.61	\$4.75	\$5.00	\$166.2	
Laclede Group Inc (The)	LG	\$1.44	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$3.49	\$108.8	
New Jersey Resources Corporation	NJR	\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$91.3	
Northwest Natural Gas Company	NWN	\$2.02	\$1.91	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$91.9	
South Jersey Industries Inc	SJI	\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$80.2	
Southwest Gas Corporation	SWX	\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$4.19	\$130.8	
WGL Holdings, Inc	WGL	\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$4.08	\$127.4	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$65.65)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.61	\$4.75	\$161.18
Laclede Group Inc (The)	LG	(\$61.14)	\$0.00	\$1.28	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$112.32
New Jersey Resources Corporation	NJR	(\$34.36)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$94.20
Northwest Natural Gas Company	NWN	(\$51.25)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$94.81
South Jersey Industries Inc	SJI	(\$24.21)	\$0.00	\$1.08	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$82.80
Southwest Gas Corporation	SWX	(\$57.43)	\$0.00	\$1.68	\$1.83	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.59	\$3.78	\$3.98	\$135.02
WGL Holdings, Inc	WGL	(\$64.08)	\$0.00	\$1.57	\$1.82	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$131.52

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
30 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
	Stock	EPS Growth Rate Estimates			Value	Retention	High	Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal					
Company	Ticker	Price	Zecks	First Call	Line	Growth	Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio				
Atmos Energy Corporation	ATO	\$65.65	6.60%	6.40%	7.00%	8.21%	8.21%	5.31%	51.00%	51.00%	67.67%	\$0.00	10.66%	21.12	3.98				
Laclede Group Inc (The)	LG	\$81.14	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	56.00%	52.00%	67.67%	\$0.00	10.45%	21.12	3.98				
New Jersey Resources Corporation	NJR	\$34.36	6.50%	6.50%	4.00%	5.81%	6.50%	5.31%	58.00%	51.00%	67.67%	\$0.00	12.47%	21.12	3.98				
Northwest Natural Gas Company	NWN	\$51.25	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	84.00%	67.67%	\$0.00	9.79%	21.12	3.98				
South Jersey Industries, Inc	SJI	\$24.21	NA	6.00%	7.00%	6.56%	7.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.80%	21.12	3.98				
Southwest Gas Corporation	SWX	\$57.43	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	55.00%	46.00%	67.67%	\$0.00	11.55%	21.12	3.98				
WGL Holdings, Inc	WGL	\$64.08	7.30%	8.00%	5.50%	5.11%	8.00%	5.31%	60.00%	58.00%	67.67%	\$0.00	10.03%	21.12	3.98				
													Mean	11.24%					
													Max	13.80%					
													Min	9.79%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.75	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54	
Laclede Group Inc (The)	LG	\$2.35	\$2.59	\$2.84	\$3.13	\$3.44	\$3.78	\$4.16	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80	
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.38	\$2.54	\$2.70	\$2.88	\$3.06	\$3.26	\$3.46	\$3.66	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29	
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66	
South Jersey Industries, Inc	SJI	\$1.57	\$1.68	\$1.80	\$1.92	\$2.06	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11	
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.48	\$3.74	\$4.02	\$4.33	\$4.65	\$4.98	\$5.32	\$5.65	\$6.01	\$6.35	\$6.69	\$7.04	\$7.42	\$7.81	\$8.22	
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	\$7.60	
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO		61.00%	61.00%	61.00%	61.00%	63.38%	65.76%	68.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG		56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR		58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN		87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI		69.00%	66.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX		55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL		60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO		\$1.77	\$1.91	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$180.3	
Laclede Group Inc (The)	LG		\$1.59	\$1.71	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.76	\$5.01	\$5.28	\$164.7	
New Jersey Resources Corporation	NJR		\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$111.7	
Northwest Natural Gas Company	NWN		\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$119.6	
South Jersey Industries, Inc	SJI		\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$86.9	
Southwest Gas Corporation	SWX		\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$173.7	
WGL Holdings, Inc	WGL		\$1.88	\$1.98	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$160.6	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	
Company	Ticker	Initial	Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$65.65)	\$0.00	\$1.56	\$1.84	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$186.04
Laclede Group Inc (The)	LG	(\$81.14)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.76	\$5.01	\$5.28	\$169.95
New Jersey Resources Corporation	NJR	(\$34.36)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$116.27
Northwest Natural Gas Company	NWN	(\$51.25)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$123.39
South Jersey Industries, Inc	SJI	(\$24.21)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$89.69
Southwest Gas Corporation	SWX	(\$57.43)	\$0.00	\$1.69	\$1.99	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$179.27
WGL Holdings, Inc	WGL	(\$64.08)	\$0.00	\$1.66	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$165.72

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21 12

90 Day Average Stock Price

Average EPS Growth Rate Estimate in First Stage

Inputs	[1] Stock	[2]	[3] EPS Growth Rate Estimates				[5] Value	[6] Retention	[7] Long-Term			[9] Payout Ratio			[11] Iterative Solution		[12]	[13]	[14]
			Price	Zacks	First Call	Line			Growth	Average	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio	Terminal
Company	Ticker																		
Atmos Energy Corporation	ATO	\$62.93	6.60%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	\$0.00	10.26%	21.12	3.98				
Laclede Group, Inc (The)	LG	\$58.86	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	56.00%	52.00%	67.67%	\$0.00	8.20%	21.12	3.98				
New Jersey Resources Corporation	NJR	\$31.87	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	\$0.00	12.65%	21.12	3.98				
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.57%	21.12	3.98				
South Jersey Industries, Inc	SJI	\$24.38	NA	6.00%	7.00%	6.56%	6.52%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.37%	21.12	3.98				
Southwest Gas Corporation	SWX	\$57.11	6.00%	4.00%	7.00%	7.53%	5.88%	5.31%	55.00%	46.00%	67.67%	\$0.00	10.46%	21.12	3.98				
WGL Holdings, Inc	WGL	\$62.07	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	55.00%	67.67%	\$0.00	9.26%	21.12	3.98				
													Mean	10.40%					
													Max	13.37%					
													Min	8.20%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO	\$2.98	\$3.17	\$3.39	\$3.63	\$3.89	\$4.16	\$4.46	\$4.76	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79	
Laclede Group, Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74	
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96	
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.28	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.46	\$4.70	
South Jersey Industries, Inc	SJI	\$1.57	\$1.67	\$1.78	\$1.90	\$2.02	\$2.15	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$3.76	\$3.95	
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.76	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21	
WGL Holdings, Inc	WGL	\$2.68	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.66	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74	
Projected Annual Dividend Payout Ratio			[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%			
Laclede Group, Inc (The)	LG	58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.96%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%			
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%			
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%			
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%			
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%			
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%			
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	Terminal
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Value		
Atmos Energy Corporation	ATO	\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.85	\$3.08	\$3.33	\$3.59	\$4.29	\$4.51	\$4.75	\$5.01	\$5.27	\$164.5	
Laclede Group, Inc (The)	LG	\$1.48	\$1.54	\$1.59	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$3.89	\$121.3		
New Jersey Resources Corporation	NJR	\$1.36	\$1.38	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$3.36	\$104.8		
Northwest Natural Gas Company	NWN	\$2.05	\$1.97	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$89.3		
South Jersey Industries, Inc	SJI	\$1.23	\$1.25	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$2.68	\$83.6		
Southwest Gas Corporation	SWX	\$1.86	\$1.86	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$4.88	\$152.4		
WGL Holdings, Inc	WGL	\$1.82	\$1.90	\$1.97	\$2.05	\$2.25	\$2.45	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$142.3		
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	
Company	Ticker	Outflow	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	Value
Atmos Energy Corporation	ATO	(\$62.93)	\$0.00	\$1.53	\$1.79	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.85	\$3.08	\$3.33	\$3.59	\$4.29	\$4.51	\$4.75	\$5.01	\$169.78
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.31	\$1.53	\$1.59	\$1.64	\$1.82	\$2.01	\$2.21	\$2.43	\$2.66	\$2.90	\$3.16	\$3.33	\$3.50	\$3.69	\$3.89	\$125.14
New Jersey Resources Corporation	NJR	(\$31.87)	\$0.00	\$1.20	\$1.40	\$1.40	\$1.41	\$1.56	\$1.73	\$1.90	\$2.09	\$2.29	\$2.50	\$2.73	\$2.87	\$3.03	\$3.19	\$3.36	\$108.13
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.82	\$2.11	\$1.86	\$1.74	\$1.83	\$1.94	\$2.05	\$2.17	\$2.30	\$2.44	\$2.59	\$2.72	\$2.87	\$3.02	\$3.18	\$102.43
South Jersey Industries, Inc	SJI	(\$24.38)	\$0.00	\$1.09	\$1.27	\$1.26	\$1.27	\$1.38	\$1.50	\$1.62	\$1.75	\$1.89	\$2.03	\$2.18	\$2.29	\$2.42	\$2.54	\$2.68	\$86.32
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.64	\$1.91	\$1.85	\$1.84	\$2.08	\$2.34	\$2.62	\$2.92	\$3.25	\$3.60	\$3.97	\$4.18	\$4.40	\$4.64	\$4.88	\$157.23
WGL Holdings, Inc	WGL	(\$62.07)	\$0.00	\$1.81	\$1.88	\$1.97	\$2.05	\$2.25	\$2.46	\$2.69	\$2.92	\$3.17	\$3.43	\$3.71	\$3.90	\$4.11	\$4.33	\$4.56	\$146.83

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21 12
90 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates				Long-Term			Payout Ratio			Relative Solution		Terminal	Terminal		
Company	Ticker	Price	Zacks	First Call	Line	Retention	Low Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$62.93	6.00%	6.40%	7.00%	8.21%	6.40%	5.31%	51.00%	51.00%	67.67%	\$0.00	9.82%	21.12	3.98			
Laclede Group Inc (The)	LG	\$58.86	4.80%	4.76%	10.00%	4.90%	4.78%	5.31%	58.00%	52.00%	67.67%	\$0.00	7.30%	21.12	3.98			
New Jersey Resources Corporation	NJR	\$31.87	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	\$0.00	11.42%	21.12	3.98			
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	7.81%	21.12	3.98			
South Jersey Industries, Inc	SJI	\$24.38	NA	6.00%	7.00%	6.56%	6.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	12.99%	21.12	3.98			
Southwest Gas Corporation	SWX	\$57.11	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	\$0.00	9.16%	21.12	3.98			
WGL Holdings, Inc	WGL	\$62.07	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	58.00%	67.67%	\$0.00	8.32%	21.12	3.98			
												Mean	9.56%					
												Max	12.99%					
												Min	7.30%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.15	\$3.35	\$3.57	\$3.79	\$4.04	\$4.29	\$4.56	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39
Laclede Group Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.96	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35
South Jersey Industries, Inc	SJI	\$1.57	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.26	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19
WGL Holdings, Inc	WGL	\$2.68	\$2.82	\$2.96	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03
Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG	58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	56.67%	53.33%	50.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.75	\$5.00	\$156.2	
Laclede Group, Inc (The)	LG	\$1.44	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$3.49	\$108.8	
New Jersey Resources Corporation	NJR	\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$91.3	
Northwest Natural Gas Company	NWN	\$2.02	\$1.91	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$91.9	
South Jersey Industries, Inc	SJI	\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$80.2	
Southwest Gas Corporation	SWX	\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.69	\$3.78	\$3.98	\$4.19	\$130.8	
WGL Holdings, Inc	WGL	\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.86	\$4.06	\$127.4	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$62.93)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.75	\$161.18
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.28	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$112.32
New Jersey Resources Corporation	NJR	(\$31.87)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$94.20
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$94.81
South Jersey Industries, Inc	SJI	(\$24.38)	\$0.00	\$1.08	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$82.80
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.58	\$1.83	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.69	\$3.78	\$3.98	\$135.02
WGL Holdings, Inc	WGL	(\$62.07)	\$0.00	\$1.57	\$1.82	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.86	\$131.52

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
90 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates				Long-Term	Payout Ratio			Iterative Solution	Terminal	Terminal					
Company	Ticker	Price	Zacks	First Call	Line	Retention	High	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$62.93	6.60%	6.40%	7.00%	8.21%	8.21%	5.31%	51.00%	51.00%	67.67%	\$0.00	11.05%	21.12	3.98			
Laclede Group, Inc (The)	LG	\$58.86	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	58.00%	52.00%	67.67%	\$0.00	10.80%	21.12	3.98			
New Jersey Resources Corporation	NJR	\$31.87	6.50%	6.50%	4.00%	5.81%	8.50%	5.31%	58.00%	51.00%	67.67%	\$0.00	13.23%	21.12	3.98			
Northwest Natural Gas Company	NWN	\$49.19	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	64.00%	67.67%	\$0.00	10.19%	21.12	3.98			
South Jersey Industries, Inc	SJI	\$24.38	NA	6.00%	7.00%	6.68%	7.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.73%	21.12	3.98			
Southwest Gas Corporation	SWX	\$57.11	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	55.00%	46.00%	67.67%	\$0.00	11.60%	21.12	3.98			
WGL Holdings, Inc	WGL	\$62.07	7.30%	8.00%	5.50%	5.11%	8.00%	5.31%	60.00%	56.00%	67.67%	\$0.00	10.30%	21.12	3.98			
												Mean	11.56%					
												Max	13.73%					
												Min	10.19%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.75	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54
Laclede Group, Inc (The)	LG	\$2.35	\$2.59	\$2.84	\$3.13	\$3.44	\$3.78	\$4.16	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.39	\$2.54	\$2.70	\$2.88	\$3.06	\$3.26	\$3.46	\$3.66	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66
South Jersey Industries, Inc	SJI	\$1.57	\$1.68	\$1.80	\$1.92	\$2.06	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.46	\$3.74	\$4.02	\$4.33	\$4.65	\$4.98	\$5.32	\$5.66	\$6.01	\$6.35	\$6.69	\$7.04	\$7.42	\$7.81	\$8.22
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	\$7.60
Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group, Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	56.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.62%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.77	\$1.91	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$180.3	
Laclede Group, Inc (The)	LG	\$1.59	\$1.71	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$5.28	\$164.7	
New Jersey Resources Corporation	NJR	\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$111.7	
Northwest Natural Gas Company	NWN	\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$119.6	
South Jersey Industries, Inc	SJI	\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$86.9	
Southwest Gas Corporation	SWX	\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$173.7	
WGL Holdings, Inc	WGL	\$1.88	\$1.98	\$2.08	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$160.6	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$62.93)	\$0.00	\$1.56	\$1.84	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$186.04
Laclede Group, Inc (The)	LG	(\$58.86)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.52	\$4.76	\$5.01	\$168.95
New Jersey Resources Corporation	NJR	(\$31.87)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$115.27
Northwest Natural Gas Company	NWN	(\$49.19)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$123.39
South Jersey Industries, Inc	SJI	(\$24.38)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$89.69
Southwest Gas Corporation	SWX	(\$57.11)	\$0.00	\$1.69	\$1.99	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$179.27
WGL Holdings, Inc	WGL	(\$62.07)	\$0.00	\$1.66	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$166.72

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
180 Day Average Stock Price
Average EPS Growth Rate Estimate in First Stage

Inputs	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]					
	Stock	EPS Growth Rate Estimates				Long Term			Payout Ratio			Iterative Solution	Terminal	Terminal					
		Value				Retent on													
Company	Ticker	Price	Zacks	First Call	Line	Growth	Average	Growth	2016	2019	2025	Proof	IIRR	P/E Ratio	PEG Ratio				
Atmos Energy Corporation	ATO	\$58.64	6.60%	6.40%	7.00%	8.21%	7.05%	5.31%	51.00%	51.00%	67.67%	\$0.00	10.92%	21.12	3.98				
Laclede Group Inc (The)	LG	\$55.96	4.80%	4.78%	10.00%	4.90%	6.12%	5.31%	56.00%	52.00%	67.67%	\$0.00	8.65%	21.12	3.98				
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	5.70%	5.31%	58.00%	51.00%	67.67%	\$0.00	13.20%	21.12	3.98				
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	4.68%	5.31%	87.00%	64.00%	67.67%	\$0.00	9.11%	21.12	3.98				
South Jersey Industries Inc	SJI	\$24.55	NA	6.00%	7.00%	6.58%	6.52%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.30%	21.12	3.98				
Southwest Gas Corporation	SWX	\$56.04	5.00%	4.00%	7.00%	7.53%	5.88%	5.31%	55.00%	46.00%	67.67%	\$0.00	10.64%	21.12	3.98				
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	6.48%	5.31%	60.00%	58.00%	67.67%	\$0.00	9.78%	21.12	3.98				
													Mean	10.90%					
													Max	13.30%					
													Min	8.65%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Atmos Energy Corporation	ATO	\$2.86	\$3.17	\$3.39	\$3.63	\$3.89	\$4.16	\$4.46	\$4.76	\$5.06	\$5.38	\$5.69	\$6.01	\$6.33	\$6.67	\$7.02	\$7.40	\$7.79	
Laclede Group Inc (The)	LG	\$2.35	\$2.49	\$2.65	\$2.81	\$2.98	\$3.16	\$3.36	\$3.56	\$3.77	\$3.98	\$4.20	\$4.43	\$4.67	\$4.92	\$5.18	\$5.45	\$5.74	
New Jersey Resources Corporation	NJR	\$2.10	\$2.22	\$2.35	\$2.48	\$2.62	\$2.77	\$2.93	\$3.09	\$3.27	\$3.45	\$3.63	\$3.83	\$4.03	\$4.25	\$4.47	\$4.71	\$4.96	
Northwest Natural Gas Company	NWN	\$2.16	\$2.26	\$2.37	\$2.48	\$2.59	\$2.72	\$2.84	\$2.98	\$3.12	\$3.28	\$3.45	\$3.63	\$3.82	\$4.02	\$4.24	\$4.46	\$4.70	
South Jersey Industries Inc	SJI	\$1.57	\$1.67	\$1.78	\$1.90	\$2.02	\$2.15	\$2.29	\$2.44	\$2.59	\$2.74	\$2.90	\$3.06	\$3.22	\$3.39	\$3.57	\$3.76	\$3.96	
Southwest Gas Corporation	SWX	\$3.01	\$3.19	\$3.37	\$3.57	\$3.78	\$4.01	\$4.24	\$4.49	\$4.74	\$5.01	\$5.28	\$5.57	\$5.86	\$6.18	\$6.50	\$6.85	\$7.21	
WGL Holdings, Inc	WGL	\$2.68	\$2.85	\$3.04	\$3.24	\$3.44	\$3.67	\$3.91	\$4.15	\$4.40	\$4.65	\$4.93	\$5.20	\$5.48	\$5.77	\$6.07	\$6.40	\$6.74	
Projected Annual Dividend Payout Ratio				[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO		51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG		58.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR		58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN		87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries Inc	SJI		69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX		55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL		60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows			[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO		\$1.73	\$1.85	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.84	\$3.05	\$3.28	\$3.53	\$3.80	\$4.09	\$4.41	\$4.75	\$5.01	\$164.5
Laclede Group Inc (The)	LG		\$1.48	\$1.54	\$1.59	\$1.64	\$1.69	\$1.74	\$1.79	\$1.84	\$1.89	\$1.94	\$1.99	\$2.04	\$2.09	\$2.14	\$2.19	\$2.24	\$121.3
New Jersey Resources Corporation	NJR		\$1.36	\$1.38	\$1.40	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$104.8
Northwest Natural Gas Company	NWN		\$2.06	\$1.97	\$1.88	\$1.74	\$1.63	\$1.54	\$1.45	\$1.36	\$1.27	\$1.18	\$1.09	\$1.00	\$0.91	\$0.82	\$0.73	\$0.64	\$98.3
South Jersey Industries Inc	SJI		\$1.23	\$1.25	\$1.26	\$1.27	\$1.28	\$1.29	\$1.30	\$1.31	\$1.32	\$1.33	\$1.34	\$1.35	\$1.36	\$1.37	\$1.38	\$1.39	\$86.3
Southwest Gas Corporation	SWX		\$1.86	\$1.86	\$1.85	\$1.84	\$1.83	\$1.82	\$1.81	\$1.80	\$1.79	\$1.78	\$1.77	\$1.76	\$1.75	\$1.74	\$1.73	\$1.72	\$152.4
WGL Holdings, Inc	WGL		\$1.82	\$1.90	\$1.97	\$2.05	\$2.13	\$2.21	\$2.29	\$2.37	\$2.45	\$2.53	\$2.61	\$2.69	\$2.77	\$2.85	\$2.93	\$3.01	\$142.3
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]	
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30	
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.63	\$1.79	\$1.98	\$2.12	\$2.28	\$2.45	\$2.64	\$2.84	\$3.05	\$3.28	\$3.53	\$3.80	\$4.09	\$4.41	\$4.75	\$169.78
Laclede Group Inc (The)	LG	(\$55.96)	\$0.00	\$1.31	\$1.53	\$1.59	\$1.64	\$1.69	\$1.74	\$1.79	\$1.84	\$1.89	\$1.94	\$1.99	\$2.04	\$2.09	\$2.14	\$2.19	\$125.14
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.20	\$1.40	\$1.40	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$1.41	\$108.13
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.82	\$2.11	\$1.88	\$1.74	\$1.63	\$1.54	\$1.45	\$1.36	\$1.27	\$1.18	\$1.09	\$1.00	\$0.91	\$0.82	\$0.73	\$102.43
South Jersey Industries Inc	SJI	(\$24.55)	\$0.00	\$1.09	\$1.27	\$1.26	\$1.27	\$1.28	\$1.29	\$1.30	\$1.31	\$1.32	\$1.33	\$1.34	\$1.35	\$1.36	\$1.37	\$1.38	\$86.32
Southwest Gas Corporation	SWX	(\$56.04)	\$0.00	\$1.64	\$1.91	\$1.85	\$1.84	\$1.83	\$1.82	\$1.81	\$1.80	\$1.79	\$1.78	\$1.77	\$1.76	\$1.75	\$1.74	\$1.73	\$157.23
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.61	\$1.88	\$1.97	\$2.05	\$2.13	\$2.21	\$2.29	\$2.37	\$2.45	\$2.53	\$2.61	\$2.69	\$2.77	\$2.85	\$2.93	\$146.83

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
180 Day Average Stock Price
Low EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates				Long-Term			Payout Ratio		Iterative Solution		Terminal	Terminal			
Company	Ticker	Price	Zacks	First Call	Line	Growth	Low Growth	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio			
Atmos Energy Corporation	ATO	\$58.64	6.60%	6.40%	7.00%	8.21%	6.40%	5.31%	5.100%	5.100%	67.67%	\$0.00	10.47%	21.12	3.98			
Laclede Group Inc (The)	LG	\$56.96	4.80%	4.78%	10.00%	4.90%	4.78%	5.31%	56.00%	52.00%	67.67%	\$0.00	7.75%	21.12	3.98			
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	4.00%	5.31%	58.00%	51.00%	67.67%	\$0.00	11.98%	21.12	3.98			
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	3.73%	5.31%	87.00%	64.00%	67.67%	\$0.00	8.44%	21.12	3.98			
South Jersey Industries Inc	SJI	\$24.55	NA	6.00%	7.00%	6.58%	6.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	12.82%	21.12	3.98			
Southwest Gas Corporation	SWX	\$56.04	5.00%	4.00%	7.00%	7.53%	4.00%	5.31%	55.00%	46.00%	67.67%	\$0.00	9.33%	21.12	3.98			
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	5.11%	5.31%	60.00%	56.00%	67.67%	\$0.00	8.84%	21.12	3.98			
												Mean	9.98%					
												Max	12.92%					
												Min	7.75%					
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.15	\$3.35	\$3.67	\$3.79	\$4.04	\$4.28	\$4.56	\$4.84	\$5.12	\$5.41	\$5.71	\$6.01	\$6.33	\$6.67	\$7.02	\$7.39
Laclede Group Inc (The)	LG	\$2.35	\$2.46	\$2.58	\$2.70	\$2.83	\$2.97	\$3.11	\$3.26	\$3.42	\$3.60	\$3.78	\$3.98	\$4.19	\$4.41	\$4.65	\$4.89	\$5.15
New Jersey Resources Corporation	NJR	\$2.10	\$2.18	\$2.27	\$2.36	\$2.46	\$2.55	\$2.66	\$2.77	\$2.89	\$3.03	\$3.17	\$3.34	\$3.51	\$3.70	\$3.90	\$4.10	\$4.32
Northwest Natural Gas Company	NWN	\$2.16	\$2.24	\$2.32	\$2.41	\$2.50	\$2.59	\$2.69	\$2.80	\$2.92	\$3.05	\$3.20	\$3.36	\$3.54	\$3.72	\$3.92	\$4.13	\$4.35
South Jersey Industries Inc	SJI	\$1.67	\$1.66	\$1.76	\$1.87	\$1.98	\$2.10	\$2.23	\$2.36	\$2.49	\$2.64	\$2.78	\$2.93	\$3.09	\$3.25	\$3.42	\$3.61	\$3.80
Southwest Gas Corporation	SWX	\$3.01	\$3.13	\$3.25	\$3.39	\$3.52	\$3.66	\$3.81	\$3.97	\$4.15	\$4.34	\$4.55	\$4.78	\$5.04	\$5.30	\$5.59	\$5.88	\$6.19
WGL Holdings, Inc	WGL	\$2.68	\$2.82	\$2.96	\$3.11	\$3.27	\$3.44	\$3.61	\$3.80	\$4.00	\$4.20	\$4.42	\$4.66	\$4.91	\$5.17	\$5.44	\$5.73	\$6.03
Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.76%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries Inc	SJI	69.00%	65.67%	62.33%	56.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.71	\$1.82	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.75	\$5.00	\$166.2	
Laclede Group Inc (The)	LG	\$1.44	\$1.48	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$3.49	\$108.8	
New Jersey Resources Corporation	NJR	\$1.32	\$1.31	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$2.92	\$91.3	
Northwest Natural Gas Company	NWN	\$2.02	\$1.91	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$2.94	\$91.9	
South Jersey Industries Inc	SJI	\$1.22	\$1.23	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$2.57	\$80.2	
Southwest Gas Corporation	SWX	\$1.79	\$1.76	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.69	\$3.78	\$3.98	\$4.19	\$130.8	
WGL Holdings, Inc	WGL	\$1.78	\$1.83	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$4.08	\$127.4	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.51	\$1.76	\$1.93	\$2.06	\$2.29	\$2.54	\$2.81	\$3.10	\$3.40	\$3.73	\$4.07	\$4.28	\$4.51	\$4.75	\$161.18
Laclede Group Inc (The)	LG	(\$56.96)	\$0.00	\$1.28	\$1.46	\$1.51	\$1.54	\$1.69	\$1.84	\$2.01	\$2.19	\$2.39	\$2.60	\$2.83	\$2.99	\$3.14	\$3.31	\$112.32
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.17	\$1.34	\$1.31	\$1.30	\$1.42	\$1.54	\$1.68	\$1.83	\$2.00	\$2.18	\$2.38	\$2.50	\$2.64	\$2.78	\$94.20
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.79	\$2.06	\$1.79	\$1.66	\$1.74	\$1.82	\$1.91	\$2.02	\$2.13	\$2.25	\$2.39	\$2.52	\$2.65	\$2.80	\$94.81
South Jersey Industries Inc	SJI	(\$24.55)	\$0.00	\$1.08	\$1.25	\$1.24	\$1.24	\$1.34	\$1.45	\$1.56	\$1.69	\$1.81	\$1.95	\$2.09	\$2.20	\$2.32	\$2.44	\$82.80
Southwest Gas Corporation	SWX	(\$56.04)	\$0.00	\$1.58	\$1.83	\$1.73	\$1.68	\$1.87	\$2.07	\$2.29	\$2.53	\$2.80	\$3.09	\$3.41	\$3.69	\$3.78	\$3.98	\$135.02
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.67	\$1.82	\$1.88	\$1.93	\$2.08	\$2.25	\$2.44	\$2.63	\$2.85	\$3.07	\$3.32	\$3.50	\$3.68	\$3.88	\$131.52

Multi-Stage Growth Discounted Cash Flow Model - Setting Terminal P/E at 21.12
180 Day Average Stock Price
High EPS Growth Rate Estimate in First Stage

Inputs		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]			
		Stock	EPS Growth Rate Estimates				Long-Term			Payout Ratio			Iterative Solution		Terminal	Terminal		
Company	Ticker	Price	Zacks	First Call	Line	Value	Retention	High	Growth	2016	2019	2025	Proof	IRR	P/E Ratio	PEG Ratio		
Atmos Energy Corporation	ATO	\$58.64	6.60%	6.40%	7.00%	6.21%	6.21%	6.21%	5.31%	51.00%	51.00%	67.67%	\$0.00	11.73%	21.12	3.98		
Laclede Group, Inc (The)	LG	\$55.96	4.80%	4.78%	10.00%	4.90%	10.00%	5.31%	58.00%	52.00%	67.67%	\$0.00	11.26%	21.12	3.98			
New Jersey Resources Corporation	NJR	\$30.17	6.50%	6.50%	4.00%	5.81%	6.50%	5.31%	58.00%	51.00%	67.67%	\$0.00	13.79%	21.12	3.98			
Northwest Natural Gas Company	NWN	\$46.50	4.00%	4.00%	7.00%	3.73%	7.00%	5.31%	87.00%	64.00%	67.67%	\$0.00	10.74%	21.12	3.98			
South Jersey Industries, Inc	SJI	\$24.55	NA	6.00%	7.00%	6.56%	7.00%	5.31%	69.00%	59.00%	67.67%	\$0.00	13.65%	21.12	3.98			
Southwest Gas Corporation	SWX	\$58.04	5.00%	4.00%	7.00%	7.53%	7.53%	5.31%	65.00%	46.00%	67.67%	\$0.00	11.78%	21.12	3.98			
WGL Holdings, Inc	WGL	\$58.67	7.30%	8.00%	5.50%	5.11%	6.00%	5.31%	60.00%	56.00%	67.67%	\$0.00	10.83%	21.12	3.98			
													Mean	11.97%				
													Max	13.79%				
													Min	10.74%				
Projected Annual Earnings per Share		[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]
Company	Ticker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Atmos Energy Corporation	ATO	\$2.96	\$3.20	\$3.47	\$3.75	\$4.06	\$4.39	\$4.75	\$5.12	\$5.49	\$5.86	\$6.23	\$6.59	\$6.94	\$7.31	\$7.70	\$8.10	\$8.54
Laclede Group, Inc (The)	LG	\$2.35	\$2.59	\$2.84	\$3.13	\$3.44	\$3.78	\$4.16	\$4.55	\$4.93	\$5.31	\$5.67	\$6.02	\$6.34	\$6.68	\$7.03	\$7.40	\$7.80
New Jersey Resources Corporation	NJR	\$2.10	\$2.24	\$2.36	\$2.54	\$2.70	\$2.88	\$3.06	\$3.26	\$3.46	\$3.66	\$3.87	\$4.08	\$4.30	\$4.53	\$4.77	\$5.02	\$5.29
Northwest Natural Gas Company	NWN	\$2.16	\$2.31	\$2.47	\$2.65	\$2.83	\$3.03	\$3.24	\$3.46	\$3.68	\$3.91	\$4.14	\$4.37	\$4.60	\$4.85	\$5.10	\$5.38	\$5.66
South Jersey Industries, Inc	SJI	\$1.57	\$1.68	\$1.80	\$1.92	\$2.06	\$2.20	\$2.36	\$2.51	\$2.68	\$2.84	\$3.01	\$3.18	\$3.35	\$3.52	\$3.71	\$3.91	\$4.11
Southwest Gas Corporation	SWX	\$3.01	\$3.24	\$3.48	\$3.74	\$4.02	\$4.33	\$4.65	\$4.98	\$5.32	\$5.66	\$6.01	\$6.35	\$6.69	\$7.04	\$7.42	\$7.81	\$8.22
WGL Holdings, Inc	WGL	\$2.68	\$2.89	\$3.13	\$3.38	\$3.65	\$3.94	\$4.25	\$4.57	\$4.90	\$5.23	\$5.55	\$5.87	\$6.18	\$6.51	\$6.86	\$7.22	\$7.60
Projected Annual Dividend Payout Ratio		[32]	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]		
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Atmos Energy Corporation	ATO	51.00%	51.00%	51.00%	51.00%	53.38%	55.78%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Laclede Group, Inc (The)	LG	56.00%	54.67%	53.33%	52.00%	54.24%	56.48%	58.72%	60.95%	63.19%	65.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
New Jersey Resources Corporation	NJR	58.00%	55.67%	53.33%	51.00%	53.38%	55.78%	58.14%	60.53%	62.91%	65.29%	67.67%	67.67%	67.67%	67.67%	67.67%		
Northwest Natural Gas Company	NWN	87.00%	79.33%	71.67%	64.00%	64.52%	65.05%	65.57%	66.10%	66.62%	67.15%	67.67%	67.67%	67.67%	67.67%	67.67%		
South Jersey Industries, Inc	SJI	69.00%	65.67%	62.33%	59.00%	60.24%	61.48%	62.72%	63.95%	65.19%	66.43%	67.67%	67.67%	67.67%	67.67%	67.67%		
Southwest Gas Corporation	SWX	55.00%	52.00%	49.00%	46.00%	49.10%	52.19%	55.29%	58.38%	61.48%	64.57%	67.67%	67.67%	67.67%	67.67%	67.67%		
WGL Holdings, Inc	WGL	60.00%	58.67%	57.33%	56.00%	57.67%	59.33%	61.00%	62.67%	64.34%	66.00%	67.67%	67.67%	67.67%	67.67%	67.67%		
Projected Annual Cash Flows		[47]	[48]	[49]	[50]	[51]	[52]	[53]	[54]	[55]	[56]	[57]	[58]	[59]	[60]	[61]	[62]	
Company	Ticker	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Terminal Value	
Atmos Energy Corporation	ATO	\$1.77	\$1.91	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$5.78	\$180.3	
Laclede Group, Inc (The)	LG	\$1.59	\$1.71	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.76	\$5.01	\$5.28	\$164.7	
New Jersey Resources Corporation	NJR	\$1.38	\$1.41	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$3.58	\$111.7	
Northwest Natural Gas Company	NWN	\$2.15	\$2.10	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$3.83	\$119.6	
South Jersey Industries, Inc	SJI	\$1.24	\$1.26	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$2.78	\$88.9	
Southwest Gas Corporation	SWX	\$1.91	\$1.95	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$5.57	\$173.7	
WGL Holdings, Inc	WGL	\$1.88	\$1.98	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$5.14	\$160.6	
Projected Annual Data Investor Cash Flows		[63]	[64]	[65]	[66]	[67]	[68]	[69]	[70]	[71]	[72]	[73]	[74]	[75]	[76]	[77]	[78]	[79]
Company	Ticker	Initial	2/12/16	12/31/16	6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22	6/30/23	6/30/24	6/30/25	6/30/26	6/30/27	6/30/28	6/30/29	6/30/30
Atmos Energy Corporation	ATO	(\$58.64)	\$0.00	\$1.66	\$1.84	\$2.07	\$2.24	\$2.54	\$2.85	\$3.19	\$3.55	\$3.92	\$4.30	\$4.70	\$4.94	\$5.21	\$5.48	\$186.04
Laclede Group, Inc (The)	LG	(\$55.96)	\$0.00	\$1.41	\$1.67	\$1.84	\$1.97	\$2.26	\$2.57	\$2.90	\$3.24	\$3.58	\$3.94	\$4.29	\$4.62	\$4.76	\$5.01	\$169.95
New Jersey Resources Corporation	NJR	(\$30.17)	\$0.00	\$1.22	\$1.43	\$1.44	\$1.47	\$1.64	\$1.82	\$2.01	\$2.22	\$2.43	\$2.67	\$2.91	\$3.06	\$3.23	\$3.40	\$115.27
Northwest Natural Gas Company	NWN	(\$46.50)	\$0.00	\$1.90	\$2.23	\$2.03	\$1.94	\$2.09	\$2.25	\$2.41	\$2.58	\$2.76	\$2.93	\$3.11	\$3.28	\$3.45	\$3.64	\$123.39
South Jersey Industries, Inc	SJI	(\$24.55)	\$0.00	\$1.10	\$1.28	\$1.28	\$1.30	\$1.42	\$1.55	\$1.68	\$1.82	\$1.96	\$2.11	\$2.26	\$2.38	\$2.51	\$2.64	\$89.69
Southwest Gas Corporation	SWX	(\$58.04)	\$0.00	\$1.69	\$1.99	\$1.97	\$1.99	\$2.28	\$2.60	\$2.94	\$3.31	\$3.69	\$4.10	\$4.52	\$4.77	\$5.02	\$5.28	\$179.27
WGL Holdings, Inc	WGL	(\$58.67)	\$0.00	\$1.65	\$1.95	\$2.09	\$2.21	\$2.45	\$2.71	\$2.99	\$3.27	\$3.57	\$3.87	\$4.18	\$4.40	\$4.64	\$4.89	\$165.72

Multi-Stage DCF Notes

-
- [1] Source Bloomberg, based on 30-, 90-, and 180-day historical average as of February 12, 2016
 - [2] Source Zacks
 - [3] Source Yahoo! Finance
 - [4] Source Value Line
 - [5] Source Exhibit RBH-2, Value Line
 - [6] Equals indicated value (average, minimum, maximum) from Columns [2], [3], [4], [5]
 - [7] Source Federal Reserve, Bureau of Economic Analysis
 - [8] Source Value Line
 - [9] Source Value Line
 - [10] Source Bloomberg Professional
 - [11] Equals Column [1] + Column [65]
 - [12] Equals result of Excel Solver function, goal Column [11] equals \$0.00
 - [13] Source SNL Financial Equals 21 12, 30-day Average PE for the Proxy Group as of February 12, 2016
 - [14] Equals Column [13] / (Column [7] x 100)
 - [15] Source Value Line
 - [16] Equals Column [15] x (1 + Column [6])
 - [17] Equals Column [16] x (1 + Column [6])
 - [18] Equals Column [17] x (1 + Column [6])
 - [19] Equals Column [18] x (1 + Column [6])
 - [20] Equals Column [19] x (1 + Column [6])
 - [21] Equals Column [20] x (1 + Column [6])
 - [22] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2021 - 2019)))) x Column [21]
 - [23] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2022 - 2019)))) x Column [22]
 - [24] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2023 - 2019)))) x Column [23]
 - [25] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [24]
 - [26] Equals (1 + (Column [6] + (((Column [7] - Column [6]) / (2025 - 2020 + 1)) x (2024 - 2019)))) x Column [25]
 - [27] Equals Column [26] x (1 + Column [7])
 - [28] Equals Column [27] x (1 + Column [7])
 - [29] Equals Column [28] x (1 + Column [7])
 - [30] Equals Column [29] x (1 + Column [7])
 - [31] Equals Column [30] x (1 + Column [7])
 - [32] Equals Column [8]
 - [33] Equals Column [32] + ((Column [35] - Column [32]) / 3)
 - [34] Equals Column [33] + ((Column [35] - Column [32]) / 3)
 - [35] Equals Column [9]
 - [36] Equals Column [35] + ((Column [42] - Column [35]) / 7)
 - [37] Equals Column [36] + ((Column [42] - Column [35]) / 7)
 - [38] Equals Column [37] + ((Column [42] - Column [35]) / 7)
 - [39] Equals Column [38] + ((Column [42] - Column [35]) / 6)
 - [40] Equals Column [39] + ((Column [42] - Column [35]) / 6)
 - [41] Equals Column [40] + ((Column [42] - Column [35]) / 7)
 - [42] Equals Column [10]
 - [43] Equals Column [10]
 - [44] Equals Column [10]
 - [45] Equals Column [10]
 - [46] Equals Column [10]
 - [47] Equals Column [17] x Column [32]
 - [48] Equals Column [18] x Column [33]
 - [49] Equals Column [19] x Column [34]
 - [50] Equals Column [20] x Column [35]
 - [51] Equals Column [21] x Column [36]
 - [52] Equals Column [22] x Column [37]
 - [53] Equals Column [23] x Column [38]
 - [54] Equals Column [24] x Column [39]
 - [55] Equals Column [25] x Column [40]
 - [56] Equals Column [26] x Column [41]
 - [57] Equals Column [27] x Column [42]
 - [58] Equals Column [28] x Column [43]
 - [59] Equals Column [29] x Column [44]
 - [60] Equals Column [30] x Column [45]
 - [61] Equals Column [31] x Column [46]
 - [62] Equals (Column [13] x Column [31])
 - [63] Equals negative net present value, discount rate equals Column [12], cash flows equal Column [64] through Column [79]
 - [64] Equals \$0.00
 - [65] Equals Column [47] x (12/31/2016 - 2/12/2016) / 365
 - [66] Equals Column [47] x (1 + (0.5 x Column [6]))
 - [67] Equals Column [49]
 - [68] Equals Column [50]
 - [69] Equals Column [51]
 - [70] Equals Column [52]
 - [71] Equals Column [53]
 - [72] Equals Column [54]
 - [73] Equals Column [55]
 - [74] Equals Column [56]
 - [75] Equals Column [57]
 - [76] Equals Column [58]
 - [77] Equals Column [59]
 - [78] Equals Column [60]
 - [79] Equals Column [61] + [62]

Ex-Ante Market Risk Premium
Market DCF Method Based - Bloomberg

[1]	[2]	[3]
S&P 500 Est Required Market Rsturn	Current 30-Year Treasury (30- day average)	Implied Market Risk Premium
13.45%	2.79%	10.66%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est	[8] DCF Result	[9] Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	11,871.79	0.07%	1.31%	9.60%	10.97%	0.0076%
ALCOA INC	AA	10,075.13	0.06%	1.56%	9.77%	11.40%	0.0067%
AMERICAN AIRLINES GROUP INC	AAL	23,838.91	0.14%	1.15%	9.17%	10.37%	0.0144%
ADVANCE AUTO PARTS INC	AAP	10,309.52	0.06%	0.17%	11.80%	11.98%	0.0072%
APPLE INC	AAPL	521,135.36	3.04%	2.30%	14.40%	16.87%	0.5125%
ABBVIE INC	ABBV	85,954.99	0.50%	4.32%	12.10%	16.68%	0.0836%
AMERISOURCEBERGEN CORP	ABC	17,589.64	0.10%	1.55%	12.50%	14.14%	0.0145%
ABBOTT LABORATORIES	ABT	55,387.55	0.32%	2.81%	11.59%	14.56%	0.0470%
ACCENTURE PLC-CL A	ACN	62,308.34	0.36%	2.31%	9.85%	12.28%	0.0446%
ADOBE SYSTEMS INC	ADBE	38,206.99	0.22%	0.00%	21.33%	21.33%	0.0475%
ANALOG DEVICES INC	ADI	15,418.66	0.09%	3.28%	11.00%	14.46%	0.0130%
ARCHER-DANIELS-MIDLAND CO	ADM	19,364.21	0.11%	3.68%	7.72%	11.54%	0.0130%
AUTOMATIC DATA PROCESSING	ADP	37,392.06	0.22%	2.51%	10.29%	12.92%	0.0282%
ALLIANCE DATA SYSTEMS CORP	ADS	11,166.91	0.07%	0.00%	14.00%	14.00%	0.0091%
AUTODESK INC	ADSK	10,121.52	0.06%	0.00%	15.83%	15.83%	0.0093%
ADT CORP/THE	ADT	4,441.92	0.03%	3.21%	6.47%	9.78%	0.0025%
AMEREN CORPORATION	AEE	10,979.22	0.06%	3.67%	6.61%	10.40%	0.0067%
AMERICAN ELECTRIC POWER	AEP	29,743.53	0.17%	3.72%	5.56%	9.38%	0.0163%
AES CORP	AES	6,170.15	0.04%	4.36%	3.95%	8.39%	0.0030%
AETNA INC	AET	34,625.91	0.20%	1.04%	11.83%	12.93%	0.0261%
AFLAC INC	AFL	24,456.39	0.14%	2.91%	8.70%	11.74%	0.0167%
ALLERGAN PLC	AGN	110,544.05	0.64%	0.00%	12.01%	12.01%	0.0774%
AMERICAN INTERNATIONAL GROUP	AIG	65,561.66	0.38%	2.38%	9.50%	11.99%	0.0459%
APARTMENT INVT & MGMT CO -A	AIV	5,639.07	0.03%	3.67%	11.91%	15.79%	0.0052%
ASSURANT INC	AIZ	4,415.83	0.03%	3.08%	7.08%	10.27%	0.0026%
AKAMAI TECHNOLOGIES INC	AKAM	9,032.18	0.05%	0.00%	16.83%	16.83%	0.0089%
ALLSTATE CORP	ALL	24,752.74	0.14%	2.00%	10.02%	12.12%	0.0175%
ALLEGION PLC	ALLE	5,514.94	0.03%	0.82%	13.72%	14.59%	0.0047%
ALEXION PHARMACEUTICALS INC	ALXN	31,790.86	0.19%	0.00%	23.90%	23.90%	0.0443%
APPLIED MATERIALS INC	AMAT	18,322.65	0.11%	2.57%	14.06%	16.81%	0.0180%
AMETEK INC	AME	10,854.58	0.06%	0.87%	8.59%	9.49%	0.0060%
AFFILIATED MANAGERS GROUP	AMG	6,723.28	0.04%	0.00%	13.06%	13.06%	0.0051%
AMGEN INC	AMGN	108,842.62	0.63%	2.77%	8.70%	11.59%	0.0736%
AMERIPRISE FINANCIAL INC	AMP	13,955.04	0.08%	3.66%	13.00%	16.89%	0.0137%
AMERICAN TOWER CORP	AMT	36,287.26	0.21%	2.10%	13.81%	16.06%	0.0340%
AMAZON COM INC	AMZN	238,754.58	1.39%	0.00%	41.88%	41.88%	0.5830%
AUTONATION INC	AN	5,163.95	0.03%	0.00%	8.74%	8.74%	0.0026%
ANTHEM INC	ANTM	31,722.56	0.18%	2.10%	9.06%	11.25%	0.0208%
AON PLC	AON	25,693.40	0.15%	1.36%	11.17%	12.60%	0.0189%
APACHE CORP	APA	13,808.86	0.08%	2.74%	0.60%	3.35%	0.0027%
ANADARKO PETROLEUM CORP	APC	19,212.88	0.11%	2.86%	2.17%	5.06%	0.0057%
AIR PRODUCTS & CHEMICALS INC	APD	28,110.02	0.16%	2.53%	6.11%	8.72%	0.0143%
AMPHENOL CORP-CL A	APH	15,271.26	0.09%	1.17%	9.27%	10.49%	0.0093%
AIRGAS INC	ARG	10,147.23	0.06%	1.70%	10.00%	11.79%	0.0070%
ACTIVISION BLIZZARD INC	ATVI	20,560.89	0.12%	0.92%	12.00%	12.98%	0.0156%
AVALONBAY COMMUNITIES INC	AVB	22,505.35	0.13%	3.28%	6.18%	9.56%	0.0126%
BROADCOM LTD	AVGO	50,052.57	0.29%	1.45%	17.86%	19.44%	0.0567%
AVERY DENNISON CORP	AVY	5,828.72	0.03%	2.46%	6.55%	9.09%	0.0031%
AMERICAN EXPRESS CO	AXP	51,830.39	0.30%	2.29%	8.57%	10.96%	0.0331%
AUTOZONE INC	AZO	22,040.58	0.13%	0.00%	12.37%	12.37%	0.0159%
BOEING CO/THE	BA	71,967.79	0.42%	3.83%	11.39%	15.43%	0.0648%
BANK OF AMERICA CORP	BAC	124,429.13	0.73%	2.27%	24.88%	27.43%	0.1980%
BAXTER INTERNATIONAL INC	BAX	20,026.32	0.12%	1.26%	10.50%	11.83%	0.0138%
BED BATH & BEYOND INC	BBBY	7,024.45	0.04%	0.00%	6.23%	6.23%	0.0026%
BB&T CORP	BBT	24,637.14	0.14%	3.60%	10.69%	14.49%	0.0208%
BEST BUY CO INC	BBY	9,637.28	0.06%	4.28%	9.60%	14.08%	0.0079%
CR BARD INC	BCR	13,545.08	0.08%	0.53%	14.08%	14.65%	0.0116%
BECTON DICKINSON AND CO	BDX	29,614.07	0.17%	1.89%	11.26%	13.26%	0.0229%
FRANKLIN RESOURCES INC	BEN	19,154.32	0.11%	2.30%	3.99%	6.33%	0.0071%
BROWN-FORMAN CORP-CLASS B	BF/B	20,369.85	0.12%	1.38%	8.28%	9.71%	0.0115%
BAKER HUGHES INC	BHI	17,399.86	0.10%	1.66%	-4.10%	-2.48%	-0.0025%
BIOGEN INC	BIIB	54,060.27	0.32%	0.00%	9.61%	9.61%	0.0303%
BANK OF NEW YORK MELLON CORP	BK	36,974.59	0.22%	2.19%	9.95%	12.25%	0.0264%
BLACKROCK INC	BLK	50,967.95	0.30%	2.99%	11.53%	14.69%	0.0437%
BALL CORP	BLL	9,237.50	0.05%	0.67%	8.27%	8.96%	0.0048%
BRISTOL-MYERS SQUIBB CO	BMJ	100,501.44	0.59%	2.56%	19.53%	22.33%	0.1309%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	317,235.55	1.85%	0.00%	6.05%	6.05%	0.1119%
BOSTON SCIENTIFIC CORP	BSX	22,384.05	0.13%	0.00%	10.51%	10.51%	0.0137%
BORGWARNER INC	BWA	6,939.59	0.04%	1.70%	9.45%	11.23%	0.0045%
BAXALTA INC	BXLT	26,268.05	N/A	0.72%	N/A	N/A	N/A
BOSTON PROPERTIES INC	BXP	16,679.92	0.10%	2.84%	6.51%	9.43%	0.0092%
CITIGROUP INC	C	111,831.30	0.65%	1.11%	14.48%	15.67%	0.1022%
CA INC	CA	11,544.33	0.07%	3.62%	8.50%	12.27%	0.0083%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
CONAGRA FOODS INC	CAG	18,059 79	0 11%	2 41%	8 17%	10 68%	0 0112%
CARDINAL HEALTH INC	CAH	25,967 59	0 15%	1 81%	11 70%	13 61%	0 0206%
CAMERON INTERNATIONAL CORP	CAM	12 331 31	0 07%	0 00%	5 05%	5 05%	0 0036%
CATERPILLAR INC	CAT	36,768 06	0 21%	4 92%	9 00%	14 14%	0 0303%
CHUBB LTD	CB	52,712 10	0 31%	2 45%	10 00%	12 57%	0 0386%
CBRE GROUP INC - A	CBG	8,133 61	0 05%	0 00%	12 50%	12 50%	0 0059%
CBS CORP-CLASS B NON VOTING	CBS	20,024 82	0 12%	1 55%	14 36%	16 02%	0 0187%
COCA-COLA ENTERPRISES	CCE	10,955 43	0 06%	2 37%	6 55%	9 00%	0 0057%
CROWN CASTLE INTL CORP	CCI	27,746 44	0 16%	4 32%	15 50%	20 16%	0 0326%
CARNIVAL CORP	GCL	34,730 93	0 20%	2 80%	17 70%	20 74%	0 0420%
CELGENE CORP	CELG	80,081 53	0 47%	0 00%	21 32%	21 32%	0 0996%
CERNER CORP	CERN	18,781 55	0 11%	0 00%	17 28%	17 28%	0 0189%
CF INDUSTRIES HOLDINGS INC	CF	6,992 26	0 04%	4 00%	20 00%	24 40%	0 0099%
CITIZENS FINANCIAL GROUP	CFG	9,967 06	0 06%	2 55%	10 00%	12 67%	0 0074%
CHURCH & DWIGHT CO INC	CHD	11,614 87	0 07%	1 61%	9 11%	10 79%	0 0073%
CHESAPEAKE ENERGY CORP	CHK	1,057 46	0 01%	12 96%	0 62%	13 61%	0 0008%
C H ROBINSON WORLDWIDE INC	CHRW	10,076 72	0 06%	2 41%	9 68%	12 21%	0 0072%
CIGNA CORP	CI	33,565 27	0 20%	0 03%	11 21%	11 25%	0 0220%
CINCINNATI FINANCIAL CORP	CINF	10,121 13	N/A	0 00%	N/A	N/A	N/A
COLGATE-PALMOLIVE CO	CL	58,927 78	0 34%	2 43%	8 25%	10 78%	0 0370%
CLOROX COMPANY	CLX	16,509 49	0 10%	2 43%	6 57%	9 08%	0 0087%
COMERICA INC	CMA	5,818 11	0 03%	2 65%	8 60%	11 36%	0 0039%
COMCAST CORP-CLASS A	CMCSA	138,679 38	0 81%	1 96%	12 62%	14 71%	0 1189%
CME GROUP INC	CME	30,830 25	0 18%	5 71%	12 79%	18 86%	0 0339%
CHIPOTLE MEXICAN GRILL INC	CMG	14,438 37	0 08%	0 00%	17 57%	17 57%	0 0148%
CUMMINS INC	CMI	16,910 86	0 10%	4 18%	4 45%	8 73%	0 0086%
CMS ENERGY CORP	CMS	10,893 65	0 06%	3 16%	6 31%	9 58%	0 0061%
CENTERPOINT ENERGY INC	CNP	7,731 81	0 05%	5 51%	5 33%	10 99%	0 0050%
CONSOL ENERGY INC	CNX	1,784 33	0 01%	0 51%	20 55%	21 12%	0 0022%
CAPITAL ONE FINANCIAL CORP	COF	33,274 11	0 19%	2 71%	6 55%	9 34%	0 0181%
CABOT OIL & GAS CORP	COG	8,174 02	0 05%	0 41%	36 06%	36 54%	0 0174%
COACH INC	COH	9,588 85	0 06%	3 91%	10 17%	14 28%	0 0080%
ROCKWELL COLLINS INC	COL	10,615 09	0 06%	1 63%	8 89%	10 59%	0 0066%
CONOCOPHILLIPS	COP	40,619 72	0 24%	3 04%	6 00%	9 13%	0 0216%
COSTCO WHOLESALE CORP	COST	65,372 89	0 38%	1 12%	9 55%	10 73%	0 0409%
CAMPBELL SOUP CO	CPB	18,056 18	0 11%	2 33%	3 85%	6 22%	0 0066%
COLUMBIA PIPELINE GROUP	CPGX	6,334 81	N/A	2 13%	N/A	N/A	N/A
SALESFORCE COM INC	CRM	39,627 52	0 23%	0 00%	29 70%	29 70%	0 0686%
CISCO SYSTEMS INC	CSCO	127,460 35	0 74%	3 74%	7 56%	11 44%	0 0850%
CSRA INC	CSRA	4,177 43	0 02%	41 55%	10 00%	53 63%	0 0131%
CSX CORP	CSX	23,298 60	0 14%	3 10%	5 96%	9 15%	0 0124%
CINTAS CORP	CTAS	8,975 91	0 05%	1 25%	12 18%	13 51%	0 0071%
CENTURYLINK INC	CTL	15,707 01	0 09%	7 55%	-0 95%	6 57%	0 0060%
COGNIZANT TECH SOLUTIONS-A	CTSH	32,756 67	0 19%	0 00%	15 87%	15 87%	0 0303%
CITRIX SYSTEMS INC	CTXS	9,892 45	0 06%	0 00%	19 98%	19 98%	0 0115%
CABLEVISION SYSTEMS-NY GRP-A	CVC	8,974 02	0 05%	1 57%	8 25%	9 89%	0 0052%
CVS HEALTH CORP	CVS	105,301 33	0 61%	1 75%	14 17%	16 04%	0 0985%
CHEVRON CORP	CVX	160,782 40	0 94%	5 06%	-3 58%	1 39%	0 0131%
DOMINION RESOURCES INC/A	D	41,042 30	0 24%	4 03%	6 56%	10 72%	0 0256%
DELTA AIR LINES INC	DAL	33 468 09	0 20%	1 40%	23 70%	25 27%	0 0493%
DU PONT (E I) DE NEMOURS	DD	50,906 17	0 30%	2 69%	8 30%	11 10%	0 0330%
DEERE & CO	DE	24,750 86	0 14%	3 13%	5 52%	8 73%	0 0126%
DISCOVER FINANCIAL SERVICES	DFS	19 031 58	0 11%	2 69%	7 28%	10 07%	0 0112%
DOLLAR GENERAL CORP	DG	20 499 25	0 12%	1 25%	12 95%	14 27%	0 0171%
QUEST DIAGNOSTICS INC	DGX	8,873 35	0 05%	2 53%	8 78%	11 42%	0 0059%
DR HORTON INC	DHI	8,952 10	0 05%	1 32%	14 06%	15 47%	0 0081%
DANAHER CORP	DHR	58,194 43	0 34%	0 68%	12 15%	12 87%	0 0437%
WALT DISNEY CO/THE	DIS	148,717 62	0 87%	1 60%	10 15%	11 83%	0 1026%
DISCOVERY COMMUNICATIONS-A	DISCA	16,077 25	0 09%	0 00%	15 17%	15 17%	0 0142%
DELPHI AUTOMOTIVE PLC	DLPH	16,996 16	0 10%	1 88%	10 54%	12 52%	0 0124%
DOLLAR TREE INC	DLTR	17,663 70	0 10%	0 00%	20 67%	20 67%	0 0213%
DUN & BRADSTREET CORP	DNB	3,448 90	0 02%	1 98%	7 35%	9 40%	0 0019%
DIAMOND OFFSHORE DRILLING	DO	2,320 73	0 01%	0 92%	14 27%	15 25%	0 0021%
DOVER CORP	DOV	9,175 01	0 05%	2 92%	10 68%	13 75%	0 0074%
DOW CHEMICAL CO/THE	DOW	51,398 34	0 30%	3 97%	6 00%	10 09%	0 0302%
DR PEPPER SNAPPLE GROUP INC	DPS	17,372 40	0 10%	2 09%	7 70%	9 86%	0 0100%
DARDEN RESTAURANTS INC	DRI	7,523 63	0 04%	3 49%	12 39%	16 09%	0 0071%
DTE ENERGY COMPANY	DTE	15,025 70	0 09%	3 55%	5 29%	8 93%	0 0078%
DUKE ENERGY CORP	DUK	52,478 61	0 31%	4 29%	4 41%	8 79%	0 0269%
DAVITA HEALTHCARE PARTNERS I	DVA	13,200 16	0 08%	0 00%	11 15%	11 15%	0 0086%
DEVON ENERGY CORP	DVN	8,914 59	0 05%	4 43%	5 40%	9 94%	0 0052%
ELECTRONIC ARTS INC	EA	18,326 59	0 11%	0 00%	11 70%	11 70%	0 0125%
EBAY INC	EBAY	26,509 08	0 15%	0 00%	7 25%	7 25%	0 0112%
ECOLAB INC	ECL	31,488 21	0 18%	1 22%	13 22%	14 52%	0 0267%
CONSOLIDATED EDISON INC	ED	20,734 56	0 12%	3 68%	2 99%	6 72%	0 0081%
EQUIFAX INC	EFX	11,547 82	0 07%	1 35%	9 37%	10 78%	0 0073%
EDISON INTERNATIONAL	EIX	20,122 10	0 12%	2 73%	5 10%	7 90%	0 0093%
ESTEE LAUDER COMPANIES-CL A	EL	32,548 96	0 19%	1 29%	11 69%	13 05%	0 0248%
EMC CORP/MA	EMC	46,805 69	0 27%	2 00%	10 94%	13 05%	0 0356%
EASTMAN CHEMICAL CO	EMN	9,014 53	0 05%	2 79%	5 70%	8 57%	0 0045%
EMERSON ELECTRIC CO	EMR	29,596 19	0 17%	4 15%	7 20%	11 50%	0 0198%
ENDO INTERNATIONAL PLC	ENDP	11,342 85	0 07%	0 00%	11 03%	11 03%	0 0073%
EOG RESOURCES INC	EOG	37,216 96	0 22%	0 88%	1 26%	2 14%	0 0047%
EQUINIX INC	EQIX	17,653 69	0 10%	2 37%	17 00%	19 57%	0 0201%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
EQUITY RESIDENTIAL	EQR	25,968 23	0 15%	15 59%	6 26%	22 34%	0 0338%
EQT CORP	EQT	9,018 29	0 05%	3 57%	25 00%	29 01%	0 0153%
EVERSOURCE ENERGY	ES	16,972 90	0 10%	3 33%	6 67%	10 12%	0 0100%
EXPRESS SCRIPTS HOLDING CO	ESRX	45,540 43	0 27%	0 00%	13 60%	13 60%	0 0361%
ESSEX PROPERTY TRUST INC	ESS	12,912 51	0 08%	3 22%	5 84%	9 15%	0 0069%
ENSCO PLC-CL A	ESV	1,973 28	0 01%	7 16%	-4 00%	3 02%	0 0003%
E*TRADE FINANCIAL CORP	ETFC	6,196 27	0 04%	0 04%	19 10%	19 14%	0 0089%
EATON CORP PLC	ETN	25,083 76	0 15%	4 39%	8 40%	12 97%	0 0190%
ENTERGY CORP	ETR	12,565 57	0 07%	4 75%	2 76%	7 58%	0 0056%
EDWARDS LIFESCIENCES CORP	EW	17,481 11	0 10%	0 00%	16 40%	16 40%	0 0167%
EXELON CORP	EXC	28,020 91	0 16%	4 12%	6 36%	10 62%	0 0173%
EXPEDITORS INTL WASH INC	EXPD	8,519 09	0 05%	1 56%	9 16%	10 79%	0 0054%
EXPEDIA INC	EXPE	15,396 85	0 09%	0 88%	24 01%	25 00%	0 0224%
EXTRA SPACE STORAGE INC	EXR	10,048 16	0 06%	2 75%	7 06%	9 91%	0 0058%
FORD MOTOR CO	F	45,847 88	0 27%	6 08%	10 85%	17 25%	0 0461%
FASTENAL CO	FAST	12,412 90	0 07%	2 89%	13 68%	16 77%	0 0121%
FACEBOOK INC-A	FB	290,349 07	1 69%	0 00%	29 67%	29 67%	0 5023%
FREEMPORT-MCMORAN INC	FCX	6,391 96	0 04%	0 74%	-38 33%	-37 73%	-0 0141%
FEDEX CORP	FDX	35,444 12	0 21%	0 78%	13 50%	14 33%	0 0286%
FIRSTENERGY CORP	FE	13,909 61	0 08%	4 38%	2 89%	7 33%	0 0059%
F5 NETWORKS INC	FFIV	6,038 63	0 04%	0 00%	12 77%	12 77%	0 0045%
FIDELITY NATIONAL INFO SERV	FIS	16,243 58	0 09%	1 90%	12 75%	14 77%	0 0140%
FISERV INC	FISV	21,270 10	0 12%	0 00%	12 25%	12 25%	0 0152%
FIFTH THIRD BANCORP	FITB	11,811 70	0 07%	3 77%	4 20%	8 05%	0 0055%
FLIR SYSTEMS INC	FLIR	4,109 28	0 02%	1 57%	12 50%	14 17%	0 0034%
FLUOR CORP	FLR	6,179 97	0 04%	1 92%	5 73%	7 71%	0 0028%
FLOWSERVE CORP	FLS	5,342 08	0 03%	1 76%	7 54%	9 36%	0 0029%
FMC CORP	FMC	4,682 15	0 03%	1 90%	10 30%	12 30%	0 0034%
TWENTY-FIRST CENTURY FOX-A	FOXA	47,181 94	0 28%	1 30%	14 39%	15 78%	0 0434%
FEDERAL REALTY INVS TRUST	FRT	10,094 47	0 06%	2 68%	5 32%	8 07%	0 0047%
FIRST SOLAR INC	FSLR	6,155 12	0 04%	0 00%	1 67%	1 67%	0 0006%
FMC TECHNOLOGIES INC	FTI	5,270 91	0 03%	0 00%	-11 80%	-11 80%	-0 0036%
FRONTIER COMMUNICATIONS CORP	FTR	4,953 22	0 03%	9 91%	3 00%	13 05%	0 0038%
AGL RESOURCES INC	GAS	7,780 44	0 05%	3 28%	7 00%	10 40%	0 0047%
GENERAL DYNAMICS CORP	GD	40,507 04	0 24%	2 25%	8 93%	11 28%	0 0266%
GENERAL ELECTRIC CO	GE	266,714 27	1 56%	3 37%	8 58%	12 08%	0 1880%
GENERAL GROWTH PROPERTIES	GGP	22,556 57	0 13%	3 03%	7 49%	10 63%	0 0140%
GILEAD SCIENCES INC	GILD	128,899 16	0 75%	2 10%	3 26%	5 40%	0 0406%
GENERAL MILLS INC	GIS	33,755 41	0 20%	3 15%	7 54%	10 81%	0 0213%
CORNING INC	GLW	20,465 08	0 12%	2 88%	6 38%	9 35%	0 0112%
GENERAL MOTORS CO	GM	42,797 89	0 25%	5 40%	9 66%	15 31%	0 0382%
KEURIG GREEN MOUNTAIN INC	GMCR	13,461 91	0 08%	1 43%	15 00%	16 53%	0 0130%
GAMESTOP CORP-CLASS A	GME	2,824 01	0 02%	3 56%	11 78%	15 55%	0 0026%
ALPHABET INC-CL C	GOOG	476,820 49	2 78%	0 00%	16 54%	16 54%	0 4599%
GENUINE PARTS CO	GPC	13,246 06	N/A	2 92%	N/A	N/A	N/A
GAP INC/THE	GPS	9,537 14	0 06%	3 87%	8 01%	12 04%	0 0067%
GARMIN LTD	GRMN	6,540 15	0 04%	5 85%	5 07%	11 07%	0 0042%
GOLDMAN SACHS GROUP INC	GS	65,077 99	0 38%	1 86%	15 20%	17 20%	0 0653%
GOODYEAR TIRE & RUBBER CO	GT	7,928 49	0 05%	0 96%	7 00%	7 99%	0 0037%
WW GRAINGER INC	GWW	13,254 03	0 08%	2 34%	9 92%	12 37%	0 0096%
HALLIBURTON CO	HAL	24,986 34	0 15%	2 51%	12 46%	15 13%	0 0220%
HARMAN INTERNATIONAL	HAR	4,995 63	0 03%	2 02%	16 00%	18 18%	0 0053%
HASBRO INC	HAS	8,733 62	0 05%	2 82%	9 97%	12 92%	0 0066%
HUNTINGTON BANCSHARES INC	HBAN	6,723 81	0 04%	3 48%	6 48%	10 08%	0 0040%
HANESBRANDS INC	HBI	10,410 61	0 06%	1 64%	15 58%	17 34%	0 0105%
HCA HOLDINGS INC	HCA	26,910 14	0 16%	0 00%	10 75%	10 75%	0 0169%
WELLTOWER INC	HCN	19,251 05	0 11%	6 07%	4 43%	10 63%	0 0119%
HCP INC	HCP	12,224 86	0 07%	8 79%	2 58%	11 49%	0 0082%
HOME DEPOT INC	HD	147,479 95	0 86%	2 02%	14 07%	16 24%	0 1396%
HESS CORP	HES	12,624 83	0 07%	2 50%	-16 86%	-14 59%	-0 0107%
HARTFORD FINANCIAL SVCS GRP	HIG	16,707 99	0 10%	2 17%	9 00%	11 27%	0 0110%
HARLEY-DAVIDSON INC	HOG	7,428 82	0 04%	3 46%	11 38%	15 03%	0 0065%
HONEYWELL INTERNATIONAL INC	HON	79,609 53	0 46%	2 34%	9 19%	11 64%	0 0540%
STARWOOD HOTELS & RESORTS	HOT	10,817 34	0 06%	2 34%	8 23%	10 67%	0 0067%
HELMERICH & PAYNE	HP	5,120 78	0 03%	5 80%	10 00%	16 09%	0 0048%
HEWLETT PACKARD ENTERPRIS	HPE	21,381 04	0 12%	1 79%	4 51%	6 34%	0 0079%
HP INC	HPQ	16,265 11	0 09%	5 23%	2 58%	7 88%	0 0075%
H&R BLOCK INC	HRB	7,956 23	0 05%	2 39%	11 00%	13 52%	0 0063%
HORMEL FOODS CORP	HRL	21,930 99	0 13%	1 30%	7 15%	8 49%	0 0109%
HARRIS CORP	HRS	8,982 58	N/A	2 80%	N/A	N/A	N/A
HENRY SCHEIN INC	HSIC	13,027 97	0 08%	0 00%	10 78%	10 78%	0 0082%
HOST HOTELS & RESORTS INC	HST	10,838 23	0 06%	5 55%	5 67%	11 37%	0 0072%
HERSHEY CO/THE	HSY	19,446 36	0 11%	2 70%	8 18%	10 98%	0 0125%
HUMANA INC	HUM	23,770 67	0 14%	0 74%	12 94%	13 73%	0 0190%
INTL BUSINESS MACHINES CORP	IBM	117,422 13	0 68%	4 38%	6 75%	11 28%	0 0772%
INTERCONTINENTAL EXCHANGE INC	ICE	28,090 78	0 16%	1 44%	14 37%	15 91%	0 0261%
INTL FLAVORS & FRAGRANCES	IFF	8,566 71	0 05%	2 11%	9 10%	11 31%	0 0056%
ILLUMINA INC	ILMN	20,894 21	0 12%	0 00%	17 52%	17 52%	0 0213%
INTEL CORP	INTC	135,295 36	0 79%	3 60%	8 69%	12 44%	0 0982%
INTUIT INC	INTU	24,964 25	0 15%	1 27%	17 21%	18 59%	0 0271%
INTERNATIONAL PAPER CO	IP	14,161 61	0 08%	5 23%	6 90%	12 31%	0 0102%
INTERPUBLIC GROUP OF COS INC	IPG	8,289 50	0 05%	2 70%	6 50%	9 28%	0 0045%
INGERSOLL-RAND PLC	IR	13,181 44	0 08%	2 51%	8 78%	11 40%	0 0088%
IRON MOUNTAIN INC	IRM	5,785 59	0 03%	6 98%	7 30%	14 54%	0 0049%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Inoex	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
INTUITIVE SURGICAL INC	ISRG	19,859 39	0 12%	0 00%	12 31%	12 31%	0 0143%
ILLINOIS TOOL WORKS	ITW	33,422 90	0 19%	2 42%	7 70%	10 22%	0 0199%
INVESCO LTD	IVZ	11,232 35	0 07%	4 29%	9 53%	14 02%	0 0092%
HUNT (JB) TRANSPRT SVCS INC	JBHT	8,529 83	0 05%	1 19%	15 60%	16 88%	0 0084%
JOHNSON CONTROLS INC	JCI	22,565 07	0 13%	3 27%	9 28%	12 70%	0 0167%
JACOBS ENGINEERING GROUP INC	JEC	4,421 14	0 03%	0 00%	8 45%	8 45%	0 0022%
JOHNSON & JOHNSON	JNJ	281,730 20	1 64%	3 05%	6 07%	9 20%	0 1512%
JUNIPER NETWORKS INC	JNPR	8,427 01	0 05%	1 88%	9 57%	11 54%	0 0057%
JPMORGAN CHASE & CO	JPM	211,628 15	1 23%	3 23%	7 70%	11 06%	0 1364%
NORDSTROM INC	JWN	8,992 98	0 05%	12 86%	7 78%	21 14%	0 0111%
KELLOGG CO	K	26,569 20	0 15%	2 77%	5 50%	8 35%	0 0129%
KEYCORP	KEY	8,674 44	0 05%	3 22%	6 44%	9 77%	0 0049%
KRAFT HEINZ CO/THE	KHC	87,271 74	0 51%	2 67%	16 75%	19 64%	0 1000%
KIMCO REALTY CORP	KIM	10,865 93	0 06%	3 91%	4 90%	8 91%	0 0056%
KLA-TENCOR CORP	KLAC	9,929 85	0 06%	3 26%	13 12%	16 59%	0 0096%
KIMBERLY-CLARK CORP	KMB	46,422 53	0 27%	2 84%	7 79%	10 74%	0 0291%
KINDER MORGAN INC	KMI	33,384 08	0 19%	3 35%	6 47%	9 92%	0 0193%
CARMAX INC	KMX	8,539 67	0 05%	0 00%	13 53%	13 53%	0 0067%
COCA-COLA CO/THE	KO	187,484 75	1 09%	3 25%	6 16%	9 51%	0 1039%
MICHAEL KORS HOLDINGS LTD	KORS	8,894 39	0 05%	0 00%	4 63%	4 63%	0 0024%
KROGER CO	KR	37,361 12	0 22%	1 07%	10 39%	11 51%	0 0251%
KOHL'S CORP	KSS	7,746 56	0 05%	4 41%	6 52%	11 07%	0 0050%
KANSAS CITY SOUTHERN	KSU	8,614 80	0 05%	1 74%	8 30%	10 11%	0 0051%
LOEWS CORP	L	12,706 73	N/A	0 74%	N/A	N/A	N/A
L BRANDS INC	LB	23,695 99	0 14%	4 95%	11 03%	16 26%	0 0225%
LEGGETT & PLATT INC	LEG	5,760 93	N/A	3 04%	N/A	N/A	N/A
LENNAR CORP-A	LEN	8,151 52	0 05%	0 40%	12 13%	12 56%	0 0060%
LABORATORY CRP OF AMER HLDGS	LH	10,425 62	0 06%	0 00%	10 26%	10 26%	0 0062%
L-3 COMMUNICATIONS HOLDINGS	LLL	9,040 46	0 05%	2 46%	5 02%	7 55%	0 0040%
LINEAR TECHNOLOGY CORP	LLTC	9,968 75	0 06%	2 97%	6 66%	9 73%	0 0057%
ELI LILLY & CO	LLY	78,972 62	0 46%	2 87%	12 87%	15 92%	0 0733%
LEGG MASON INC	LM	2,869 34	0 02%	3 01%	14 95%	18 19%	0 0030%
LOCKHEED MARTIN CORP	LMT	63,327 46	0 37%	3 26%	7 21%	10 58%	0 0391%
LINCOLN NATIONAL CORP	LNC	8,079 93	0 05%	3 07%	10 30%	13 53%	0 0064%
LOWE'S COS INC	LOW	59,362 84	0 35%	1 64%	17 02%	18 79%	0 0651%
LAM RESEARCH CORP	LRCX	10,494 94	0 06%	1 80%	8 34%	10 21%	0 0063%
LEUCADIA NATIONAL CORP	LUK	5,355 36	0 03%	1 69%	18 00%	19 84%	0 0062%
SOUTHWEST AIRLINES CO	LUV	23,123 66	0 13%	0 91%	15 07%	16 04%	0 0216%
LEVEL 3 COMMUNICATIONS INC	LVL3	16,623 42	0 10%	0 00%	-1 51%	-1 51%	-0 0015%
LYONDELLBASELL INDU-CL A	LYB	34,364 47	0 20%	4 19%	4 18%	8 46%	0 0169%
MACY'S INC	M	12,338 93	0 07%	3 51%	6 60%	10 23%	0 0074%
MASTERCARD INC-CLASS A	MA	94,290 61	0 55%	0 90%	15 23%	16 20%	0 0890%
MACERICH CO/THE	MAC	11,920 49	0 07%	6 30%	5 86%	12 34%	0 0086%
MARRIOTT INTERNATIONAL -CL A	MAR	16,404 82	0 10%	1 49%	12 23%	13 81%	0 0132%
MASCO CORP	MAS	8,622 11	0 05%	1 47%	13 40%	14 97%	0 0075%
MATTEL INC	MAT	10,438 53	0 06%	5 00%	8 97%	14 19%	0 0086%
MCDONALD'S CORP	MCD	108,286 84	0 63%	3 09%	9 81%	13 06%	0 0825%
MICROCHIP TECHNOLOGY INC	MCHP	8,223 48	0 05%	3 49%	7 81%	11 44%	0 0055%
MCKESSON CORP	MCK	34,523 49	0 20%	0 69%	12 78%	13 51%	0 0272%
MOODY'S CORP	MCO	16,272 69	0 09%	1 81%	13 00%	14 93%	0 0142%
MONDELEZ INTERNATIONAL INC-A	MDLZ	60,547 28	0 35%	1 83%	11 80%	13 73%	0 0485%
MEDTRONIC PLC	MDT	103,211 83	0 60%	2 07%	8 84%	11 00%	0 0662%
METLIFE INC	MET	41,608 18	0 24%	4 38%	8 60%	13 17%	0 0320%
MCGRAW HILL FINANCIAL INC	MHFI	22,688 46	0 13%	1 69%	10 88%	12 66%	0 0167%
MOHAWK INDUSTRIES INC	MHK	11,474 17	N/A	0 00%	N/A	N/A	N/A
MEAD JOHNSON NUTRITION CO	MJN	13,146 79	0 08%	2 57%	9 15%	11 84%	0 0091%
MCCORMICK & CO-NON VTG SHRS	MKC	11,392 14	0 07%	1 92%	6 50%	8 48%	0 0056%
MARTIN MARIETTA MATERIALS	MLM	8,787 43	0 05%	1 26%	21 93%	23 33%	0 0120%
MARSH & MCLENNAN COS	MVIC	29,254 03	0 17%	2 33%	11 69%	14 16%	0 0242%
3M CO	MMM	93,151 68	0 54%	2 90%	9 13%	12 15%	0 0660%
MALLINCKRODT PLC	MNKT	6,977 89	0 04%	0 00%	8 44%	8 44%	0 0034%
MONSTER BEVERAGE CORP	MNST	24,987 14	0 15%	0 00%	19 38%	19 38%	0 0282%
ALTRIA GROUP INC	MO	117,581 95	0 69%	3 97%	7 64%	11 76%	0 0806%
MONSANTO CO	MON	38,324 13	0 22%	2 50%	9 74%	12 36%	0 0276%
MOSAIC CO/THE	MOS	8,076 12	0 05%	4 85%	13 40%	18 57%	0 0087%
MARATHON PETROLEUM CORP	MPC	16,911 27	0 10%	4 20%	2 34%	6 59%	0 0065%
MERCK & CO INC	MRK	136,967 42	0 80%	3 76%	7 28%	11 17%	0 0892%
MARATHON OIL CORP	MRO	5,072 68	0 03%	9 08%	7 67%	17 09%	0 0051%
MORGAN STANLEY	MS	44,707 41	0 26%	3 00%	16 32%	19 56%	0 0510%
MICROSOFT CORP	MSFT	399,419 79	2 33%	2 79%	9 60%	12 52%	0 2916%
MOTOROLA SOLUTIONS INC	MSI	10,907 98	0 06%	2 25%	9 00%	11 36%	0 0072%
M & T BANK CORP	MTB	18,831 20	0 11%	2 72%	3 75%	6 52%	0 0072%
MICRON TECHNOLOGY INC	MU	10,395 31	0 06%	0 00%	-0 14%	-0 14%	-0 0001%
MURPHY OIL CORP	MUR	2,888 30	N/A	8 30%	N/A	N/A	N/A
MYLAN NV	MYL	20,566 98	0 12%	0 00%	9 92%	9 92%	0 0119%
NAVIENT CORP	NAVI	3,307 88	N/A	7 19%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	12,297 41	0 07%	2 52%	0 92%	3 46%	0 0025%
NASDAQ INC	NDAQ	10,069 34	0 06%	1 67%	7 90%	9 63%	0 0057%
NEXTERA ENERGY INC	NEE	51,428 04	0 30%	3 11%	6 42%	9 63%	0 0289%
NEWMONT MINING CORP	NEM	13,640 65	0 08%	0 40%	1 43%	1 83%	0 0015%
NETFLIX INC	NFLX	37,414 30	0 22%	0 00%	39 63%	39 63%	0 0864%
NEWFIELD EXPLORATION CO	NFX	3,949 68	0 02%	0 00%	4 68%	4 68%	0 0011%
NISOURCE INC	NI	6,781 32	0 04%	3 90%	4 00%	7 98%	0 0032%
NIKE INC -CL B	NKE	96,091 63	0 56%	1 08%	13 98%	15 14%	0 0848%

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Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
NIELSEN HOLDINGS PLC	NLSN	17,216 30	0 10%	2 50%	12 33%	14 98%	0 0150%
NORTHROP GRUMMAN CORP	NOC	32,795 96	0 19%	1 86%	6 90%	8 83%	0 0169%
NATIONAL OILWELL VARCO INC	NOV	10,351 85	0 06%	6 67%	-11 14%	-4 84%	-0 0029%
NRG ENERGY INC	NRG	3,009 81	0 02%	6 10%	-24 70%	-19 36%	-0 0034%
NORFOLK SOUTHERN CORP	NSC	21,637 29	0 13%	3 33%	5 00%	8 42%	0 0106%
NETAPP INC	NTAP	6,399 41	0 04%	3 29%	8 87%	12 30%	0 0046%
NORTHERN TRUST CORP	NTRS	13,144 87	0 08%	2 64%	11 48%	14 28%	0 0109%
NUCOR CORP	NUE	12,794 18	0 07%	3 75%	11 63%	15 61%	0 0116%
NVIDIA CORP	NVDA	13,842 74	0 08%	1 53%	8 53%	10 13%	0 0082%
NEWELL RUBBERMAID INC	NWL	9,292 41	0 05%	2 35%	8 48%	10 93%	0 0059%
NEWS CORP - CLASS A	NWSA	6,343 33	0 04%	1 86%	11 45%	13 42%	0 0050%
REALTY INCOME CORP	O	15,152 55	0 09%	3 88%	4 41%	8 36%	0 0074%
OWENS-ILLINOIS INC	OI	2,099 21	0 01%	0 00%	9 09%	9 09%	0 0011%
ONEOK INC	OKE	4,223 22	0 02%	12 10%	8 25%	20 85%	0 0051%
OMNICOM GROUP	OMC	17,573 97	0 10%	2 87%	5 75%	8 70%	0 0089%
ORACLE CORP	ORCL	149,311 36	0 87%	1 71%	7 75%	9 53%	0 0829%
O'REILLY AUTOMOTIVE INC	ORLY	24,957 88	0 15%	0 00%	15 69%	15 69%	0 0228%
OCCIDENTAL PETROLEUM CORP	OXY	51,216 13	0 30%	4 51%	8 00%	12 69%	0 0379%
PAYCHEX INC	PAYX	17,664 71	0 10%	3 43%	9 33%	12 92%	0 0133%
PEOPLE'S UNITED FINANCIAL	PBCT	4,454 95	0 03%	4 71%	12 40%	17 40%	0 0045%
PITNEY BOWES INC	PBI	3,326 21	0 02%	4 44%	14 00%	18 75%	0 0036%
PACCAR INC	PCAR	17,672 79	0 10%	4 10%	8 60%	12 87%	0 0133%
P G & E CORP	PCG	27,077 96	0 16%	3 30%	5 75%	9 14%	0 0144%
PLUM CREEK TIMBER CO	PCL	6,269 21	0 04%	4 94%	22 49%	27 98%	0 0102%
PRICELINE GROUP INC/THE	PCLN	52,671 85	0 31%	0 00%	18 62%	18 62%	0 0572%
PATTERSON COS INC	PDCC	4,223 79	0 02%	2 15%	9 93%	12 19%	0 0030%
PUBLIC SERVICE ENTERPRISE GP	PEG	21,194 74	0 12%	3 72%	3 76%	7 55%	0 0093%
PEPSICO INC	PEP	142,358 70	0 83%	3 01%	6 57%	9 68%	0 0804%
PFIZER INC	PFE	181,239 34	1 06%	4 07%	5 37%	9 55%	0 1009%
PRINCIPAL FINANCIAL GROUP	PFNG	10,317 71	0 06%	4 56%	9 02%	13 79%	0 0083%
PROCTER & GAMBLE CO/THE	PG	219,042 76	1 28%	3 34%	7 35%	10 81%	0 1381%
PROGRESSIVE CORP	PGR	18,343 00	0 11%	2 08%	9 25%	11 43%	0 0122%
PARKER HANNIFIN CORP	PH	13,138 73	0 08%	2 59%	8 57%	11 27%	0 0086%
PULTEGROUP INC	PHM	5,589 87	0 03%	2 25%	12 20%	14 59%	0 0048%
PERKINELMER INC	PKI	4,971 00	0 03%	0 63%	11 51%	12 18%	0 0035%
PROLOGIS INC	PLD	18,902 38	0 11%	4 60%	4 11%	8 80%	0 0097%
PHILIP MORRIS INTERNATIONAL	PM	137,980 27	0 80%	4 69%	7 49%	12 35%	0 0994%
PNC FINANCIAL SERVICES GROUP	PNC	41,096 72	0 24%	2 64%	7 66%	10 40%	0 0249%
PENTAIR PLC	PNR	8,003 26	0 05%	3 02%	8 06%	11 20%	0 0052%
PINNACLE WEST CAPITAL	PNW	7,451 32	0 04%	3 59%	4 87%	8 55%	0 0037%
PEPCO HOLDINGS INC	POM	6,743 68	0 04%	4 06%	6 00%	10 18%	0 0040%
PPG INDUSTRIES INC	PPG	24,713 53	0 14%	1 61%	8 40%	10 08%	0 0145%
PPL CORP	PPL	24,047 50	0 14%	4 27%	4 66%	9 03%	0 0127%
PERRIGO CO PLC	PRGO	20,291 33	0 12%	0 37%	12 57%	12 96%	0 0153%
PRUDENTIAL FINANCIAL INC	PRU	27,676 36	0 16%	4 61%	10 67%	15 52%	0 0250%
PUBLIC STORAGE	PSA	40,450 88	N/A	2 78%	N/A	N/A	N/A
PHILLIPS 66	PSX	40,114 71	0 23%	3 15%	7 61%	10 88%	0 0254%
PVH CORP	PVH	6,010 75	0 04%	0 20%	7 47%	7 68%	0 0027%
QUANTA SERVICES INC	PWR	2,821 33	0 02%	0 00%	8 00%	8 00%	0 0013%
PRAXAIR INC	PX	29,575 51	0 17%	2 86%	8 23%	11 21%	0 0193%
PIONEER NATURAL RESOURCES CO	PXD	18,631 53	0 11%	0 09%	0 15%	0 24%	0 0003%
PAYPAL HOLDINGS INC	PYPL	41,937 78	0 24%	0 00%	16 67%	16 67%	0 0408%
QUALCOMM INC	QCOM	66,612 18	0 39%	4 35%	10 80%	15 39%	0 0598%
QORVO INC	QRVO	5,148 28	0 03%	0 00%	14 64%	14 64%	0 0044%
RYDER SYSTEM INC	R	2,896 15	0 02%	3 14%	7 63%	10 88%	0 0018%
REYNOLDS AMERICAN INC	RAI	68,226 92	0 40%	3 53%	10 08%	13 78%	0 0548%
ROYAL CARIBBEAN CRUISES LTD	RCL	15,129 08	0 09%	2 23%	26 52%	29 04%	0 0256%
REGENERON PHARMACEUTICALS	REGN	39,715 75	0 23%	0 00%	20 92%	20 92%	0 0484%
REGIONS FINANCIAL CORP	RF	9,921 56	0 06%	3 49%	4 47%	8 03%	0 0046%
ROBERT HALF INTL INC	RHI	4,954 50	0 03%	2 27%	11 45%	13 84%	0 0040%
RED HAT INC	RHT	11,708 10	0 07%	0 00%	18 03%	18 03%	0 0123%
TRANSOCEAN LTD	RIG	3,286 77	0 02%	11 85%	10 02%	22 47%	0 0043%
RALPH LAUREN CORP	RL	7,304 24	0 04%	2 31%	12 77%	15 23%	0 0065%
ROCKWELL AUTOMATION INC	ROK	12,659 98	0 07%	3 00%	6 82%	9 92%	0 0073%
ROPER TECHNOLOGIES INC	ROP	16,490 72	0 10%	0 70%	11 53%	12 27%	0 0118%
ROSS STORES INC	ROST	21,769 02	0 13%	0 87%	10 63%	11 55%	0 0147%
RANGE RESOURCES CORP	RRC	4,645 81	0 03%	0 59%	3 25%	3 85%	0 0010%
REPUBLIC SERVICES INC	RSG	15,243 24	0 09%	2 77%	5 97%	8 82%	0 0078%
RAYTHEON COMPANY	RTN	35,951 52	0 21%	2 37%	7 65%	10 11%	0 0212%
STARBUCKS CORP	SBUX	82,566 67	0 48%	1 47%	17 91%	19 51%	0 0939%
SCANA CORP	SCG	9,203 85	0 05%	3 38%	5 55%	9 02%	0 0048%
SCHWAB (CHARLES) CORP	SCHW	30,043 06	0 18%	1 27%	18 63%	20 01%	0 0351%
SPECTRA ENERGY CORP	SE	19,128 49	0 11%	5 71%	5 40%	11 27%	0 0126%
SEALED AIR CORP	SEE	8,538 61	0 05%	1 26%	6 58%	7 88%	0 0039%
SHERWIN-WILLIAMS CO/THE	SHW	23,894 25	0 14%	1 23%	15 15%	16 47%	0 0229%
SIGNET JEWELERS LTD	SIG	7,844 24	0 05%	0 86%	15 20%	16 13%	0 0074%
JM SMUCKER CO/THE	SJM	15,189 14	0 09%	2 12%	11 37%	13 61%	0 0121%
SCHLUMBERGER LTD	SLB	88,227 98	0 51%	2 92%	11 40%	14 49%	0 0745%
SL GREEN REALTY CORP	SLG	8,181 97	0 05%	3 63%	4 26%	7 97%	0 0038%
SNAP-ON INC	SNA	8,133 46	0 05%	2 21%	3 40%	5 64%	0 0027%
SANDISK CORP	SNDK	13,566 46	0 08%	1 63%	9 75%	11 46%	0 0091%
SCRIPPS NETWORKS INTER-CL A	SNI	6,906 61	0 04%	1 69%	10 08%	11 86%	0 0048%
SOUTHERN CO/THE	SO	43,547 26	0 25%	4 66%	3 92%	8 67%	0 0220%
SIMON PROPERTY GROUP INC	SPG	56,787 50	0 33%	3 61%	7 55%	11 29%	0 0374%

Company	Ticker	[4]	[5]	[6]	[7]	[8]	[9]
		Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
STAPLES INC	SPLS	5,354 94	0 03%	5 77%	3 21%	9 07%	0 0028%
STERICYCLE INC	SRCL	9,086 57	0 05%	0 00%	15 60%	15 60%	0 0083%
SEMPRA ENERGY	SRE	23,200 23	0 14%	2 97%	8 94%	12 04%	0 0163%
SUNTRUST BANKS INC	STI	17,087 32	0 10%	3 05%	10 57%	13 79%	0 0137%
ST JUDE MEDICAL INC	STJ	14,246 08	0 08%	2 43%	11 17%	13 74%	0 0114%
STATE STREET CORP	STT	22,062 62	0 13%	2 63%	7 83%	10 67%	0 0136%
SEAGATE TECHNOLOGY	STX	8,857 09	0 05%	7 77%	5 42%	13 41%	0 0069%
CONSTELLATION BRANDS INC-A	STZ	27,474 65	0 16%	0 90%	13 68%	14 64%	0 0234%
STANLEY BLACK & DECKER INC	SWK	13,738 89	0 08%	2 40%	10 67%	13 20%	0 0106%
SKYWORKS SOLUTIONS INC	SWKS	11,045 85	0 06%	1 85%	17 69%	19 70%	0 0127%
SOUTHWESTERN ENERGY CO	SWN	3,433 39	0 02%	0 00%	5 61%	5 61%	0 0011%
SYNCHRONY FINANCIAL	SYF	21,154 16	0 12%	0 98%	5 84%	6 84%	0 0084%
STRYKER CORP	SYK	36,302 36	0 21%	1 55%	12 11%	13 76%	0 0291%
SYMANTEC CORP	SYMC	12,490 06	0 07%	3 16%	7 37%	10 65%	0 0078%
SYSCO CORP	SYI	24,396 51	0 14%	2 84%	8 75%	11 71%	0 0167%
AT&T INC	T	224,363 44	1 31%	5 28%	3 80%	9 19%	0 1202%
MOLSON COORS BREWING CO -B	TAP	18,016 83	0 11%	2 03%	13 30%	15 47%	0 0162%
TERADATA CORP	TDC	3,068 31	0 02%	0 00%	7 69%	7 69%	0 0014%
TECO ENERGY INC	TE	6,393 57	0 04%	3 39%	6 02%	9 51%	0 0035%
TE CONNECTIVITY LTD	TEL	20,143 73	0 12%	2 55%	10 00%	12 68%	0 0149%
TEGNA INC	TGNA	4,914 93	N/A	2 53%	N/A	N/A	N/A
TARGET CORP	TGT	43,092 81	0 25%	3 07%	10 49%	13 71%	0 0345%
TENET HEALTHCARE CORP	THC	2,392 06	0 01%	0 00%	18 95%	18 95%	0 0026%
TIFFANY & CO	TIF	7,914 52	0 05%	2 55%	9 05%	11 72%	0 0054%
TJX COMPANIES INC	TJX	46,780 00	0 27%	1 20%	10 89%	12 15%	0 0332%
TORCHMARK CORP	TMK	6,181 31	0 04%	1 14%	7 56%	8 74%	0 0032%
THERMO FISHER SCIENTIFIC INC	TMO	50,477 88	0 29%	0 49%	12 57%	13 09%	0 0385%
TRIPADVISOR INC	TRIP	8,636 78	0 05%	0 00%	17 66%	17 66%	0 0089%
T ROWE PRICE GROUP INC	TROW	16,764 51	0 10%	3 30%	9 24%	12 69%	0 0124%
TRAVELERS COS INC/THE	TRV	31,707 12	0 18%	2 36%	8 25%	10 71%	0 0198%
TRACTOR SUPPLY COMPANY	TSCO	11,214 20	0 07%	0 99%	15 41%	16 47%	0 0108%
TYSON FOODS INC-CL A	TSN	23,767 41	0 14%	1 06%	10 53%	11 65%	0 0161%
TESORO CORP	TSO	8,556 15	0 05%	2 87%	5 39%	8 33%	0 0042%
TOTAL SYSTEM SERVICES INC	TSS	7,245 50	0 04%	1 03%	10 00%	11 08%	0 0047%
TIME WARNER CABLE	TWC	52,402 19	0 31%	1 67%	7 73%	9 47%	0 0289%
TIME WARNER INC	TWX	49,775 63	0 29%	2 52%	13 06%	15 75%	0 0457%
TEXAS INSTRUMENTS INC	TXN	51,877 03	0 30%	3 00%	9 58%	12 72%	0 0385%
TEXTRON INC	TXT	8,779 35	0 05%	0 34%	9 59%	9 95%	0 0051%
TYCO INTERNATIONAL PLC	TYC	14,233 21	0 08%	2 60%	10 60%	13 34%	0 0111%
UNDER ARMOUR INC-CLASS A	UA	16,464 59	0 10%	0 00%	22 74%	22 74%	0 0218%
UNITED CONTINENTAL HOLDINGS	UAL	18,469 77	0 11%	0 00%	19 92%	19 92%	0 0215%
UNIVERSAL HEALTH SERVICES-B	UHS	10,286 33	0 06%	0 38%	10 35%	10 76%	0 0065%
UNITEDHEALTH GROUP INC	UNH	106,304 37	0 62%	1 82%	13 35%	15 29%	0 0948%
UNUM GROUP	UNM	6,120 27	0 04%	3 04%	9 00%	12 18%	0 0043%
UNION PACIFIC CORP	UNP	65,343 19	0 38%	2 95%	8 34%	11 42%	0 0435%
UNITED PARCEL SERVICE-CL B	UPS	86,592 83	0 50%	3 19%	9 93%	13 28%	0 0670%
URBAN OUTFITTERS INC	URBN	2,910 74	0 02%	0 00%	12 69%	12 69%	0 0022%
UNITED RENTALS INC	URI	4,134 60	0 02%	0 00%	12 64%	12 64%	0 0030%
US BANCORP	USB	68,565 55	0 40%	2 74%	5 40%	8 22%	0 0329%
UNITED TECHNOLOGIES CORP	UTX	71,891 33	0 42%	3 14%	9 01%	12 30%	0 0516%
VISA INC-CLASS A SHARES	V	169,110 53	0 99%	0 80%	17 12%	17 99%	0 1774%
VARIAN MEDICAL SYSTEMS INC	VAR	7,244 82	0 04%	0 00%	15 00%	15 00%	0 0063%
VF CORP	VFC	25,062 71	0 15%	2 25%	10 68%	13 05%	0 0191%
VIACOM INC-CLASS B	VIAB	13,178 02	0 08%	4 90%	9 50%	14 63%	0 0112%
VALERO ENERGY CORP	VLO	27,808 82	0 16%	4 11%	4 49%	8 69%	0 0141%
VULCAN MATERIALS CO	VMC	12,268 01	0 07%	0 58%	28 41%	29 08%	0 0208%
VORNADO REALTY TRUST	VNO	15,296 32	N/A	3 11%	N/A	N/A	N/A
VERISK ANALYTICS INC	VRSK	11,531 29	0 07%	0 00%	12 00%	12 00%	0 0081%
VERISIGN INC	VRSN	8,582 71	0 05%	0 00%	9 75%	9 75%	0 0049%
VERTEX PHARMACEUTICALS INC	VRTX	20,451 05	0 12%	0 00%	45 07%	45 07%	0 0537%
VENTAS INC	VTR	16,275 89	0 09%	6 21%	2 57%	8 86%	0 0084%
VERIZON COMMUNICATIONS INC	VZ	203,891 23	1 19%	4 56%	5 30%	9 98%	0 1186%
WATERS CORP	WAT	9,669 81	0 06%	0 00%	9 39%	9 39%	0 0053%
WALGREENS BOOTS ALLIANCE INC	WBA	83,149 81	0 48%	1 89%	12 27%	14 27%	0 0692%
WESTERN DIGITAL CORP	WDC	9,562 20	0 06%	4 96%	10 00%	15 20%	0 0085%
WEC ENERGY GROUP INC	WEC	17,574 15	0 10%	3 51%	5 54%	9 15%	0 0094%
WELLS FARGO & CO	WFC	241,650 63	1 41%	3 30%	9 14%	12 59%	0 1775%
WHOLE FOODS MARKET INC	WFM	10,054 42	0 06%	1 78%	9 75%	11 62%	0 0068%
WHIRLPOOL CORP	WHR	10,336 52	0 06%	2 93%	16 71%	19 88%	0 0120%
WILLIS TOWERS WATSON PLC	WLTW	14,891 11	0 09%	1 65%	10 00%	11 73%	0 0102%
WASTE MANAGEMENT INC	WM	24,101 82	0 14%	2 83%	8 33%	11 29%	0 0159%
WILLIAMS COS INC	WMB	10,099 33	0 06%	18 19%	-3 60%	14 26%	0 0084%
WAL-MART STORES INC	WMT	211,901 29	1 24%	2 96%	0 36%	3 33%	0 0411%
WESTROCK CO	WRK	7,876 95	0 05%	4 83%	1 63%	6 51%	0 0030%
WESTERN UNION CO	WU	8,872 73	0 05%	3 62%	5 85%	9 58%	0 0050%
WEYERHAEUSER CO	WY	11,536 80	0 07%	5 69%	5 33%	11 17%	0 0075%
WYNDHAM WORLDWIDE CORP	WYNN	7,379 40	0 04%	2 93%	8 75%	11 81%	0 0051%
WYNN RESORTS LTD	WYNN	7,022 45	0 04%	2 95%	8 93%	12 02%	0 0049%
CIMAREX ENERGY CO	XEC	8,006 36	0 05%	0 76%	-6 02%	-5 29%	-0 0025%
XCEL ENERGY INC	XEL	19,701 03	0 11%	3 48%	5 13%	8 70%	0 0100%
XL GROUP PLC	XL	10,296 52	0 06%	2 40%	9 50%	12 01%	0 0072%
XILINX INC	XLNX	12,176 48	0 07%	2 60%	8 87%	11 58%	0 0082%
EXXON MOBIL CORP	XOM	337,322 91	1 97%	3 66%	13 22%	17 13%	0 3369%
DENTSPLY INTERNATIONAL INC	XRAY	7,868 88	0 04%	0 51%	10 30%	10 84%	0 0048%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
XEROX CORP	XRX	8,878.77	0.05%	3.59%	8.55%	12.30%	0.0064%
XYLEM INC	XYL	6,643.72	0.04%	1.65%	11.30%	13.04%	0.0051%
YAHOO! INC	YHOO	25,535.36	0.15%	0.00%	8.97%	8.97%	0.0134%
YUM! BRANDS INC	YUM	29,039.81	0.17%	2.81%	11.85%	14.83%	0.0251%
ZIMMER BIOMET HOLDINGS INC	ZBH	18,485.76	0.11%	0.99%	10.61%	11.66%	0.0126%
ZIONS BANCORPORATION	ZION	4,288.14	0.03%	1.45%	9.00%	10.51%	0.0026%
ZOETIS INC	ZTS	20,130.92	N/A	0.92%	N/A	N/A	N/A
Total Market Capitalization		17,150,140.71					13.45%

Notes

- [1] Equals sum of Col [9]
- [2] Source Bloomberg Professional
- [3] Equals [1] - [2]
- [4] Source Bloomberg Professional
- [5] Equals weight in S&P 500 based on market capitalization
- [6] Source Bloomberg Professional
- [7] Source Bloomberg Professional
- [8] Equals $([6] \times (1 + (0.5 \times [7]))) + [7]$
- [9] Equals Col [5] x Col [8]

Ex-Ante Market Risk Premium
Market DCF Method Based - Value Line

[1]	[2]	[3]
S&P 500	Current 30-Year	
Est Required	Treasury (30-	Implied Market
Market Return	day average)	Risk Premium
12.78%	2.79%	9.99%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
AGILENT TECHNOLOGIES INC	A	11,710.45	0.08%	1.30%	2.50%	3.82%	0.0029%
ALCOA INC	AA	9,602.48	0.06%	1.64%	17.00%	18.78%	0.0117%
AMERICAN AIRLINES GROUP INC	AAL	23,357.54	N/A	1.10%	N/A	N/A	N/A
ADVANCE AUTO PARTS INC	AAP	10,136.32	0.07%	0.17%	13.50%	13.68%	0.0090%
APPLE INC	AAPL	519,518.40	3.37%	2.38%	14.00%	16.55%	0.5570%
ABBVIE INC	ABBV	85,301.10	N/A	4.37%	N/A	N/A	N/A
AMERISOURCEBERGEN CORP	ABC	17,444.02	0.11%	1.61%	13.50%	15.22%	0.0172%
ABBOTT LABORATORIES	ABT	54,209.10	0.35%	2.86%	1.00%	3.87%	0.0136%
ACCENTURE PLC-CL A	ACN	60,594.11	0.39%	2.42%	8.00%	10.52%	0.0413%
ADOBE SYSTEMS INC	ADBE	37,305.81	0.24%	0.00%	37.50%	37.50%	0.0906%
ANALOG DEVICES INC	ADI	15,241.06	0.10%	3.28%	13.00%	16.49%	0.0163%
ARCHER-DANIELS-MIDLAND CO	ADM	19,009.63	0.12%	3.79%	8.00%	11.94%	0.0147%
AUTOMATIC DATA PROCESSING	ADP	36,792.33	0.24%	2.87%	9.00%	12.00%	0.0286%
ALLIANCE DATA SYSTEMS CORP	ADS	11,029.65	0.07%	0.00%	15.00%	15.00%	0.0107%
AUTODESK INC	ADSK	9,747.47	0.06%	0.00%	13.50%	13.50%	0.0085%
ADT CORP/THE	ADT	4,358.80	0.03%	3.34%	10.50%	14.02%	0.0040%
AMEREN CORPORATION	AEE	11,006.76	0.07%	3.79%	7.00%	10.92%	0.0078%
AMERICAN ELECTRIC POWER	AEP	30,091.25	0.19%	3.70%	5.00%	8.79%	0.0171%
AES CORP	AES	6,070.15	0.04%	4.89%	8.00%	13.09%	0.0051%
AETNA INC	AET	34,109.84	0.22%	1.02%	11.00%	12.08%	0.0267%
AFLAC INC	AFL	23,772.72	0.15%	2.99%	4.50%	7.56%	0.0116%
ALLERGAN PLC	AGN	108,172.70	0.70%	0.00%	17.00%	17.00%	0.1191%
AMERICAN INTERNATIONAL GROUP	AIG	62,968.08	0.41%	2.22%	5.00%	7.28%	0.0297%
APARTMENT INVT & MGMT CO -A	AIV	-	N/A	3.69%	N/A	N/A	N/A
ASSURANT INC	AIZ	4,466.04	0.03%	2.99%	3.50%	6.54%	0.0019%
AKAMAI TECHNOLOGIES INC	AKAM	8,743.87	0.06%	0.00%	15.50%	15.50%	0.0088%
ALLSTATE CORP	ALL	24,304.80	0.16%	1.93%	7.50%	9.50%	0.0150%
ALLEGION PLC	ALLE	5,442.05	N/A	0.85%	N/A	N/A	N/A
ALEXION PHARMACEUTICALS INC	ALXN	30,589.33	0.20%	0.00%	25.50%	25.50%	0.0505%
APPLIED MATERIALS INC	AMAT	18,142.40	0.12%	2.56%	18.50%	21.30%	0.0250%
AMETEK INC	AME	10,711.87	0.07%	0.80%	7.50%	8.33%	0.0058%
AFFILIATED MANAGERS GROUP	AMG	6,573.24	0.04%	0.00%	13.00%	13.00%	0.0055%
AMGEN INC	AMGN	106,788.10	0.69%	2.83%	9.50%	12.46%	0.0862%
AMERIPRISE FINANCIAL INC	AMP	13,348.85	0.09%	3.51%	13.50%	17.25%	0.0149%
AMERICAN TOWER CORP	AMT	35,429.76	0.23%	2.44%	14.50%	17.12%	0.0393%
AMAZON COM INC	AMZN	236,291.60	N/A	0.00%	N/A	N/A	N/A
AUTONATION INC	AN	5,193.84	0.03%	0.00%	11.50%	11.50%	0.0039%
ANTHEM INC	ANTM	31,318.26	0.20%	2.08%	9.00%	11.17%	0.0227%
AON PLC	AON	25,387.79	0.16%	1.30%	13.50%	14.89%	0.0245%
APACHE CORP	APA	12,996.12	0.08%	2.91%	-3.00%	-0.13%	-0.0001%
ANADARKO PETROLEUM CORP	APC	18,129.01	0.12%	0.56%	10.00%	10.59%	0.0124%
AIR PRODUCTS & CHEMICALS INC	APD	27,432.84	0.18%	2.55%	13.00%	15.72%	0.0279%
AMPHENOL CORP-CL A	APH	15,104.88	0.10%	1.14%	9.50%	10.69%	0.0105%
AIRGAS INC	ARG	10,072.34	0.07%	1.80%	10.00%	11.89%	0.0078%
ACTIVISION BLIZZARD INC	ATVI	22,308.41	0.14%	0.85%	10.00%	10.89%	0.0157%
AVALONBAY COMMUNITIES INC	AVB	-	N/A	3.34%	N/A	N/A	N/A
BROADCOM LTD	AVGO	31,974.55	0.21%	1.51%	15.50%	17.13%	0.0355%
AVERY DENNISON CORP	AVY	5,673.83	0.04%	2.41%	7.50%	10.00%	0.0037%
AMERICAN EXPRESS CO	AXP	50,304.76	0.33%	2.45%	3.50%	5.99%	0.0195%
AUTOZONE INC	AZO	21,530.75	0.14%	0.00%	13.00%	13.00%	0.0181%
BOEING CO/THE	BA	72,759.02	0.47%	4.02%	11.00%	15.24%	0.0718%
BANK OF AMERICA CORP	BAC	116,368.70	0.75%	2.15%	27.00%	29.44%	0.2220%
BAXTER INTERNATIONAL INC	BAX	19,619.86	0.13%	1.28%	-7.00%	-5.76%	-0.0073%
BED BATH & BEYOND INC	BBBY	6,901.74	0.04%	0.00%	4.00%	4.00%	0.0018%
BB&T CORP	BBT	23,622.94	0.15%	3.86%	6.50%	10.49%	0.0160%
BEST BUY CO INC	BBY	9,287.16	0.06%	3.42%	6.50%	10.03%	0.0060%
CR BARD INC	BCR	13,410.31	0.09%	0.56%	9.00%	9.59%	0.0083%
BECTON DICKINSON AND CO	BDX	28,513.49	0.18%	2.04%	9.50%	11.64%	0.0215%
FRANKLIN RESOURCES INC	BEN	18,719.95	0.12%	2.39%	8.50%	10.99%	0.0133%
BROWN-FORMAN CORP-CLASS B	BF/B	19,244.27	0.12%	1.44%	9.00%	10.50%	0.0131%
BAKER HUGHES INC	BHI	17,347.54	0.11%	1.71%	2.00%	3.73%	0.0042%
BIAGEN INC	BIIB	54,635.75	0.35%	0.00%	16.50%	16.50%	0.0584%
BANK OF NEW YORK MELLON CORP	BK	35,783.28	0.23%	2.08%	11.50%	13.70%	0.0318%
BLACKROCK INC	BLK	48,227.50	0.31%	3.11%	8.50%	11.74%	0.0367%
BALL CORP	BLL	8,678.87	0.06%	0.81%	9.50%	10.35%	0.0058%
BRISTOL-MYERS SQUIBB CO	BMY	99,296.38	0.64%	2.55%	14.50%	17.23%	0.1109%
BERKSHIRE HATHAWAY INC-CL B	BRK/B	156.11	N/A	0.00%	N/A	N/A	N/A
BOSTON SCIENTIFIC CORP	BSX	22,297.83	0.14%	0.00%	15.00%	15.00%	0.0217%
BORGWARNER INC	BWA	6,766.94	0.04%	1.72%	8.50%	10.29%	0.0045%
BAXALTA INC	BXLT	N/A	N/A	0.00%	N/A	N/A	N/A
BOSTON PROPERTIES INC	BXP	-	N/A	2.59%	N/A	N/A	N/A
CITIGROUP INC	C	104,205.10	0.68%	0.57%	13.50%	14.11%	0.0953%
CA INC	CA	11,197.80	0.07%	3.83%	5.00%	8.93%	0.0065%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
CONAGRA FOODS INC	CAG	17,478 07	0 11%	2 48%	6 50%	9 06%	0 0103%
CARDINAL HEALTH INC	CAH	25,449 60	0 16%	2 27%	14 00%	16 43%	0 0271%
CAMERON INTERNATIONAL CORP	CAM	12,007 86	0 08%	0 00%	3 50%	3 50%	0 0027%
CATERPILLAR INC	CAT	35,754 99	0 23%	5 02%	2 50%	7 58%	0 0176%
CHUBB LTD	CB	35,919 03	0 23%	2 42%	8 00%	10 52%	0 0245%
CBRE GROUP INC - A	CBG	7,862 95	0 05%	0 00%	12 50%	12 50%	0 0064%
CBS CORP-CLASS B NON VOTING	CBS	20,652 18	0 13%	1 38%	12 50%	13 97%	0 0187%
COCA-COLA ENTERPRISES	CCE	10,714 40	0 07%	2 54%	5 00%	7 60%	0 0053%
CROWN CASTLE INTL CORP	CCI	27,205 67	0 18%	4 34%	23 50%	28 35%	0 0500%
CARNIVAL CORP	CCL	33,601 82	0 22%	2 78%	14 00%	16 97%	0 0370%
CELGENE CORP	CELG	78,397 24	0 51%	0 00%	16 50%	16 50%	0 0838%
CERNER CORP	CERN	18,456 51	0 12%	0 00%	17 00%	17 00%	0 0203%
CF INDUSTRIES HOLDINGS INC	CF	6,768 44	0 04%	4 82%	6 50%	11 48%	0 0050%
CITIZENS FINANCIAL GROUP	CFG	9,571 34	N/A	2 21%	N/A	N/A	N/A
CHURCH & DWIGHT CO INC	CHD	11,346 61	0 07%	1 64%	8 50%	10 21%	0 0075%
CHESAPEAKE ENERGY CORP	CHK	1,180 98	0 01%	0 00%	7 00%	7 00%	0 0005%
C H ROBINSON WORLDWIDE INC	CHRW	9,918 95	0 06%	2 50%	6 50%	9 08%	0 0058%
CIGNA CORP	CI	32,972 67	0 21%	0 03%	14 50%	14 53%	0 0310%
CINCINNATI FINANCIAL CORP	CINF	9,911 54	0 06%	3 17%	7 50%	10 79%	0 0069%
COLGATE-PALMOLIVE CO	CL	57,797 66	0 37%	2 50%	11 00%	13 64%	0 0511%
CLOROX COMPANY	CLX	16,425 75	0 11%	2 47%	8 00%	10 57%	0 0112%
COMERICA INC	CMA	5,495 32	0 04%	2 71%	7 50%	10 31%	0 0037%
COMCAST CORP-CLASS A	CMCSA	137,703 20	0 89%	1 96%	10 00%	12 06%	0 1076%
CME GROUP INC	CME	30,077 53	0 19%	2 69%	10 00%	12 82%	0 0250%
CHIPOTLE MEXICAN GRILL INC	CMG	14,392 14	0 09%	0 00%	16 50%	16 50%	0 0154%
CUMMINS INC	CMI	16,918 40	0 11%	4 09%	6 50%	10 72%	0 0118%
CMS ENERGY CORP	CMS	10,881 72	0 07%	3 16%	5 50%	8 75%	0 0062%
CENTERPOINT ENERGY INC	CNP	7,594 13	N/A	5 84%	N/A	N/A	N/A
CONSOL ENERGY INC	CNX	1,681 26	0 01%	0 55%	8 00%	8 57%	0 0009%
CAPITAL ONE FINANCIAL CORP	COF	32,174 60	0 21%	2 66%	3 50%	6 21%	0 0129%
CABOT OIL & GAS CORP	COG	8,223 68	0 05%	0 40%	30 50%	30 96%	0 0165%
COACH INC	COH	9,339 05	0 06%	4 01%	2 00%	6 05%	0 0037%
ROCKWELL COLLINS INC	COL	10,272 96	0 07%	1 72%	7 00%	8 78%	0 0058%
CONOCOPHILLIPS	COP	39,360 39	0 26%	3 14%	2 50%	5 68%	0 0145%
COSTCO WHOLESALE CORP	COST	64,493 29	0 42%	1 12%	10 50%	11 68%	0 0488%
CAMPBELL SOUP CO	CPB	17,772 30	0 12%	2 18%	4 50%	6 73%	0 0077%
COLUMBIA PIPELINE GROUP	CPGX	N/A	N/A	0 00%	N/A	N/A	N/A
SALESFORCE COM INC	CRM	39,335 36	N/A	0 00%	N/A	N/A	N/A
CISCO SYSTEMS INC	CSCO	125,423 80	0 81%	4 21%	6 50%	10 85%	0 0881%
CSRA INC	CSRA	-	N/A	1 62%	N/A	N/A	N/A
CSX CORP	CSX	22,823 44	0 15%	3 08%	9 00%	12 22%	0 0181%
CINTAS CORP	CTAS	8,879 64	0 06%	1 28%	13 50%	14 87%	0 0086%
CENTURYLINK INC	CTL	15,121 12	0 10%	7 92%	15 00%	23 51%	0 0230%
COGNIZANT TECH SOLUTIONS-A	CTSH	31,682 88	0 21%	0 00%	15 50%	15 50%	0 0318%
CITRIX SYSTEMS INC	CTXS	18,596 23	0 12%	0 00%	14 00%	14 00%	0 0169%
CABLEVISION SYSTEMS-NY GRP-A	CVC	8,861 84	0 06%	0 00%	13 00%	13 00%	0 0075%
CVS HEALTH CORP	CVS	104,195 70	0 68%	1 81%	13 00%	14 93%	0 1008%
CHEVRON CORP	CVX	156,190 30	1 01%	5 16%	2 50%	7 72%	0 0782%
DOMINION RESOURCES INC/A	D	41,203 00	0 27%	4 13%	8 00%	12 30%	0 0328%
DELTA AIR LINES INC	DAL	33,647 60	0 22%	1 59%	16 00%	17 72%	0 0386%
DU PONT (E I) DE NEMOURS	DD	49,616 45	0 32%	2 79%	6 00%	8 87%	0 0285%
DEERE & CO	DE	24,198 05	N/A	3 14%	N/A	N/A	N/A
DISCOVER FINANCIAL SERVICES	DFS	18,576 61	0 12%	2 59%	4 00%	6 64%	0 0080%
DOLLAR GENERAL CORP	DG	20,001 78	0 13%	1 46%	14 00%	15 56%	0 0202%
QUEST DIAGNOSTICS INC	DGX	8,827 20	0 06%	2 61%	9 00%	11 73%	0 0067%
DR HORTON INC	DHI	8,588 76	0 06%	1 38%	15 00%	16 48%	0 0092%
DANAHER CORP	DHR	57,275 86	0 37%	0 65%	13 00%	13 69%	0 0508%
WALT DISNEY CO/THE	DIS	144,496 00	0 94%	1 57%	12 00%	13 66%	0 1279%
DISCOVERY COMMUNICATIONS-A	DISCA	10,473 65	0 07%	0 00%	18 00%	18 00%	0 0122%
DELPHI AUTOMOTIVE PLC	DLPH	16,452 46	0 11%	1 98%	15 50%	17 63%	0 0188%
DOLLAR TREE INC	DLTR	17,241 36	0 11%	0 00%	17 50%	17 50%	0 0195%
DUN & BRADSTREET CORP	DNB	3,225 17	0 02%	2 07%	4 50%	6 62%	0 0014%
DIAMOND OFFSHORE DRILLING	DO	2,363 25	0 02%	0 00%	-2 00%	-2 00%	-0 0003%
DOVER CORP	DOV	8,871 75	0 06%	2 93%	2 50%	5 47%	0 0031%
DOW CHEMICAL CO/THE	DOW	51,905 96	0 34%	4 11%	12 50%	16 87%	0 0567%
DR PEPPER SNAPPLE GROUP INC	DPS	16,942 63	0 11%	2 23%	9 00%	11 33%	0 0124%
DARDEN RESTAURANTS INC	DRI	7,327 41	0 05%	3 50%	11 50%	15 20%	0 0072%
DTE ENERGY COMPANY	DTE	15,090 34	0 10%	3 57%	5 00%	8 66%	0 0085%
DUKE ENERGY CORP	DUK	52,838 40	0 34%	4 41%	5 00%	9 52%	0 0326%
DAVITA HEALTHCARE PARTNERS I	DVA	13,202 90	0 09%	0 00%	11 50%	11 50%	0 0098%
DEVON ENERGY CORP	DVN	8,733 75	0 06%	4 52%	6 00%	10 66%	0 0060%
ELECTRONIC ARTS INC	EA	18,097 09	0 12%	0 00%	16 50%	16 50%	0 0193%
EBAY INC	EBAY	26,510 42	0 17%	0 00%	3 00%	3 00%	0 0052%
ECOLAB INC	ECL	30,504 49	0 20%	1 36%	11 00%	12 43%	0 0246%
CONSOLIDATED EDISON INC	ED	19,471 34	0 13%	3 74%	2 50%	6 29%	0 0079%
EQUIFAX INC	EFX	11,055 13	0 07%	1 41%	9 00%	10 47%	0 0075%
EDISON INTERNATIONAL	EIX	20,314 31	0 13%	3 13%	3 50%	6 68%	0 0088%
ESTEE LAUDER COMPANIES-CL A	EL	32,153 65	0 21%	1 38%	9 00%	10 44%	0 0218%
EMC CORP/MA	EMC	46,846 24	0 30%	1 90%	3 50%	5 43%	0 0165%
EASTMAN CHEMICAL CO	EMN	8,681 67	0 06%	3 15%	9 50%	12 80%	0 0072%
EMERSON ELECTRIC CO	EMR	29,216 03	0 19%	4 18%	2 00%	6 22%	0 0118%
ENDO INTERNATIONAL PLC	ENDP	10,978 96	N/A	0 00%	N/A	N/A	N/A
EOG RESOURCES INC	EOG	36,036 30	0 23%	1 11%	2 00%	3 12%	0 0073%
EQUINIX INC	EQIX	15,756 51	0 10%	2 46%	25 50%	28 27%	0 0289%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est	[8] DCF Result	[9] Weighted DCF Result
EQUITY RESIDENTIAL	EQR	-	N/A	3 37%	N/A	N/A	N/A
EQT CORP	EQT	8,714 61	0 06%	0 21%	14 00%	14 22%	0 0080%
EVERSOURCE ENERGY	ES	17,096 60	0 11%	3 36%	7 00%	10 45%	0 0116%
EXPRESS SCRIPTS HOLDING CO	ESRX	44,886 03	0 29%	0 00%	17 50%	17 50%	0 0509%
ESSEX PROPERTY TRUST INC	ESS	-	N/A	3 33%	N/A	N/A	N/A
ENSCO PLC-CL A	ESV	1,896 18	0 01%	7 45%	-18 50%	-11 74%	-0 0014%
E*TRADE FINANCIAL CORP	ETFC	5,875 36	0 04%	0 00%	32 50%	32 50%	0 0124%
EATON CORP PLC	ETN	24,574 68	0 16%	4 14%	5 00%	9 24%	0 0147%
ENERGY CORP	ETR	12,583 42	0 08%	4 85%	-1 00%	3 83%	0 0031%
EDWARDS LIFESCIENCES CORP	EW	17,025 21	0 11%	0 00%	15 00%	15 00%	0 0165%
EXELON CORP	EXC	27,871 99	0 18%	4 19%	6 50%	10 83%	0 0196%
EXPEDITORS INTL WASH INC	EXPD	8,320 52	0 05%	1 61%	10 50%	12 19%	0 0066%
EXPEDIA INC	EXPE	13,418 56	0 09%	0 93%	22 00%	23 03%	0 0200%
EXTRA SPACE STORAGE INC	EXR	N/A	N/A	0 00%	N/A	N/A	N/A
FORD MOTOR CO	F	43,538 18	0 28%	5 91%	7 00%	13 12%	0 0370%
FASTENAL CO	FAST	12,168 37	0 08%	2 86%	8 50%	11 48%	0 0091%
FACEBOOK INC-A	FB	287,997 70	1 87%	0 00%	34 50%	34 50%	0 6438%
FREEPORT-MCMORAN INC	FCX	5,564 82	0 04%	0 00%	-0 50%	-0 50%	-0 0002%
FEDEX CORP	FDX	34,292 02	0 22%	0 80%	15 00%	15 86%	0 0352%
FIRSTENERGY CORP	FE	13,879 97	0 09%	4 39%	7 50%	12 05%	0 0108%
F5 NETWORKS INC	FFIV	5,978 59	0 04%	0 00%	9 00%	9 00%	0 0035%
FIDELITY NATIONAL INFO SERV	FIS	15,921 72	0 10%	1 84%	12 50%	14 46%	0 0149%
FISERV INC	FISV	21,040 56	0 14%	0 00%	10 50%	10 50%	0 0143%
FIFTH THIRD BANCORP	FITB	11,088 42	0 07%	4 02%	4 00%	8 10%	0 0058%
FLIR SYSTEMS INC	FLIR	3,953 22	0 03%	1 68%	6 50%	8 23%	0 0021%
FLUOR CORP	FLR	5,936 22	0 04%	2 01%	7 50%	9 59%	0 0037%
FLOWSERVE CORP	FLS	5,187 12	0 03%	1 81%	10 00%	11 90%	0 0040%
FMC CORP	FMC	4,480 38	0 03%	2 15%	4 50%	6 70%	0 0019%
TWENTY-FIRST CENTURY FOX-A	FOXA	48,768 96	0 32%	1 22%	6 50%	7 76%	0 0245%
FEDERAL REALTY INVS TRUST	FRT	-	N/A	2 65%	N/A	N/A	N/A
FIRST SOLAR INC	FSLR	6,192 39	0 04%	0 00%	7 50%	7 50%	0 0030%
FMC TECHNOLOGIES INC	FTI	5,193 84	0 03%	0 00%	3 00%	3 00%	0 0010%
FRONTIER COMMUNICATIONS CORP	FTR	4,871 47	0 03%	10 07%	18 00%	28 98%	0 0091%
AGL RESOURCES INC	GAS	7,777 70	0 05%	3 28%	6 50%	9 89%	0 0050%
GENERAL DYNAMICS CORP	GD	40,009 08	0 26%	2 15%	9 00%	11 25%	0 0292%
GENERAL ELECTRIC CO	GE	277,498 60	1 80%	3 35%	9 00%	12 50%	0 2248%
GENERAL GROWTH PROPERTIES	GGP	-	N/A	3 07%	N/A	N/A	N/A
GILEAD SCIENCES INC	GILD	126,584 60	0 82%	1 97%	22 50%	24 69%	0 2025%
GENERAL MILLS INC	GIS	33,212 94	0 22%	3 23%	5 50%	8 82%	0 0190%
CORNING INC	GLW	21,087 04	0 14%	3 03%	6 00%	9 12%	0 0125%
GENERAL MOTORS CO	GM	43,040 00	0 28%	5 35%	10 00%	15 62%	0 0436%
KEURIG GREEN MOUNTAIN INC	GMCR	13,406 03	0 09%	1 45%	8 50%	10 01%	0 0087%
GAMESTOP CORP-CLASS A	GME	2,797 68	0 02%	5 40%	7 50%	13 10%	0 0024%
ALPHABET INC-CL C	GOOG	469,770 00	3 04%	0 00%	16 50%	16 50%	0 5022%
GENUINE PARTS CO	GPC	13,031 95	0 08%	2 85%	7 00%	9 95%	0 0084%
GAP INC/THE	GPS	9,061 72	0 06%	4 24%	4 00%	8 32%	0 0049%
GARMIN LTD	GRMN	6,441 17	0 04%	6 12%	-2 00%	4 06%	0 0017%
GOLDMAN SACHS GROUP INC	GS	60,009 35	0 39%	1 85%	7 00%	8 91%	0 0347%
GOODYEAR TIRE & RUBBER CO	GT	7,696 09	0 05%	0 98%	10 50%	11 53%	0 0058%
VWV GRAINGER INC	GWW	12,832 19	0 08%	2 29%	9 00%	11 39%	0 0095%
HALLIBURTON CO	HAL	24,624 00	0 16%	2 50%	2 00%	4 53%	0 0072%
HARMAN INTERNATIONAL	HAR	4,809 64	0 03%	2 07%	20 00%	22 28%	0 0069%
HASBRO INC	HAS	8,674 69	0 06%	2 93%	10 00%	13 08%	0 0073%
HUNTINGTON BANCSHARES INC	HBAN	6,381 24	0 04%	3 50%	9 00%	12 66%	0 0052%
HANESBRANDS INC	HBI	9,871 12	0 06%	1 75%	16 50%	18 39%	0 0118%
HCA HOLDINGS INC	HCA	26,511 99	0 17%	0 00%	12 50%	12 50%	0 0215%
WELLTOWER INC	HCN	-	N/A	6 41%	N/A	N/A	N/A
HCP INC	HCP	-	0 00%	8 80%	89 00%	101 72%	0 0000%
HOME DEPOT INC	HD	143,626 40	0 93%	2 23%	13 50%	15 88%	0 1478%
HESS CORP	HES	11,137 76	0 07%	2 57%	-10 00%	-7 56%	-0 0055%
HARTFORD FINANCIAL SVCS GRP	HIG	15,889 06	0 10%	2 17%	13 50%	15 82%	0 0163%
HARLEY-DAVIDSON INC	HOG	7,313 70	0 05%	3 67%	10 50%	14 36%	0 0068%
HONEYWELL INTERNATIONAL INC	HON	78,255 96	0 51%	2 34%	8 50%	10 94%	0 0555%
STARWOOD HOTELS & RESORTS	HOT	10,515 66	0 07%	2 42%	6 50%	9 00%	0 0061%
HELMERICH & PAYNE	HP	4,930 39	0 03%	6 01%	-10 00%	-4 29%	-0 0014%
HEWLETT PACKARD ENTERPRIS	HPE	N/A	N/A	0 00%	N/A	N/A	N/A
HP INC	HPQ	N/A	N/A	0 00%	N/A	N/A	N/A
H&R BLOCK INC	HRB	7,824 07	0 05%	2 41%	9 50%	12 02%	0 0061%
HORMEL FOODS CORP	HLR	22,029 50	0 14%	1 39%	14 50%	15 99%	0 0228%
HARRIS CORP	HRS	8,921 51	0 06%	2 85%	7 00%	9 95%	0 0058%
HENRY SCHEIN INC	HSIC	13,167 33	0 09%	0 00%	9 00%	9 00%	0 0077%
HOST HOTELS & RESORTS INC	HST	-	N/A	5 98%	N/A	N/A	N/A
HERSHEY CO/THE	HSY	19,184 01	0 12%	2 63%	7 00%	9 72%	0 0121%
HUMANA INC	HUM	23,422 20	0 15%	0 73%	10 00%	10 77%	0 0163%
INTL BUSINESS MACHINES CORP	IBM	114,327 50	N/A	4 41%	N/A	N/A	N/A
INTERCONTINENTAL EXCHANGE IN	ICE	25,650 90	0 17%	1 46%	13 50%	15 06%	0 0250%
INTL FLAVORS & FRAGRANCES	IFF	8,074 98	0 05%	2 23%	6 50%	8 80%	0 0046%
ILLUMINA INC	ILMN	20,270 54	0 13%	0 00%	27 50%	27 50%	0 0361%
INTEL CORP	INTC	133,480 60	0 86%	3 69%	10 00%	13 87%	0 1200%
INTUIT INC	INTU	24,163 78	0 16%	1 31%	14 00%	15 40%	0 0241%
INTERNATIONAL PAPER CO	IP	13,730 00	0 09%	5 31%	15 50%	21 22%	0 0189%
INTERPUBLIC GROUP OF COS INC	IPG	8,498 26	0 06%	2 75%	12 50%	15 42%	0 0085%
INGERSOLL-RAND PLC	IR	12,788 79	0 08%	2 61%	9 50%	12 23%	0 0101%
IRON MOUNTAIN INC	IRM	5,616 92	0 04%	7 29%	6 50%	14 03%	0 0051%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est	[8] DCF Result	[9] Weighted DCF Result
INTUITIVE SURGICAL INC	ISRG	19,088 73	0 12%	0 00%	9 50%	9 50%	0 0117%
ILLINOIS TOOL WORKS	ITW	32,568 88	0 21%	2 46%	10 00%	12 58%	0 0268%
INVESCO LTD	IVZ	10,757 62	0 07%	4 26%	14 00%	18 56%	0 0129%
HUNT (JB) TRANSPRT SVCS INC	JBHT	8,362 51	0 05%	1 21%	12 00%	13 28%	0 0072%
JOHNSON CONTROLS INC	JCI	22,176 12	0 14%	3 39%	10 00%	13 56%	0 0195%
JACOBS ENGINEERING GROUP INC	JEC	4,304 56	0 03%	0 00%	6 00%	6 00%	0 0017%
JOHNSON & JOHNSON	JNJ	281,432 50	1 82%	3 15%	5 50%	8 74%	0 1593%
JUNIPER NETWORKS INC	JNPR	8,350 16	0 05%	2 12%	16 00%	18 29%	0 0099%
JPMORGAN CHASE & CO	JPM	195,357 60	1 27%	3 43%	7 00%	10 55%	0 1335%
NORDSTROM INC	JWN	9,119 83	0 06%	3 17%	4 50%	7 74%	0 0046%
KELLOGG CO	K	26,115 52	0 17%	2 82%	4 00%	6 88%	0 0116%
KEYCORP	KEY	8,352 85	0 05%	3 40%	6 50%	10 01%	0 0054%
KRAFT HEINZ CO/THE	KHC	28,430 26	N/A	3 22%	N/A	N/A	N/A
KIMCO REALTY CORP	KIM	-	N/A	3 96%	N/A	N/A	N/A
KLA-TENCOR CORP	KLAC	9,788 22	0 06%	3 31%	12 50%	16 02%	0 0102%
KIMBERLY-CLARK CORP	KMB	45,889 70	0 30%	2 78%	7 00%	9 88%	0 0294%
KINDER MORGAN INC	KMI	31,101 40	0 20%	3 58%	13 00%	16 81%	0 0339%
CARMAX INC	KMX	8 327 28	0 05%	0 00%	12 50%	12 50%	0 0067%
COCA-COLA CO/THE	KO	184,398 70	1 19%	3 30%	4 50%	7 87%	0 0941%
MICHAEL KORS HOLDINGS LTD	KORS	8,816 01	0 06%	0 00%	10 50%	10 50%	0 0060%
KROGER CO	KR	35,191 38	0 23%	1 26%	11 50%	12 83%	0 0293%
KOHL'S CORP	KSS	7,533 96	0 05%	4 84%	6 50%	11 50%	0 0056%
KANSAS CITY SOUTHERN	KSU	8 462 41	0 05%	1 70%	13 00%	14 81%	0 0081%
LOEWS CORP	L	12,683 94	0 08%	0 70%	11 00%	11 74%	0 0096%
L BRANDS INC	LB	24,444 00	0 16%	2 86%	9 00%	11 99%	0 0190%
LEGGETT & PLATT INC	LEG	5,604 43	0 04%	3 11%	11 50%	14 79%	0 0054%
LENNAR CORP A	LEN	7 941 37	0 05%	0 42%	19 50%	19 96%	0 0103%
LABORATORY CRP OF AMER HLDGS	LH	10,261 68	0 07%	0 00%	9 00%	9 00%	0 0060%
L-3 COMMUNICATIONS HOLDINGS	LLL	9,064 13	0 06%	2 44%	6 00%	8 51%	0 0050%
LINEAR TECHNOLOGY CORP	LLTC	9,852 90	0 06%	3 11%	6 50%	9 71%	0 0062%
ELI LILLY & CO	LLY	79,138 86	0 51%	2 86%	8 00%	10 97%	0 0563%
LEGG MASON INC	LM	2,714 04	0 02%	3 18%	12 00%	15 37%	0 0027%
LOCKHEED MARTIN CORP	LMT	63,665 38	0 41%	3 26%	9 00%	12 41%	0 0512%
LINCOLN NATIONAL CORP	LNC	7,616 97	0 05%	3 41%	8 00%	11 55%	0 0057%
LOWE'S COS INC	LOW	58 137 80	0 38%	1 86%	15 50%	17 50%	0 0659%
LAM RESEARCH CORP	LRCX	10,181 65	0 07%	1 87%	19 50%	21 55%	0 0142%
LEUCADIA NATIONAL CORP	LUK	N/A	N/A	0 00%	N/A	N/A	N/A
SOUTHWEST AIRLINES CO	LUV	22,886 25	0 15%	0 85%	29 00%	29 97%	0 0444%
LEVEL 3 COMMUNICATIONS INC	LVL3	16,323 09	N/A	0 00%	N/A	N/A	N/A
LYONDELLBASELL INDU-CL A	LYB	33,252 41	0 22%	4 25%	10 50%	14 97%	0 0323%
MACY'S INC	M	11 914 55	0 08%	3 80%	3 50%	7 37%	0 0057%
MASTERCARD INC-CLASS A	MA	92,317 34	0 60%	0 93%	12 50%	13 49%	0 0807%
MACERICH CO/THE	MAC	-	N/A	3 74%	N/A	N/A	N/A
MARRIOTT INTERNATIONAL -CL A	MAR	15,836 57	0 10%	1 62%	16 00%	17 75%	0 0182%
MASCO CORP	MAS	8,287 54	0 05%	1 52%	18 50%	20 16%	0 0108%
MATTEL INC	MAT	10,165 43	0 07%	5 07%	4 00%	9 17%	0 0060%
MCDONALD'S CORP	MCD	107,181 50	0 69%	3 05%	4 50%	7 62%	0 0529%
MICROCHIP TECHNOLOGY INC	MCHP	8,051 01	0 05%	3 63%	9 50%	13 30%	0 0069%
MCKESSON CORP	MCK	34,294 91	0 22%	0 75%	12 00%	12 80%	0 0284%
MOODY'S CORP	MCO	15,512 70	0 10%	1 89%	10 00%	11 98%	0 0120%
MONDELEZ INTERNATIONAL INC-A	MDLZ	59,956 08	0 39%	1 91%	11 00%	13 02%	0 0506%
MEDTRONIC PLC	MDT	102,115 00	0 66%	2 18%	7 00%	9 26%	0 0612%
METLIFE INC	MET	39,250 84	0 25%	4 66%	6 00%	10 80%	0 0275%
MCGRAW HILL FINANCIAL INC	MHFI	22,234 88	N/A	1 75%	N/A	N/A	N/A
MOHAWK INDUSTRIES INC	MHK	11,295 84	0 07%	0 00%	15 50%	15 50%	0 0113%
MEAD JOHNSON NUTRITION CO	MJN	13,643 26	0 09%	2 38%	6 50%	8 96%	0 0079%
MCCORMICK & CO-NON VGT SHRS	MK	11,567 67	0 07%	1 90%	8 50%	10 48%	0 0079%
MARTIN MARIETTA MATERIALS	MLM	8,558 65	0 06%	1 24%	26 50%	27 90%	0 0155%
MARSH & MCLENNAN COS	MMC	28,700 38	0 19%	2 26%	10 50%	12 88%	0 0239%
3M CO	MMM	92,769 48	0 60%	2 95%	8 00%	11 07%	0 0665%
MALLINCKRODT PLC	MNK	6,811 83	N/A	0 00%	N/A	N/A	N/A
MONSTER BEVERAGE CORP	MNST	24,104 71	0 16%	0 00%	16 50%	16 50%	0 0258%
ALTRIA GROUP INC	MO	117,621 10	0 76%	3 77%	9 50%	13 45%	0 1025%
MONSANTO CO	MON	37,728 65	0 24%	2 52%	6 50%	9 10%	0 0222%
MOSAIC CO/THE	MOS	8,724 18	0 06%	4 77%	5 50%	10 40%	0 0059%
MARATHON PETROLEUM CORP	MPC	16 463 22	0 11%	4 15%	9 00%	13 34%	0 0142%
MERCK & CO INC	MRK	136,889 10	0 89%	3 77%	4 00%	7 85%	0 0696%
MARATHON OIL CORP	MRO	4,779 62	0 03%	2 83%	1 00%	3 84%	0 0012%
MORGAN STANLEY	MS	41,996 68	0 27%	2 77%	24 50%	27 61%	0 0751%
MICROSOFT CORP	MSFT	393,793 30	2 55%	2 90%	8 00%	11 02%	0 2811%
MOTOROLA SOLUTIONS INC	MSI	10 687 83	0 07%	2 81%	4 50%	7 37%	0 0051%
M & T BANK CORP	MTB	13,435 08	0 09%	2 78%	5 50%	8 36%	0 0073%
MICRON TECHNOLOGY INC	MU	10,533 03	0 07%	0 00%	1 00%	1 00%	0 0007%
MURPHY OIL CORP	MUR	2,747 24	0 02%	8 77%	-4 00%	4 59%	0 0008%
MYLAN NV	MYL	20,367 70	0 13%	0 00%	21 00%	21 00%	0 0277%
NAVIENT CORP	NAVI	3,047 01	N/A	7 61%	N/A	N/A	N/A
NOBLE ENERGY INC	NBL	12,029 21	0 08%	1 43%	4 50%	5 96%	0 0046%
NASDAQ INC	NDAQ	9 839 70	0 06%	1 67%	9 00%	10 75%	0 0069%
NEXTERA ENERGY INC	NEE	51,585 90	0 33%	3 24%	7 00%	10 35%	0 0346%
NEWMONT MINING CORP	NEM	13,249 12	0 09%	0 40%	-12 00%	-11 62%	-0 0100%
NETFLIX INC	NFLX	36 952 62	0 24%	0 00%	37 50%	37 50%	0 0898%
NEWFIELD EXPLORATION CO	NFX	4,410 30	0 03%	0 00%	9 50%	9 50%	0 0027%
NISOURCE INC	NI	6,719 82	0 04%	2 94%	-1 50%	1 42%	0 0006%
NIKE INC -CL B	NKE	95,592 00	0 62%	1 14%	16 00%	17 23%	0 1067%

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est	[8] DCF Result	[9] Weighted DCF Result
NIELSEN HOLDINGS PLC	NLSN	17,230 87	0 11%	2 37%	10 50%	12 99%	0 0145%
NORTHROP GRUMMAN CORP	NOC	33,622 98	0 22%	1 74%	7 50%	9 31%	0 0203%
NATIONAL OILWELL VARCO INC	NOV	9,896 86	0 06%	6 99%	-10 50%	-3 88%	-0 0025%
NRG ENERGY INC	NRG	3,066 26	0 02%	6 05%	23 50%	30 26%	0 0060%
NORFOLK SOUTHERN CORP	NSC	21,398 44	0 14%	3 29%	8 00%	11 42%	0 0158%
NETAPP INC	NTAP	6,345 16	0 04%	3 31%	5 50%	8 90%	0 0037%
NORTHERN TRUST CORP	NTRS	12,601 49	0 08%	2 64%	9 50%	12 27%	0 0100%
NUCOR CORP	NUE	12,257 20	0 08%	3 91%	22 50%	26 85%	0 0213%
NVIDIA CORP	NVDA	13,611 40	0 09%	1 82%	9 00%	10 90%	0 0096%
NEWELL RUBBERMAID INC	NWL	9,017 30	0 06%	2 25%	14 00%	16 41%	0 0096%
NEWS CORP - CLASS A	NWSA	6,046 58	0 04%	1 92%	33 50%	35 74%	0 0140%
REALTY INCOME CORP	O	-	N/A	3 95%	N/A	N/A	N/A
OWENS-ILLINOIS INC	OI	2,023 34	0 01%	0 00%	5 50%	5 50%	0 0007%
ONEOK INC	OKE	4,105 94	0 03%	13 41%	9 50%	23 55%	0 0063%
OMNICOM GROUP	OMC	17,415 71	0 11%	2 99%	9 00%	12 12%	0 0137%
ORACLE CORP	ORCL	146,606 70	0 95%	1 72%	7 00%	8 78%	0 0834%
O'REILLY AUTOMOTIVE INC	ORLY	24,632 10	0 16%	0 00%	13 50%	13 50%	0 0215%
OCCIDENTAL PETROLEUM CORP	OXY	50,559 32	0 33%	4 53%	-4 00%	0 44%	0 0014%
PAYCHEX INC	PAYX	17,229 37	0 11%	3 71%	9 50%	13 39%	0 0149%
PEOPLE'S UNITED FINANCIAL	PBCT	4,289 35	0 03%	4 91%	11 00%	16 18%	0 0045%
PITNEY BOWES INC	PBI	3,243 23	0 02%	4 56%	4 00%	8 65%	0 0018%
PACCAR INC	PCAR	17,075 34	0 11%	4 56%	7 00%	11 72%	0 0130%
P G & E CORP	PCG	27,038 22	0 18%	3 30%	10 50%	13 97%	0 0245%
PLUM CREEK TIMBER CO	PCL	6 136 76	0 04%	4 98%	9 50%	14 72%	0 0059%
PRICELINE GROUP INC/THE	PCLN	52,950 89	0 34%	0 00%	16 50%	16 50%	0 0566%
PATTERSON COS INC	PDCO	4 122 37	0 03%	2 32%	9 50%	11 83%	0 0032%
PUBLIC SERVICE ENTERPRISE GP	PEG	21,167 77	0 14%	3 92%	4 00%	8 00%	0 0110%
PEPSICO INC	PEP	141,667 80	0 92%	2 96%	6 00%	9 05%	0 0831%
PFIZER INC	PFE	179,819 50	1 17%	4 12%	9 50%	13 82%	0 1610%
PRINCIPAL FINANCIAL GROUP	PFG	10,078 79	0 07%	4 43%	6 50%	11 07%	0 0072%
PROCTER & GAMBLE CO/THE	PG	216,094 80	1 40%	3 32%	7 50%	10 94%	0 1532%
PROGRESSIVE CORP	PGR	17,672 46	0 11%	2 28%	11 50%	13 91%	0 0159%
PARKER HANNIFIN CORP	PH	13,090 13	0 08%	2 60%	6 50%	9 18%	0 0078%
PULTEGROUP INC	PHM	5,362 75	0 03%	2 34%	14 00%	16 50%	0 0057%
PERKINELMER INC	PKI	4,857 80	0 03%	0 65%	6 50%	7 17%	0 0023%
PROLOGIS INC	PLD	-	N/A	4 50%	N/A	N/A	N/A
PHILIP MORRIS INTERNATIONAL	PM	136 864 70	0 89%	4 62%	2 00%	6 67%	0 0591%
PNC FINANCIAL SERVICES GROUP	PNC	42,368 14	0 27%	2 61%	4 50%	7 17%	0 0197%
PENTAIR PLC	PNR	7,765 30	0 05%	3 06%	15 00%	18 29%	0 0092%
PINNACLE WEST CAPITAL	PNW	7,491 04	0 05%	3 79%	4 00%	7 87%	0 0038%
PEPCO HOLDINGS INC	POM	6 674 49	0 04%	4 10%	8 50%	12 77%	0 0055%
PPG INDUSTRIES INC	PPG	24,037 64	0 16%	1 61%	12 50%	14 21%	0 0221%
PPL CORP	PPL	24,117 33	0 16%	4 23%	3 00%	7 29%	0 0114%
PERRIGO CO PLC	PRGO	19,774 25	0 13%	0 37%	14 50%	14 90%	0 0191%
PRUDENTIAL FINANCIAL INC	PRU	26,647 75	0 17%	4 83%	4 50%	9 44%	0 0163%
PUBLIC STORAGE	PSA	-	N/A	2 95%	N/A	N/A	N/A
PHILLIPS 66	PSX	38,887 77	0 25%	3 28%	5 00%	8 36%	0 0211%
PVH CORP	PVH	5,783 43	0 04%	0 21%	6 00%	6 22%	0 0023%
QUANTA SERVICES INC	PWR	2,705 14	0 02%	0 00%	10 00%	10 00%	0 0018%
PRAXAIR INC	PX	29,071 38	0 19%	2 94%	7 50%	10 55%	0 0199%
PIONEER NATURAL RESOURCES CO	PXD	16,543 61	0 11%	0 07%	11 50%	11 57%	0 0124%
PAYPAL HOLDINGS INC	PYPL	40,927 91	N/A	0 00%	N/A	N/A	N/A
QUALCOMM INC	QCOM	64,285 00	0 42%	4 88%	4 50%	9 49%	0 0395%
QORVO INC	QRVO	4,867 90	N/A	0 00%	N/A	N/A	N/A
RYDER SYSTEM INC	R	2,803 21	0 02%	3 13%	11 50%	14 81%	0 0027%
REYNOLDS AMERICAN INC	RAI	69,311 40	0 45%	2 97%	13 50%	16 67%	0 0749%
ROYAL CARIBBEAN CRUISES LTD	RCL	14,952 52	0 10%	2 21%	21 50%	23 95%	0 0232%
REGENERON PHARMACEUTICALS	REGN	37,508 43	0 24%	0 00%	24 50%	24 50%	0 0595%
REGIONS FINANCIAL CORP	RF	9,527 19	0 06%	3 81%	6 00%	9 92%	0 0061%
ROBERT HALF INTL INC	RHI	4,861 70	0 03%	2 29%	12 50%	14 93%	0 0047%
RED HAT INC	RHT	11,316 90	0 07%	0 00%	15 50%	15 50%	0 0114%
TRANSOCEAN LTD	RIG	3 131 63	0 02%	0 00%	-15 50%	-15 50%	-0 0031%
RALPH LAUREN CORP	RL	7,045 35	0 05%	2 65%	6 50%	9 24%	0 0042%
ROCKWELL AUTOMATION INC	ROK	12,350 29	0 08%	3 09%	6 00%	9 18%	0 0073%
ROPER TECHNOLOGIES INC	ROP	16,125 78	0 10%	0 75%	8 00%	8 78%	0 0092%
ROSS STORES INC	ROST	21,287 06	0 14%	1 03%	9 00%	10 08%	0 0139%
RANGE RESOURCES CORP	RRC	4,556 13	0 03%	0 60%	10 00%	10 63%	0 0031%
REPUBLIC SERVICES INC	RSG	15,215 97	0 10%	2 78%	8 00%	10 89%	0 0107%
RAYTHEON COMPANY	RTN	36,776 18	0 24%	2 19%	8 50%	10 78%	0 0257%
STARBUCKS CORP	SBUX	81,589 15	0 53%	1 46%	17 00%	18 58%	0 0982%
SCANA CORP	SCG	9 224 20	0 06%	3 50%	4 50%	8 08%	0 0048%
SCHWAB (CHARLES) CORP	SCHW	29,250 12	0 19%	1 08%	14 50%	15 66%	0 0297%
SPECTRA ENERGY CORP	SE	18,512 89	0 12%	5 87%	5 00%	11 02%	0 0132%
SEALED AIR CORP	SEE	8,360 64	0 05%	1 23%	19 50%	20 85%	0 0113%
SHERWIN-WILLIAMS CO/THE	SHW	23,077 88	0 15%	1 29%	13 00%	14 37%	0 0215%
SIGNET JEWELERS LTD	SIG	7,529 45	0 05%	1 06%	14 50%	15 64%	0 0076%
JM SMUCKER CO/THE	SJM	15,097 25	0 10%	2 17%	7 50%	9 75%	0 0095%
SCHLUMBERGER LTD	SLB	86,801 79	0 56%	2 91%	7 00%	10 01%	0 0563%
SL GREEN REALTY CORP	SLG	-	N/A	3 58%	N/A	N/A	N/A
SNAP-ON INC	SNA	8,015 26	0 05%	1 77%	9 50%	11 35%	0 0059%
SANDISK CORP	SNDK	13,504 50	0 09%	0 00%	1 50%	1 50%	0 0013%
SCRIPPS NETWORKS INTER-CL A	SNI	6,830 71	0 04%	1 73%	9 00%	10 81%	0 0048%
SOUTHERN CO/THE	SO	43,663 04	0 28%	4 66%	2 50%	7 22%	0 0204%
SIMON PROPERTY GROUP INC	SPG	-	N/A	3 53%	N/A	N/A	N/A

Company	Ticker	[4] Market Capitalization	[5] Weight in Index	[6] Estimated Dividend Yield	[7] Long-Term Growth Est	[8] DCF Result	[9] Weighted DCF Result
STAPLES INC	SPLS	5,271 10	0 03%	5 86%	-2 00%	3 80%	0 0013%
STERICYCLE INC	SRCL	9 008 10	0 06%	0 00%	10 00%	10 00%	0 0058%
SEMPRA ENERGY	SRE	23,443 43	0 15%	2 97%	9 50%	12 61%	0 0192%
SUNTRUST BANKS INC	STI	16,122 36	0 10%	3 70%	9 00%	12 87%	0 0134%
ST JUDE MEDICAL INC	STJ	13,969 93	0 09%	2 51%	5 00%	7 57%	0 0069%
STATE STREET CORP	STT	21,150 62	0 14%	2 71%	6 50%	9 30%	0 0127%
SEAGATE TECHNOLOGY	STX	8,600 37	0 06%	8 68%	2 00%	10 77%	0 0060%
CONSTELLATION BRANDS INC-A	STZ	27,016 90	0 18%	1 00%	17 00%	18 09%	0 0317%
STANLEY BLACK & DECKER INC	SWK	13,496 30	0 09%	2 44%	10 00%	12 56%	0 0110%
SKYWORKS SOLUTIONS INC	SWKS	10,700 86	0 07%	1 86%	21 00%	23 06%	0 0160%
SOUTHWESTERN ENERGY CO	SWN	3,133 72	0 02%	0 00%	-4 00%	-4 00%	-0 0008%
SYNCHRONY FINANCIAL	SYF	20,428 69	N/A	0 00%	N/A	N/A	N/A
STRYKER CORP	SYK	36,156 16	0 23%	1 58%	15 50%	17 20%	0 0403%
SYMANTEC CORP	SYMC	12,331 89	0 08%	3 20%	-3 50%	-0 36%	-0 0003%
SYSCO CORP	SYU	24,143 76	0 16%	2 91%	12 00%	15 08%	0 0236%
AT&T INC	T	222,772 60	1 44%	5 30%	5 50%	10 95%	0 1580%
MOLSON COORS BREWING CO -B	TAP	15,479 91	0 10%	1 96%	8 50%	10 54%	0 0106%
TERADATA CORP	TDC	3,028 82	0 02%	0 00%	3 50%	3 50%	0 0007%
TECO ENERGY INC	TE	6,371 57	0 04%	3 43%	5 50%	9 02%	0 0037%
TE CONNECTIVITY LTD	TEL	20,159 74	0 13%	2 46%	9 00%	11 57%	0 0151%
TEGNA INC	TGNA	4,806 28	0 03%	2 58%	-0 50%	2 07%	0 0006%
TARGET CORP	TGT	42,095 73	0 27%	3 38%	9 00%	12 53%	0 0342%
TENET HEALTHCARE CORP	THC	2 329 46	0 02%	0 00%	28 00%	28 00%	0 0042%
TIFFANY & CO	TIF	7,788 15	0 05%	2 73%	12 50%	15 40%	0 0078%
TJX COMPANIES INC	TJX	45,467 72	0 29%	1 24%	10 00%	11 30%	0 0333%
TORCHMARK CORP	TMK	6 010 17	0 04%	1 11%	7 50%	8 65%	0 0034%
THERMO FISHER SCIENTIFIC INC	TMO	49,208 79	0 32%	0 49%	12 50%	13 02%	0 0415%
TRIPADVISOR INC	TRIP	8 804 34	0 06%	0 00%	18 50%	18 50%	0 0106%
T ROWE PRICE GROUP INC	TROW	16,481 58	0 11%	3 36%	9 50%	13 02%	0 0139%
TRAVELERS COS INC/THE	TRV	31,566 84	0 20%	2 35%	4 50%	6 90%	0 0141%
TRACTOR SUPPLY COMPANY	TSCO	10,999 15	0 07%	1 13%	15 50%	16 72%	0 0119%
TYSON FOODS INC-CL A	TSN	22,158 45	0 14%	1 00%	12 50%	13 56%	0 0195%
TESORO CORP	TSO	8,696 22	0 06%	2 78%	12 50%	15 45%	0 0087%
TOTAL SYSTEM SERVICES INC	TSS	7 075 79	0 05%	1 04%	11 50%	12 60%	0 0058%
TIME WARNER CABLE	TWC	50,791 92	0 33%	1 67%	6 00%	7 72%	0 0254%
TIME WARNER INC	TWX	50,042 96	0 32%	2 58%	12 00%	14 73%	0 0478%
TEXAS INSTRUMENTS INC	TXN	51 368 96	0 33%	3 02%	11 50%	14 69%	0 0489%
TEXTRON INC	TXT	8,519 85	0 06%	0 26%	17 00%	17 28%	0 0085%
TYCO INTERNATIONAL PLC	TYC	14,103 25	0 09%	2 47%	11 50%	14 11%	0 0129%
UNDER ARMOUR INC-CLASS A	UA	15,663 93	0 10%	0 00%	23 50%	23 50%	0 0239%
UNITED CONTINENTAL HOLDINGS	UAL	17,557 84	0 11%	0 00%	24 50%	24 50%	0 0279%
UNIVERSAL HEALTH SERVICES-B	UHS	10,009 78	0 06%	0 39%	12 00%	12 41%	0 0081%
UNITEDHEALTH GROUP INC	UNH	105,420 90	0 68%	1 81%	12 50%	14 42%	0 0985%
UNUM GROUP	UNM	5,859 17	0 04%	3 07%	11 00%	14 24%	0 0054%
UNION PACIFIC CORP	UNP	64,640 86	0 42%	2 91%	10 00%	13 06%	0 0547%
UNITED PARCEL SERVICE-CL B	UPS	84 725 19	0 55%	3 32%	10 50%	13 99%	0 0768%
URBAN OUTFITTERS INC	URBN	2,904 95	0 02%	0 00%	15 00%	15 00%	0 0028%
UNITED RENTALS INC	URI	4,023 12	0 03%	0 00%	16 00%	16 00%	0 0042%
US BANCORP	USB	65,672 13	0 43%	2 72%	5 50%	8 29%	0 0353%
UNITED TECHNOLOGIES CORP	UTX	75,095 20	0 49%	3 02%	7 00%	10 13%	0 0493%
VISA INC-CLASS A SHARES	V	149,949 30	0 97%	0 88%	13 00%	13 94%	0 1354%
VARIAN MEDICAL SYSTEMS INC	VAR	7,373 88	0 05%	0 00%	7 50%	7 50%	0 0036%
VF CORP	VFC	24 215 26	0 16%	2 61%	12 00%	14 77%	0 0232%
VIACOM INC-CLASS B	VIAB	12,838 72	0 08%	4 96%	9 00%	14 18%	0 0118%
VALERO ENERGY CORP	VLO	26,841 59	0 17%	4 32%	10 00%	14 54%	0 0253%
VULCAN MATERIALS CO	VMC	11,997 02	0 08%	0 44%	47 50%	48 04%	0 0373%
VORNADO REALTY TRUST	VNO	15,111 56	0 10%	3 14%	8 50%	9 74%	0 0095%
VERISK ANALYTICS INC	VRSK	11,220 05	0 07%	0 00%	12 50%	12 50%	0 0091%
VERISIGN INC	VRSN	8 297 84	0 05%	0 00%	11 00%	11 00%	0 0059%
VERTEX PHARMACEUTICALS INC	VRTX	19,580 44	N/A	0 00%	N/A	N/A	N/A
VENTAS INC	VTR	-	N/A	6 49%	N/A	N/A	N/A
VERIZON COMMUNICATIONS INC	VZ	200,967 90	1 30%	4 58%	5 50%	10 21%	0 1329%
WATERS CORP	WAT	9,509 43	0 06%	0 00%	8 00%	8 00%	0 0049%
WALGREENS BOOTS ALLIANCE INC	WBA	81,999 59	0 53%	1 91%	15 00%	17 05%	0 0906%
WESTERN DIGITAL CORP	WDC	9,263 10	0 06%	4 99%	2 00%	7 04%	0 0042%
WEC ENERGY GROUP INC	WEC	17,596 22	0 11%	3 55%	6 00%	9 66%	0 0110%
WELLS FARGO & CO	WFC	230,698 70	1 49%	3 50%	5 50%	9 10%	0 1360%
WHOLE FOODS MARKET INC	WFM	10,093 68	0 07%	1 87%	8 50%	10 45%	0 0068%
WHIRLPOOL CORP	WHR	10,119 72	0 07%	2 78%	13 50%	16 47%	0 0108%
WILLIS TOWERS WATSON PLC	WLTW	N/A	N/A	0 00%	N/A	N/A	N/A
WASTE MANAGEMENT INC	WM	23,644 73	0 15%	2 97%	7 00%	10 07%	0 0154%
WILLIAMS COS INC	WMB	9,954 21	0 06%	19 26%	16 00%	36 80%	0 0237%
WAL-MART STORES INC	WMT	209,677 20	1 36%	3 06%	1 50%	4 58%	0 0623%
WESTROCK CO	WRK	7,694 58	N/A	5 01%	N/A	N/A	N/A
WESTERN UNION CO	WU	8,541 28	0 06%	3 79%	6 00%	9 90%	0 0055%
WEYERHAEUSER CO	WY	11,355 15	0 07%	5 58%	12 50%	18 43%	0 0136%
WYNDHAM WORLDWIDE CORP	WYNN	7,385 27	0 05%	2 64%	8 50%	11 25%	0 0054%
WYNN RESORTS LTD	WYNN	6,061 10	0 04%	3 35%	3 50%	6 91%	0 0027%
CIMAREX ENERGY CO	XEC	7,674 41	0 05%	0 79%	4 00%	4 81%	0 0024%
XCEL ENERGY INC	XEL	19,778 34	0 13%	3 49%	4 50%	8 07%	0 0103%
XL GROUP PLC	XL	8,472 08	0 05%	2 41%	9 00%	11 52%	0 0063%
XILINX INC	XLNX	12,074 26	0 08%	2 62%	17 00%	19 84%	0 0155%
EXXON MOBIL CORP	XOM	331,374 80	2 15%	3 67%	2 50%	6 22%	0 1335%
DENTSPLY INTERNATIONAL INC	XRAY	7,900 10	0 05%	0 51%	9 00%	9 53%	0 0049%

		[4]	[5]	[6]	[7]	[8]	[9]
Company	Ticker	Market Capitalization	Weight in Index	Estimated Dividend Yield	Long-Term Growth Est	DCF Result	Weighted DCF Result
XEROX CORP	XRX	8,797.78	0.06%	3.57%	1.50%	5.10%	0.0029%
XYLEM INC	XYL	6,494.84	0.04%	1.71%	9.50%	11.29%	0.0048%
YAHOO! INC	YHOO	25,248.81	0.16%	0.00%	1.50%	1.50%	0.0025%
YUM! BRANDS INC	YUM	28,118.44	0.18%	2.88%	8.50%	11.50%	0.0210%
ZIMMER BIOMET HOLDINGS INC	ZBH	18,611.04	0.12%	0.98%	10.50%	11.53%	0.0139%
ZIONS BANCORPORATION	ZION	4,065.15	0.03%	1.31%	10.00%	11.38%	0.0030%
ZOETIS INC	ZTS	19,614.39	N/A	0.97%	N/A	N/A	N/A
Total Market Capitalization		15,433,945.18					12.78%

Notes

[1] Equals sum of Col [9]

[2] Source Bloomberg Professional

[3] Equals [1] - [2]

[4] Source Value Line

[5] Equals weight in S&P 500 based on market capitalization

[6] Source Value Line

[7] Source Value Line

[8] Equals $([6] \times (1 + (0.5 \times [7]))) + [7]$

[9] Equals Col [5] x Col [8]

I/A

Bloomberg, Value Line, and Calculated Beta Coefficients

Company	Ticker	[1] Bloomberg	[2] Value Line
Atmos Energy Corporation	ATO	0.633	0.80
Laclede Group, Inc. (The)	LG	0.657	0.70
New Jersey Resources Corporation	NJR	0.680	0.80
Northwest Natural Gas Company	NWN	0.611	0.65
South Jersey Industries, Inc.	SJI	0.644	0.80
Southwest Gas Corporation	SWX	0.554	0.80
WGL Holdings, Inc.	WGL	0.663	0.75
Mean		0.634	0.76

Notes:

[1] Source: Bloomberg Professional

[2] Source: Value Line

IA

Capital Asset Pricing Model Results
Bloomberg, and Value Line Derived Market Risk Premium

	[1]	[2]	[3]	[4]	[5]	[6]
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg MRP	Value Line MRP
PROXY GROUP AVERAGE BLOOMBERG BETA COEFFICIENT						
Current 30-Year Treasury [7]	2.79%	0.634	10.66%	9.99%	9.55%	9.13%
Projected 30-Year Treasury [8]	3.35%	0.634	10.66%	9.99%	10.11%	9.69%
Mean					9.83%	9.41%
	Risk-Free Rate	Average Beta Coefficient	Bloomberg Market DCF Derived	Value Line Market DCF Derived	Bloomberg MRP	Value Line MRP
PROXY GROUP AVERAGE VALUE LINE AVERAGE BETA COEFFICIENT						
Current 30-Year Treasury [7]	2.79%	0.757	10.66%	9.99%	10.86%	10.35%
Projected 30-Year Treasury [8]	3.35%	0.757	10.66%	9.99%	11.42%	10.92%
Mean					11.14%	10.63%

Notes:

[1] See Note [7]

[2] Source: Exhibit RBH-5

[3] Source: Exhibit RBH-4

[4] Source: Exhibit RBH-4

[5] Equals Col. [1] + (Col. [2] x Col. [3])

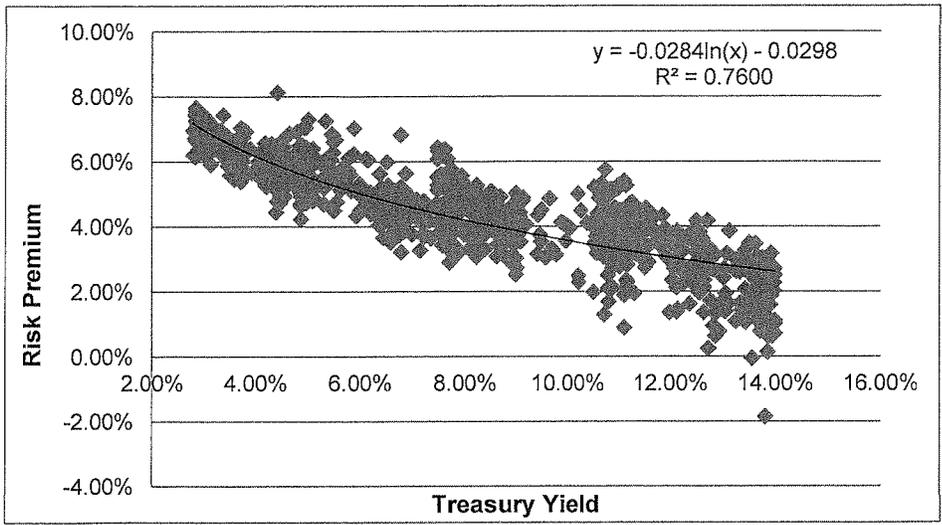
[6] Equals Col. [1] + (Col. [2] x Col. [4])

[7] Source: Bloomberg Professional

[8] Source: Blue Chip Financial Forecasts, Vol. 35, No. 2, February 1, 2016, at 2

Bond Yield Plus Risk Premium

	[1]	[2]	[3]	[4]	[5]
	Constant	Slope	30-Year Treasury Yield	Risk Premium	Return on Equity
	-2.98%	-2.84%			
Current 30-Year Treasury			2.79%	7.20%	9.98%
Near-Term Projected 30-Year Treasury			3.35%	6.67%	10.02%
Long-Term Projected 30-Year Treasury			4.65%	5.74%	10.39%



Notes:

- [1] Constant of regression equation
- [2] Slope of regression equation
- [3] Source: Current = Bloomberg Professional,
 Near Term Projected = Blue Chip Financial Forecasts, Vol. 35, No. 2, February 1, 2016, at 2
 Long Term Projected = Blue Chip Financial Forecasts, Vol. 34, No. 12, December 1, 2015, at 14
- [4] Equals [1] + ln([3]) x [2]
- [5] Equals [3] + [4]
- [6] Source: SNL Financial
- [7] Source: SNL Financial
- [8] Source: Bloomberg Professional, equals 188-trading day average (i.e. lag period) as of August 14, 2015
- [9] Equals [7] - [8]

[6]	[7]	[8]	[9]
Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/3/1980	12.55%	9.39%	3.16%
1/4/1980	13.75%	9.40%	4.35%
1/14/1980	13.20%	9.44%	3.76%
1/18/1980	14.00%	9.47%	4.53%
1/31/1980	12.61%	9.56%	3.05%
2/8/1980	14.50%	9.63%	4.87%
2/14/1980	13.00%	9.67%	3.33%
2/15/1980	13.00%	9.69%	3.31%
2/29/1980	14.00%	9.86%	4.14%
3/5/1980	14.00%	9.91%	4.09%
3/7/1980	13.50%	9.95%	3.55%
3/14/1980	14.00%	10.04%	3.96%
3/27/1980	12.69%	10.20%	2.49%
4/1/1980	14.75%	10.26%	4.49%
4/29/1980	12.50%	10.51%	1.99%
5/7/1980	14.27%	10.56%	3.71%
5/8/1980	13.75%	10.56%	3.19%
5/19/1980	15.50%	10.62%	4.88%
5/27/1980	14.60%	10.65%	3.95%
5/29/1980	16.00%	10.67%	5.33%
6/10/1980	13.78%	10.71%	3.07%
6/25/1980	14.25%	10.74%	3.51%
7/9/1980	14.51%	10.77%	3.74%
7/17/1980	12.90%	10.79%	2.11%
7/18/1980	13.80%	10.79%	3.01%
7/22/1980	14.10%	10.79%	3.31%
7/23/1980	14.19%	10.79%	3.40%
8/1/1980	12.50%	10.80%	1.70%
8/11/1980	14.85%	10.81%	4.04%
8/21/1980	13.03%	10.84%	2.19%
8/28/1980	13.61%	10.87%	2.74%
8/28/1980	14.00%	10.87%	3.13%
9/4/1980	14.00%	10.90%	3.10%
9/24/1980	15.00%	10.98%	4.02%
10/9/1980	14.50%	11.05%	3.45%
10/9/1980	14.50%	11.05%	3.45%
10/24/1980	14.00%	11.09%	2.91%
10/27/1980	15.20%	11.10%	4.10%
10/27/1980	15.20%	11.10%	4.10%
10/28/1980	12.00%	11.10%	0.90%
10/28/1980	13.00%	11.10%	1.90%
10/31/1980	14.50%	11.12%	3.38%
11/4/1980	15.00%	11.12%	3.88%
11/6/1980	14.35%	11.13%	3.22%
11/10/1980	13.25%	11.14%	2.11%
11/17/1980	15.50%	11.15%	4.35%
11/19/1980	13.50%	11.14%	2.36%
12/5/1980	14.60%	11.13%	3.47%
12/8/1980	16.40%	11.13%	5.27%
12/12/1980	15.45%	11.15%	4.30%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/17/1980	14.20%	11.16%	3.04%
12/17/1980	14.40%	11.16%	3.24%
12/18/1980	14.00%	11.16%	2.84%
12/22/1980	13.45%	11.16%	2.29%
12/26/1980	14.00%	11.15%	2.85%
12/30/1980	14.50%	11.14%	3.36%
12/31/1980	14.56%	11.14%	3.42%
1/7/1981	14.30%	11.13%	3.17%
1/12/1981	14.95%	11.14%	3.81%
1/26/1981	15.25%	11.20%	4.05%
1/30/1981	13.25%	11.23%	2.02%
2/11/1981	14.50%	11.33%	3.17%
2/20/1981	14.50%	11.40%	3.10%
3/12/1981	15.65%	11.60%	4.05%
3/25/1981	15.30%	11.74%	3.56%
4/1/1981	15.30%	11.82%	3.48%
4/9/1981	15.00%	11.91%	3.09%
4/29/1981	13.50%	12.12%	1.38%
4/29/1981	14.25%	12.12%	2.13%
4/30/1981	13.60%	12.14%	1.46%
4/30/1981	15.00%	12.14%	2.86%
5/21/1981	14.00%	12.37%	1.63%
6/3/1981	14.67%	12.46%	2.21%
6/22/1981	16.00%	12.57%	3.43%
6/25/1981	14.75%	12.60%	2.15%
7/2/1981	14.00%	12.64%	1.36%
7/10/1981	16.00%	12.69%	3.31%
7/14/1981	16.90%	12.71%	4.19%
7/21/1981	15.78%	12.78%	3.00%
7/27/1981	13.77%	12.82%	0.95%
7/27/1981	15.50%	12.82%	2.68%
7/31/1981	13.50%	12.86%	0.64%
7/31/1981	14.20%	12.86%	1.34%
8/12/1981	13.72%	12.93%	0.79%
8/12/1981	13.72%	12.93%	0.79%
8/12/1981	14.41%	12.93%	1.48%
8/25/1981	15.45%	13.02%	2.43%
8/27/1981	14.43%	13.04%	1.39%
8/28/1981	15.00%	13.05%	1.95%
9/23/1981	14.34%	13.24%	1.10%
9/24/1981	16.25%	13.26%	2.99%
9/29/1981	14.50%	13.31%	1.19%
9/30/1981	15.94%	13.32%	2.62%
10/2/1981	14.80%	13.36%	1.44%
10/12/1981	16.25%	13.43%	2.82%
10/20/1981	15.25%	13.50%	1.75%
10/20/1981	16.50%	13.50%	3.00%
10/20/1981	17.00%	13.50%	3.50%
10/23/1981	15.50%	13.54%	1.96%
10/26/1981	13.50%	13.56%	-0.06%
10/29/1981	16.50%	13.60%	2.90%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
11/4/1981	15.33%	13.62%	1.71%
11/6/1981	15.17%	13.64%	1.53%
11/12/1981	15.00%	13.65%	1.35%
11/25/1981	15.25%	13.66%	1.59%
11/25/1981	16.10%	13.66%	2.44%
11/25/1981	16.10%	13.66%	2.44%
11/30/1981	16.75%	13.66%	3.09%
12/1/1981	15.70%	13.66%	2.04%
12/1/1981	16.00%	13.66%	2.34%
12/15/1981	15.81%	13.69%	2.12%
12/17/1981	14.75%	13.70%	1.05%
12/22/1981	15.70%	13.72%	1.98%
12/22/1981	16.00%	13.72%	2.28%
12/30/1981	16.00%	13.74%	2.26%
12/30/1981	16.25%	13.74%	2.51%
1/4/1982	15.50%	13.75%	1.75%
1/14/1982	11.95%	13.80%	-1.85%
1/25/1982	16.25%	13.84%	2.41%
1/27/1982	16.84%	13.85%	2.99%
1/31/1982	14.00%	13.86%	0.14%
2/2/1982	16.24%	13.86%	2.38%
2/8/1982	15.50%	13.87%	1.63%
2/9/1982	14.95%	13.88%	1.07%
2/9/1982	15.75%	13.88%	1.87%
2/11/1982	16.00%	13.89%	2.11%
3/1/1982	15.96%	13.91%	2.05%
3/3/1982	15.00%	13.91%	1.09%
3/8/1982	17.10%	13.92%	3.18%
3/26/1982	16.00%	13.97%	2.03%
3/31/1982	16.25%	13.98%	2.27%
4/1/1982	16.50%	13.98%	2.52%
4/6/1982	15.00%	13.99%	1.01%
4/9/1982	16.50%	13.99%	2.51%
4/12/1982	15.10%	13.99%	1.11%
4/12/1982	16.70%	13.99%	2.71%
4/18/1982	14.70%	13.99%	0.71%
4/27/1982	15.00%	13.97%	1.03%
5/10/1982	14.57%	13.94%	0.63%
5/14/1982	15.80%	13.92%	1.88%
5/20/1982	15.82%	13.91%	1.91%
5/21/1982	15.50%	13.90%	1.60%
5/25/1982	16.25%	13.90%	2.35%
6/2/1982	14.50%	13.87%	0.63%
6/7/1982	16.00%	13.85%	2.15%
6/23/1982	15.50%	13.81%	1.69%
6/25/1982	16.50%	13.81%	2.69%
7/1/1982	15.55%	13.79%	1.76%
7/1/1982	16.00%	13.79%	2.21%
7/2/1982	15.10%	13.79%	1.31%
7/13/1982	16.80%	13.75%	3.05%
7/22/1982	14.50%	13.71%	0.79%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
7/28/1982	16.10%	13.68%	2.42%
7/30/1982	14.82%	13.66%	1.16%
8/4/1982	15.58%	13.64%	1.94%
8/6/1982	16.50%	13.63%	2.87%
8/11/1982	17.11%	13.62%	3.49%
8/25/1982	16.00%	13.59%	2.41%
8/30/1982	16.25%	13.58%	2.67%
9/3/1982	15.50%	13.57%	1.93%
9/9/1982	16.04%	13.55%	2.49%
9/15/1982	16.04%	13.52%	2.52%
9/17/1982	15.25%	13.51%	1.74%
9/29/1982	14.50%	13.43%	1.07%
9/30/1982	14.74%	13.42%	1.32%
9/30/1982	15.50%	13.42%	2.08%
9/30/1982	16.50%	13.42%	3.08%
9/30/1982	16.70%	13.42%	3.28%
10/1/1982	16.50%	13.41%	3.09%
10/8/1982	15.00%	13.33%	1.67%
10/15/1982	15.90%	13.26%	2.64%
10/19/1982	15.90%	13.22%	2.68%
10/27/1982	17.00%	13.12%	3.88%
10/28/1982	14.75%	13.11%	1.64%
11/2/1982	16.25%	13.07%	3.18%
11/4/1982	15.75%	13.03%	2.72%
11/5/1982	14.73%	13.01%	1.72%
11/17/1982	16.00%	12.86%	3.14%
11/23/1982	15.50%	12.79%	2.71%
11/24/1982	14.50%	12.77%	1.73%
11/24/1982	16.02%	12.77%	3.25%
11/30/1982	12.98%	12.72%	0.26%
11/30/1982	15.50%	12.72%	2.78%
11/30/1982	15.50%	12.72%	2.78%
11/30/1982	15.65%	12.72%	2.93%
11/30/1982	16.00%	12.72%	3.28%
11/30/1982	16.10%	12.72%	3.38%
12/3/1982	15.33%	12.68%	2.65%
12/8/1982	15.75%	12.63%	3.12%
12/13/1982	16.00%	12.58%	3.42%
12/14/1982	16.40%	12.57%	3.83%
12/17/1982	16.25%	12.52%	3.73%
12/20/1982	15.00%	12.51%	2.49%
12/21/1982	15.70%	12.49%	3.21%
12/28/1982	15.25%	12.42%	2.83%
12/28/1982	15.25%	12.42%	2.83%
12/29/1982	16.25%	12.41%	3.84%
12/29/1982	16.25%	12.41%	3.84%
1/11/1983	15.90%	12.26%	3.64%
1/12/1983	15.50%	12.24%	3.26%
1/18/1983	15.00%	12.18%	2.82%
1/24/1983	15.50%	12.13%	3.37%
1/24/1983	16.00%	12.13%	3.87%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/28/1983	14.90%	12.08%	2.82%
1/31/1983	15.00%	12.07%	2.93%
2/10/1983	15.00%	11.97%	3.03%
2/25/1983	15.70%	11.84%	3.86%
3/2/1983	15.25%	11.79%	3.46%
3/16/1983	16.00%	11.62%	4.38%
3/21/1983	14.96%	11.57%	3.39%
3/23/1983	15.40%	11.53%	3.87%
3/23/1983	16.10%	11.53%	4.57%
3/24/1983	15.00%	11.51%	3.49%
4/12/1983	13.25%	11.30%	1.95%
4/29/1983	15.05%	11.09%	3.96%
5/3/1983	15.40%	11.06%	4.34%
5/9/1983	15.50%	11.00%	4.50%
5/19/1983	14.85%	10.90%	3.95%
5/31/1983	14.00%	10.84%	3.16%
6/2/1983	14.50%	10.82%	3.68%
6/7/1983	14.50%	10.80%	3.70%
6/9/1983	14.85%	10.79%	4.06%
6/20/1983	14.15%	10.74%	3.41%
6/20/1983	16.50%	10.74%	5.76%
6/27/1983	14.50%	10.71%	3.79%
6/30/1983	14.80%	10.70%	4.10%
6/30/1983	15.90%	10.70%	5.20%
7/1/1983	14.80%	10.70%	4.10%
7/5/1983	15.00%	10.69%	4.31%
7/8/1983	15.50%	10.69%	4.81%
7/19/1983	15.00%	10.70%	4.30%
7/19/1983	15.10%	10.70%	4.40%
8/18/1983	15.30%	10.81%	4.49%
8/19/1983	15.79%	10.82%	4.97%
8/29/1983	16.00%	10.85%	5.15%
8/31/1983	14.75%	10.87%	3.88%
8/31/1983	15.25%	10.87%	4.38%
9/8/1983	14.75%	10.89%	3.86%
9/16/1983	15.51%	10.93%	4.58%
9/26/1983	14.50%	10.96%	3.54%
9/28/1983	14.25%	10.97%	3.28%
9/30/1983	16.15%	10.98%	5.17%
9/30/1983	16.25%	10.98%	5.27%
10/1/1983	16.25%	10.98%	5.27%
10/13/1983	15.52%	11.02%	4.50%
10/19/1983	15.20%	11.04%	4.16%
10/26/1983	14.75%	11.06%	3.69%
10/27/1983	14.88%	11.07%	3.81%
10/27/1983	15.33%	11.07%	4.26%
11/9/1983	14.82%	11.10%	3.72%
11/9/1983	16.51%	11.10%	5.41%
11/9/1983	16.51%	11.10%	5.41%
12/1/1983	14.50%	11.17%	3.33%
12/8/1983	15.90%	11.20%	4.70%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/9/1983	15.30%	11.21%	4.09%
12/12/1983	14.50%	11.22%	3.28%
12/12/1983	15.50%	11.22%	4.28%
12/20/1983	15.40%	11.26%	4.14%
12/20/1983	16.00%	11.26%	4.74%
12/22/1983	15.75%	11.27%	4.48%
12/29/1983	15.00%	11.30%	3.70%
12/30/1983	15.00%	11.30%	3.70%
1/10/1984	15.90%	11.34%	4.56%
1/13/1984	15.50%	11.36%	4.14%
1/18/1984	15.53%	11.38%	4.15%
1/26/1984	15.90%	11.42%	4.48%
2/14/1984	14.25%	11.51%	2.74%
2/28/1984	14.50%	11.58%	2.92%
3/20/1984	16.00%	11.70%	4.30%
3/23/1984	15.50%	11.72%	3.78%
4/9/1984	15.20%	11.81%	3.39%
4/18/1984	16.20%	11.86%	4.34%
4/27/1984	15.85%	11.90%	3.95%
5/15/1984	13.35%	11.99%	1.36%
5/16/1984	15.00%	12.00%	3.00%
5/22/1984	14.40%	12.04%	2.36%
6/13/1984	15.50%	12.18%	3.32%
7/10/1984	16.00%	12.37%	3.63%
8/7/1984	16.69%	12.51%	4.18%
8/9/1984	15.33%	12.51%	2.82%
8/17/1984	14.82%	12.54%	2.28%
8/21/1984	14.64%	12.54%	2.10%
8/27/1984	14.52%	12.56%	1.96%
8/28/1984	14.75%	12.57%	2.18%
8/30/1984	15.60%	12.58%	3.02%
9/12/1984	15.60%	12.60%	3.00%
9/12/1984	15.90%	12.60%	3.30%
9/25/1984	16.25%	12.61%	3.64%
10/2/1984	14.80%	12.62%	2.18%
10/9/1984	14.75%	12.63%	2.12%
10/10/1984	15.50%	12.63%	2.87%
10/18/1984	15.00%	12.65%	2.35%
10/24/1984	15.50%	12.65%	2.85%
11/7/1984	15.00%	12.64%	2.36%
11/20/1984	15.92%	12.63%	3.29%
11/30/1984	15.50%	12.60%	2.90%
12/18/1984	15.00%	12.55%	2.45%
12/20/1984	15.00%	12.54%	2.46%
12/28/1984	15.75%	12.51%	3.24%
12/28/1984	16.25%	12.51%	3.74%
1/2/1985	16.00%	12.50%	3.50%
1/31/1985	14.75%	12.37%	2.38%
2/7/1985	14.85%	12.33%	2.52%
2/15/1985	15.00%	12.27%	2.73%
2/20/1985	14.50%	12.25%	2.25%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
2/22/1985	14.86%	12.25%	2.61%
3/14/1985	15.50%	12.16%	3.34%
3/28/1985	14.80%	12.08%	2.72%
4/9/1985	15.50%	12.02%	3.48%
4/16/1985	15.70%	11.96%	3.74%
6/10/1985	15.75%	11.58%	4.17%
6/26/1985	14.82%	11.46%	3.36%
7/9/1985	15.00%	11.38%	3.62%
7/26/1985	14.50%	11.26%	3.24%
8/29/1985	14.50%	11.11%	3.39%
8/30/1985	14.38%	11.11%	3.27%
9/12/1985	15.25%	11.07%	4.18%
9/23/1985	15.30%	11.03%	4.27%
9/25/1985	14.50%	11.02%	3.48%
9/26/1985	13.80%	11.02%	2.78%
9/26/1985	14.50%	11.02%	3.48%
10/25/1985	15.25%	10.91%	4.34%
11/8/1985	12.94%	10.85%	2.09%
11/20/1985	14.90%	10.81%	4.09%
11/25/1985	13.30%	10.79%	2.51%
12/6/1985	12.00%	10.71%	1.29%
12/11/1985	14.90%	10.68%	4.22%
12/20/1985	14.88%	10.59%	4.29%
12/20/1985	15.00%	10.59%	4.41%
12/20/1985	15.00%	10.59%	4.41%
12/30/1985	15.75%	10.53%	5.22%
12/31/1985	14.00%	10.51%	3.49%
12/31/1985	14.50%	10.51%	3.99%
1/17/1986	14.50%	10.38%	4.12%
2/11/1986	12.50%	10.20%	2.30%
2/12/1986	15.20%	10.19%	5.01%
3/11/1986	14.00%	9.98%	4.02%
4/2/1986	12.90%	9.76%	3.14%
4/28/1986	13.01%	9.47%	3.54%
5/21/1986	13.25%	9.18%	4.07%
5/28/1986	14.00%	9.12%	4.88%
5/29/1986	13.90%	9.10%	4.80%
6/2/1986	13.00%	9.08%	3.92%
6/11/1986	14.00%	8.97%	5.03%
6/13/1986	13.55%	8.94%	4.61%
6/27/1986	11.88%	8.77%	3.11%
7/14/1986	12.60%	8.59%	4.01%
7/30/1986	13.30%	8.38%	4.92%
8/14/1986	13.50%	8.22%	5.28%
9/5/1986	13.30%	8.02%	5.28%
9/23/1986	12.75%	7.91%	4.84%
10/30/1986	13.00%	7.67%	5.33%
10/31/1986	13.75%	7.66%	6.09%
11/10/1986	14.00%	7.61%	6.39%
11/19/1986	13.75%	7.56%	6.19%
11/25/1986	13.15%	7.54%	5.61%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/22/1986	13.80%	7.47%	6.33%
12/30/1986	13.90%	7.47%	6.43%
1/20/1987	12.75%	7.47%	5.28%
1/23/1987	13.55%	7.47%	6.08%
1/27/1987	12.16%	7.47%	4.69%
2/13/1987	12.60%	7.47%	5.13%
2/24/1987	12.00%	7.47%	4.53%
3/30/1987	12.20%	7.46%	4.74%
3/31/1987	13.00%	7.47%	5.53%
5/5/1987	12.85%	7.60%	5.25%
5/28/1987	13.50%	7.73%	5.77%
6/15/1987	13.20%	7.80%	5.40%
6/30/1987	12.60%	7.85%	4.75%
7/10/1987	12.90%	7.88%	5.02%
7/27/1987	13.50%	7.93%	5.57%
8/25/1987	11.40%	8.09%	3.31%
9/18/1987	13.00%	8.27%	4.73%
10/20/1987	12.60%	8.55%	4.05%
10/20/1987	12.98%	8.55%	4.43%
11/12/1987	12.75%	8.68%	4.07%
11/13/1987	12.75%	8.68%	4.07%
11/24/1987	12.50%	8.73%	3.77%
12/8/1987	12.50%	8.81%	3.69%
12/22/1987	12.00%	8.90%	3.10%
12/31/1987	12.85%	8.94%	3.91%
12/31/1987	13.25%	8.94%	4.31%
1/15/1988	13.15%	8.99%	4.16%
1/20/1988	12.75%	8.99%	3.76%
1/29/1988	13.20%	8.99%	4.21%
2/4/1988	12.60%	8.99%	3.61%
3/23/1988	13.00%	8.95%	4.05%
5/27/1988	13.18%	9.02%	4.16%
6/14/1988	13.50%	9.00%	4.50%
6/17/1988	11.72%	8.99%	2.73%
6/24/1988	11.50%	8.97%	2.53%
7/1/1988	12.75%	8.95%	3.80%
7/8/1988	12.00%	8.93%	3.07%
7/18/1988	12.00%	8.91%	3.09%
7/20/1988	13.40%	8.90%	4.50%
8/8/1988	12.74%	8.90%	3.84%
9/20/1988	12.90%	8.93%	3.97%
9/26/1988	12.40%	8.93%	3.47%
9/27/1988	13.65%	8.93%	4.72%
9/30/1988	13.25%	8.94%	4.31%
10/13/1988	13.10%	8.93%	4.17%
10/21/1988	12.80%	8.94%	3.86%
10/25/1988	13.25%	8.94%	4.31%
10/26/1988	13.50%	8.94%	4.56%
10/27/1988	12.95%	8.94%	4.01%
10/28/1988	13.00%	8.95%	4.05%
11/15/1988	12.00%	8.98%	3.02%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
11/29/1988	12.75%	9.01%	3.74%
12/19/1988	13.00%	9.05%	3.95%
12/21/1988	12.90%	9.05%	3.85%
12/22/1988	13.50%	9.05%	4.45%
1/26/1989	12.60%	9.06%	3.54%
1/27/1989	13.00%	9.06%	3.94%
2/8/1989	13.37%	9.05%	4.32%
3/8/1989	13.00%	9.04%	3.96%
5/4/1989	13.00%	9.04%	3.96%
6/8/1989	13.50%	8.96%	4.54%
7/19/1989	11.80%	8.84%	2.96%
7/25/1989	12.80%	8.82%	3.98%
7/31/1989	13.00%	8.81%	4.19%
8/14/1989	12.50%	8.76%	3.74%
8/22/1989	12.80%	8.73%	4.07%
8/23/1989	12.90%	8.72%	4.18%
9/21/1989	12.10%	8.62%	3.48%
10/6/1989	13.00%	8.58%	4.42%
10/17/1989	12.41%	8.54%	3.87%
10/18/1989	13.25%	8.54%	4.71%
10/20/1989	12.90%	8.53%	4.37%
10/31/1989	13.60%	8.50%	5.10%
11/3/1989	12.93%	8.48%	4.45%
11/5/1989	13.20%	8.48%	4.72%
11/9/1989	12.60%	8.45%	4.15%
11/9/1989	13.00%	8.45%	4.55%
11/28/1989	12.75%	8.37%	4.38%
12/7/1989	13.25%	8.32%	4.93%
12/15/1989	13.00%	8.28%	4.72%
12/20/1989	12.90%	8.26%	4.64%
12/21/1989	12.80%	8.25%	4.55%
12/21/1989	12.90%	8.25%	4.65%
12/27/1989	12.50%	8.23%	4.27%
1/9/1990	13.00%	8.19%	4.81%
1/18/1990	12.50%	8.16%	4.34%
1/26/1990	12.10%	8.14%	3.96%
3/21/1990	12.80%	8.15%	4.65%
3/28/1990	13.00%	8.16%	4.84%
4/5/1990	12.20%	8.17%	4.03%
4/12/1990	13.25%	8.19%	5.06%
4/30/1990	12.45%	8.24%	4.21%
5/31/1990	12.40%	8.31%	4.09%
6/15/1990	13.20%	8.33%	4.87%
6/27/1990	12.90%	8.34%	4.56%
6/29/1990	13.25%	8.35%	4.90%
7/6/1990	12.10%	8.36%	3.74%
7/19/1990	11.70%	8.38%	3.32%
8/31/1990	12.50%	8.53%	3.97%
8/31/1990	12.50%	8.53%	3.97%
9/13/1990	12.50%	8.58%	3.92%
9/18/1990	12.75%	8.60%	4.15%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/20/1990	12.50%	8.61%	3.89%
10/2/1990	13.00%	8.65%	4.35%
10/17/1990	11.90%	8.68%	3.22%
10/31/1990	12.95%	8.70%	4.25%
11/9/1990	13.25%	8.70%	4.55%
11/19/1990	13.00%	8.70%	4.30%
11/21/1990	12.10%	8.70%	3.40%
11/21/1990	12.50%	8.70%	3.80%
11/28/1990	12.75%	8.70%	4.05%
11/29/1990	12.75%	8.70%	4.05%
12/18/1990	13.10%	8.68%	4.42%
12/20/1990	12.50%	8.67%	3.83%
12/21/1990	12.50%	8.67%	3.83%
12/21/1990	13.00%	8.67%	4.33%
12/21/1990	13.60%	8.67%	4.93%
1/3/1991	13.02%	8.66%	4.36%
1/16/1991	13.25%	8.63%	4.62%
1/25/1991	11.70%	8.61%	3.09%
2/15/1991	12.70%	8.56%	4.14%
2/15/1991	12.80%	8.56%	4.24%
4/3/1991	13.00%	8.51%	4.49%
4/30/1991	12.45%	8.48%	3.97%
4/30/1991	13.00%	8.48%	4.52%
6/25/1991	11.70%	8.34%	3.36%
6/28/1991	12.50%	8.34%	4.16%
7/1/1991	11.70%	8.34%	3.36%
7/19/1991	12.10%	8.31%	3.79%
7/19/1991	12.30%	8.31%	3.99%
7/22/1991	12.90%	8.30%	4.60%
8/15/1991	12.25%	8.28%	3.97%
8/29/1991	13.30%	8.26%	5.04%
9/27/1991	12.50%	8.23%	4.27%
9/30/1991	12.40%	8.23%	4.17%
10/3/1991	11.30%	8.22%	3.08%
10/9/1991	11.70%	8.21%	3.49%
10/15/1991	13.40%	8.20%	5.20%
11/1/1991	12.90%	8.20%	4.70%
11/8/1991	12.75%	8.20%	4.55%
11/26/1991	11.60%	8.18%	3.42%
11/26/1991	12.00%	8.18%	3.82%
11/27/1991	12.70%	8.18%	4.52%
12/6/1991	12.70%	8.16%	4.54%
12/10/1991	11.75%	8.15%	3.60%
12/19/1991	12.60%	8.14%	4.46%
12/19/1991	12.80%	8.14%	4.66%
12/30/1991	12.10%	8.11%	3.99%
1/22/1992	12.84%	8.05%	4.79%
1/31/1992	12.00%	8.03%	3.97%
2/20/1992	13.00%	8.00%	5.00%
2/27/1992	11.75%	7.98%	3.77%
3/18/1992	12.50%	7.94%	4.56%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
5/15/1992	12.75%	7.86%	4.89%
6/24/1992	12.20%	7.85%	4.35%
6/29/1992	11.00%	7.85%	3.15%
7/14/1992	12.00%	7.83%	4.17%
7/22/1992	11.20%	7.82%	3.38%
8/10/1992	12.10%	7.79%	4.31%
8/26/1992	12.43%	7.75%	4.68%
9/30/1992	11.60%	7.72%	3.88%
10/6/1992	12.25%	7.72%	4.53%
10/13/1992	12.75%	7.71%	5.04%
10/23/1992	11.65%	7.71%	3.94%
10/28/1992	12.25%	7.71%	4.54%
10/29/1992	12.75%	7.70%	5.05%
10/30/1992	11.40%	7.70%	3.70%
11/9/1992	10.60%	7.70%	2.90%
11/25/1992	11.00%	7.68%	3.32%
11/25/1992	12.00%	7.68%	4.32%
12/3/1992	11.85%	7.66%	4.19%
12/16/1992	11.90%	7.64%	4.26%
12/22/1992	12.30%	7.62%	4.68%
12/22/1992	12.40%	7.62%	4.78%
12/30/1992	12.00%	7.61%	4.39%
12/31/1992	12.00%	7.61%	4.39%
1/12/1993	12.00%	7.59%	4.41%
1/12/1993	12.00%	7.59%	4.41%
2/2/1993	11.40%	7.53%	3.87%
2/22/1993	11.60%	7.48%	4.12%
4/23/1993	11.75%	7.27%	4.48%
5/3/1993	11.50%	7.25%	4.25%
5/3/1993	11.75%	7.25%	4.50%
6/3/1993	12.00%	7.20%	4.80%
6/7/1993	11.50%	7.20%	4.30%
6/22/1993	11.75%	7.16%	4.59%
7/21/1993	11.78%	7.06%	4.72%
7/21/1993	11.90%	7.06%	4.84%
7/23/1993	11.50%	7.05%	4.45%
7/29/1993	11.50%	7.03%	4.47%
8/12/1993	10.75%	6.97%	3.78%
8/24/1993	11.50%	6.92%	4.58%
8/31/1993	11.90%	6.88%	5.02%
9/1/1993	11.25%	6.87%	4.38%
9/1/1993	11.47%	6.87%	4.60%
9/27/1993	10.50%	6.74%	3.76%
9/29/1993	11.00%	6.72%	4.28%
9/30/1993	11.60%	6.72%	4.88%
10/8/1993	11.50%	6.67%	4.83%
10/14/1993	11.20%	6.65%	4.55%
10/15/1993	11.75%	6.64%	5.11%
10/25/1993	11.55%	6.60%	4.95%
10/28/1993	11.50%	6.58%	4.92%
10/29/1993	10.10%	6.57%	3.53%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
10/29/1993	10.20%	6.57%	3.63%
10/29/1993	11.25%	6.57%	4.68%
11/2/1993	10.80%	6.56%	4.24%
11/12/1993	11.80%	6.53%	5.27%
11/23/1993	12.50%	6.51%	5.99%
11/26/1993	11.00%	6.50%	4.50%
12/1/1993	11.45%	6.49%	4.96%
12/16/1993	10.60%	6.45%	4.15%
12/16/1993	11.20%	6.45%	4.75%
12/21/1993	11.30%	6.44%	4.86%
12/22/1993	11.00%	6.44%	4.56%
12/23/1993	10.10%	6.44%	3.66%
1/5/1994	11.50%	6.41%	5.09%
1/10/1994	11.00%	6.40%	4.60%
1/25/1994	12.00%	6.37%	5.63%
2/2/1994	10.40%	6.35%	4.05%
2/9/1994	10.70%	6.34%	4.36%
4/6/1994	11.24%	6.35%	4.89%
4/25/1994	11.00%	6.39%	4.61%
6/16/1994	10.50%	6.63%	3.87%
6/23/1994	10.60%	6.67%	3.93%
7/19/1994	10.70%	6.83%	3.87%
9/29/1994	10.90%	7.20%	3.70%
9/29/1994	11.00%	7.20%	3.80%
10/7/1994	11.87%	7.26%	4.61%
10/18/1994	11.50%	7.32%	4.18%
10/18/1994	11.50%	7.32%	4.18%
10/24/1994	11.00%	7.35%	3.65%
11/22/1994	12.12%	7.52%	4.60%
11/29/1994	11.30%	7.55%	3.75%
12/1/1994	11.00%	7.56%	3.44%
12/8/1994	11.50%	7.59%	3.91%
12/8/1994	11.70%	7.59%	4.11%
12/12/1994	11.82%	7.60%	4.22%
12/14/1994	11.50%	7.61%	3.89%
12/19/1994	11.50%	7.62%	3.88%
4/19/1995	11.00%	7.72%	3.28%
9/11/1995	11.30%	7.16%	4.14%
9/15/1995	10.40%	7.13%	3.27%
9/29/1995	11.50%	7.06%	4.44%
10/13/1995	10.76%	6.98%	3.78%
11/7/1995	12.50%	6.86%	5.64%
11/8/1995	11.10%	6.85%	4.25%
11/8/1995	11.30%	6.85%	4.45%
11/17/1995	10.90%	6.81%	4.09%
11/20/1995	11.40%	6.80%	4.60%
11/27/1995	13.60%	6.77%	6.83%
12/14/1995	11.30%	6.68%	4.62%
12/20/1995	11.60%	6.65%	4.95%
1/31/1996	11.30%	6.45%	4.85%
3/11/1996	11.60%	6.40%	5.20%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
4/3/1996	11.13%	6.41%	4.72%
4/15/1996	10.50%	6.41%	4.09%
4/17/1996	10.77%	6.40%	4.37%
4/26/1996	10.60%	6.40%	4.20%
5/10/1996	11.00%	6.40%	4.60%
5/13/1996	11.25%	6.41%	4.84%
7/3/1996	11.25%	6.49%	4.76%
7/22/1996	11.25%	6.54%	4.71%
10/3/1996	10.00%	6.77%	3.23%
10/29/1996	11.30%	6.84%	4.46%
11/26/1996	11.30%	6.86%	4.44%
11/27/1996	11.30%	6.86%	4.44%
11/29/1996	11.00%	6.86%	4.14%
12/12/1996	11.96%	6.85%	5.11%
12/17/1996	11.50%	6.85%	4.65%
1/22/1997	11.30%	6.83%	4.47%
1/27/1997	11.25%	6.83%	4.42%
1/31/1997	11.25%	6.83%	4.42%
2/13/1997	11.00%	6.82%	4.18%
2/13/1997	11.80%	6.82%	4.98%
2/20/1997	11.80%	6.81%	4.99%
3/27/1997	10.75%	6.79%	3.96%
4/29/1997	11.70%	6.81%	4.89%
7/17/1997	12.00%	6.77%	5.23%
10/29/1997	10.75%	6.70%	4.05%
10/31/1997	11.25%	6.70%	4.55%
12/24/1997	10.75%	6.53%	4.22%
4/28/1998	10.90%	6.11%	4.79%
4/30/1998	12.20%	6.10%	6.10%
6/30/1998	11.00%	5.94%	5.06%
8/26/1998	10.93%	5.82%	5.11%
9/3/1998	11.40%	5.80%	5.60%
9/15/1998	11.90%	5.77%	6.13%
10/7/1998	11.06%	5.70%	5.36%
10/30/1998	11.40%	5.63%	5.77%
12/10/1998	12.20%	5.52%	6.68%
12/17/1998	12.10%	5.49%	6.61%
2/19/1999	11.15%	5.32%	5.83%
3/1/1999	10.65%	5.31%	5.34%
3/1/1999	10.65%	5.31%	5.34%
6/8/1999	11.25%	5.35%	5.90%
11/12/1999	10.25%	5.92%	4.33%
12/14/1999	10.50%	5.99%	4.51%
1/28/2000	10.71%	6.16%	4.55%
2/17/2000	10.60%	6.20%	4.40%
5/25/2000	10.80%	6.19%	4.61%
6/19/2000	11.05%	6.18%	4.87%
6/22/2000	11.25%	6.18%	5.07%
7/17/2000	11.06%	6.15%	4.91%
7/20/2000	12.20%	6.14%	6.06%
8/11/2000	11.00%	6.11%	4.89%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
9/27/2000	11.25%	6.00%	5.25%
9/29/2000	11.16%	6.00%	5.16%
10/5/2000	11.30%	5.98%	5.32%
11/28/2000	12.90%	5.87%	7.03%
11/30/2000	12.10%	5.86%	6.24%
2/5/2001	11.50%	5.75%	5.75%
3/15/2001	11.25%	5.66%	5.59%
5/8/2001	10.75%	5.61%	5.14%
10/24/2001	10.30%	5.54%	4.76%
10/24/2001	11.00%	5.54%	5.46%
1/9/2002	10.00%	5.50%	4.50%
1/30/2002	11.00%	5.47%	5.53%
1/31/2002	11.00%	5.47%	5.53%
4/17/2002	11.50%	5.44%	6.06%
4/29/2002	11.00%	5.45%	5.55%
6/11/2002	11.77%	5.48%	6.29%
6/20/2002	12.30%	5.48%	6.82%
8/28/2002	11.00%	5.49%	5.51%
9/11/2002	11.20%	5.45%	5.75%
9/12/2002	12.30%	5.45%	6.85%
10/28/2002	11.30%	5.35%	5.95%
10/30/2002	10.60%	5.34%	5.26%
11/1/2002	12.60%	5.34%	7.26%
11/7/2002	11.40%	5.33%	6.07%
11/8/2002	10.75%	5.33%	5.42%
11/20/2002	10.00%	5.30%	4.70%
11/20/2002	10.50%	5.30%	5.20%
12/4/2002	10.75%	5.27%	5.48%
12/30/2002	11.20%	5.19%	6.01%
1/6/2003	11.25%	5.16%	6.09%
2/28/2003	12.30%	5.01%	7.29%
3/7/2003	9.96%	4.99%	4.97%
3/12/2003	11.40%	4.97%	6.43%
3/20/2003	12.00%	4.95%	7.05%
4/3/2003	12.00%	4.92%	7.08%
5/2/2003	11.40%	4.88%	6.52%
5/15/2003	11.05%	4.87%	6.18%
6/26/2003	11.00%	4.80%	6.20%
7/1/2003	11.00%	4.80%	6.20%
7/29/2003	11.71%	4.78%	6.93%
8/22/2003	10.20%	4.81%	5.39%
9/17/2003	9.90%	4.85%	5.05%
9/25/2003	10.25%	4.85%	5.40%
10/17/2003	10.54%	4.87%	5.67%
10/22/2003	10.46%	4.87%	5.59%
10/22/2003	10.71%	4.87%	5.84%
10/30/2003	11.00%	4.88%	6.12%
10/31/2003	10.20%	4.88%	5.32%
10/31/2003	10.75%	4.88%	5.87%
11/10/2003	10.60%	4.89%	5.71%
12/9/2003	10.50%	4.93%	5.57%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/18/2003	10.50%	4.94%	5.56%
12/19/2003	12.00%	4.94%	7.06%
12/19/2003	12.00%	4.94%	7.06%
1/13/2004	10.25%	4.95%	5.30%
1/13/2004	12.00%	4.95%	7.05%
2/9/2004	11.25%	4.98%	6.27%
3/16/2004	10.90%	5.05%	5.85%
3/16/2004	10.90%	5.05%	5.85%
5/25/2004	10.00%	5.06%	4.94%
6/2/2004	11.22%	5.07%	6.15%
6/30/2004	10.50%	5.10%	5.40%
7/8/2004	10.00%	5.10%	4.90%
7/22/2004	10.25%	5.10%	5.15%
8/26/2004	10.50%	5.10%	5.40%
8/26/2004	10.50%	5.10%	5.40%
9/9/2004	10.40%	5.10%	5.30%
9/21/2004	10.50%	5.09%	5.41%
9/27/2004	10.30%	5.09%	5.21%
9/27/2004	10.50%	5.09%	5.41%
10/20/2004	10.20%	5.08%	5.12%
11/30/2004	10.60%	5.08%	5.52%
12/8/2004	9.90%	5.09%	4.81%
12/21/2004	11.50%	5.09%	6.41%
12/22/2004	11.50%	5.09%	6.41%
12/28/2004	10.25%	5.09%	5.16%
2/18/2005	10.30%	4.95%	5.35%
3/29/2005	11.00%	4.86%	6.14%
4/13/2005	10.60%	4.84%	5.76%
4/28/2005	11.00%	4.80%	6.20%
5/17/2005	10.00%	4.77%	5.23%
6/8/2005	10.18%	4.71%	5.47%
6/10/2005	10.90%	4.71%	6.19%
7/6/2005	10.50%	4.65%	5.85%
7/19/2005	11.50%	4.63%	6.87%
8/11/2005	10.40%	4.60%	5.80%
9/19/2005	9.45%	4.53%	4.92%
9/30/2005	10.51%	4.52%	5.99%
10/4/2005	9.90%	4.52%	5.38%
10/4/2005	10.75%	4.52%	6.23%
10/14/2005	10.40%	4.52%	5.88%
10/31/2005	10.25%	4.53%	5.72%
11/2/2005	9.70%	4.53%	5.17%
11/30/2005	10.00%	4.53%	5.47%
12/9/2005	9.70%	4.53%	5.17%
12/12/2005	11.00%	4.53%	6.47%
12/20/2005	10.13%	4.53%	5.60%
12/21/2005	10.40%	4.52%	5.88%
12/21/2005	11.00%	4.52%	6.48%
12/22/2005	10.20%	4.52%	5.68%
12/22/2005	11.00%	4.52%	6.48%
12/28/2005	10.00%	4.52%	5.48%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/5/2006	11.00%	4.52%	6.48%
1/25/2006	11.20%	4.52%	6.68%
1/25/2006	11.20%	4.52%	6.68%
2/3/2006	10.50%	4.52%	5.98%
2/15/2006	9.50%	4.53%	4.97%
4/26/2006	10.60%	4.65%	5.95%
7/24/2006	9.60%	4.87%	4.73%
7/24/2006	10.00%	4.87%	5.13%
9/20/2006	11.00%	4.93%	6.07%
9/26/2006	10.75%	4.93%	5.82%
10/20/2006	9.80%	4.96%	4.84%
11/2/2006	9.71%	4.97%	4.74%
11/9/2006	10.00%	4.97%	5.03%
11/21/2006	11.00%	4.98%	6.02%
12/5/2006	10.20%	4.97%	5.23%
1/5/2007	10.40%	4.95%	5.45%
1/9/2007	11.00%	4.94%	6.06%
1/11/2007	10.90%	4.94%	5.96%
1/19/2007	10.80%	4.93%	5.87%
1/26/2007	10.00%	4.92%	5.08%
2/8/2007	10.40%	4.91%	5.49%
3/14/2007	10.10%	4.86%	5.24%
3/20/2007	10.25%	4.84%	5.41%
3/21/2007	11.35%	4.84%	6.51%
3/22/2007	10.50%	4.84%	5.66%
3/29/2007	10.00%	4.83%	5.17%
6/13/2007	10.75%	4.81%	5.94%
6/29/2007	9.53%	4.84%	4.69%
6/29/2007	10.10%	4.84%	5.26%
7/3/2007	10.25%	4.85%	5.40%
7/13/2007	9.50%	4.86%	4.64%
7/24/2007	10.40%	4.87%	5.53%
8/1/2007	10.15%	4.88%	5.27%
8/29/2007	10.50%	4.91%	5.59%
9/10/2007	9.71%	4.91%	4.80%
9/19/2007	10.00%	4.91%	5.09%
9/25/2007	9.70%	4.92%	4.78%
10/8/2007	10.48%	4.92%	5.56%
10/19/2007	10.50%	4.91%	5.59%
10/25/2007	9.65%	4.91%	4.74%
11/15/2007	10.00%	4.89%	5.11%
11/20/2007	9.90%	4.89%	5.01%
11/27/2007	10.00%	4.88%	5.12%
11/29/2007	10.90%	4.88%	6.02%
12/14/2007	10.80%	4.87%	5.93%
12/18/2007	10.40%	4.86%	5.54%
12/19/2007	9.80%	4.86%	4.94%
12/19/2007	9.80%	4.86%	4.94%
12/19/2007	10.20%	4.86%	5.34%
12/21/2007	9.10%	4.86%	4.24%
1/8/2008	10.75%	4.83%	5.92%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/17/2008	10.75%	4.81%	5.94%
1/17/2008	10.75%	4.81%	5.94%
2/5/2008	9.99%	4.78%	5.21%
2/5/2008	10.19%	4.78%	5.41%
2/13/2008	10.20%	4.76%	5.44%
3/31/2008	10.00%	4.63%	5.37%
5/28/2008	10.50%	4.53%	5.97%
6/24/2008	10.00%	4.52%	5.48%
6/27/2008	10.00%	4.52%	5.48%
7/31/2008	10.70%	4.50%	6.20%
7/31/2008	10.82%	4.50%	6.32%
8/27/2008	10.25%	4.50%	5.75%
9/2/2008	10.25%	4.50%	5.75%
9/19/2008	10.70%	4.48%	6.22%
9/24/2008	10.68%	4.48%	6.20%
9/24/2008	10.68%	4.48%	6.20%
9/24/2008	10.68%	4.48%	6.20%
9/30/2008	10.20%	4.48%	5.72%
10/3/2008	10.30%	4.48%	5.82%
10/8/2008	10.15%	4.47%	5.68%
10/20/2008	10.06%	4.47%	5.59%
10/24/2008	10.60%	4.46%	6.14%
10/24/2008	10.60%	4.46%	6.14%
11/21/2008	10.50%	4.42%	6.08%
11/21/2008	10.50%	4.42%	6.08%
11/21/2008	10.50%	4.42%	6.08%
11/24/2008	10.50%	4.41%	6.09%
12/3/2008	10.39%	4.37%	6.02%
12/24/2008	10.00%	4.26%	5.74%
12/26/2008	10.10%	4.24%	5.86%
12/29/2008	10.20%	4.23%	5.97%
1/13/2009	10.45%	4.14%	6.31%
2/2/2009	10.05%	4.04%	6.01%
3/9/2009	10.30%	3.89%	6.41%
3/25/2009	10.17%	3.84%	6.34%
4/2/2009	10.75%	3.81%	6.94%
5/5/2009	10.75%	3.71%	7.04%
5/15/2009	10.20%	3.70%	6.50%
5/29/2009	9.54%	3.70%	5.84%
6/3/2009	10.10%	3.71%	6.39%
6/22/2009	10.00%	3.73%	6.27%
6/29/2009	10.21%	3.74%	6.47%
6/30/2009	9.31%	3.74%	5.57%
7/17/2009	9.26%	3.75%	5.51%
7/17/2009	10.50%	3.75%	6.75%
10/16/2009	10.40%	4.09%	6.31%
10/26/2009	10.10%	4.11%	5.99%
10/28/2009	10.15%	4.12%	6.03%
10/28/2009	10.15%	4.12%	6.03%
10/30/2009	9.95%	4.12%	5.83%
11/20/2009	9.45%	4.18%	5.27%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
12/14/2009	10.50%	4.24%	6.26%
12/16/2009	10.75%	4.25%	6.50%
12/17/2009	10.30%	4.26%	6.04%
12/18/2009	10.40%	4.26%	6.14%
12/18/2009	10.40%	4.26%	6.14%
12/18/2009	10.50%	4.26%	6.24%
12/22/2009	10.20%	4.27%	5.93%
12/22/2009	10.40%	4.27%	6.13%
12/28/2009	10.85%	4.29%	6.56%
12/29/2009	10.38%	4.30%	6.08%
1/11/2010	10.24%	4.34%	5.90%
1/21/2010	10.23%	4.37%	5.86%
1/21/2010	10.33%	4.37%	5.96%
1/26/2010	10.40%	4.37%	6.03%
2/10/2010	10.00%	4.39%	5.61%
2/23/2010	10.50%	4.40%	6.10%
3/9/2010	9.60%	4.40%	5.20%
3/24/2010	10.13%	4.42%	5.71%
3/31/2010	10.70%	4.43%	6.27%
4/1/2010	9.50%	4.43%	5.07%
4/2/2010	10.10%	4.44%	5.66%
4/8/2010	10.35%	4.44%	5.91%
4/29/2010	9.19%	4.46%	4.73%
4/29/2010	9.40%	4.46%	4.94%
4/29/2010	9.40%	4.46%	4.94%
5/17/2010	10.55%	4.46%	6.09%
5/24/2010	10.05%	4.46%	5.59%
6/3/2010	11.00%	4.46%	6.54%
6/16/2010	10.00%	4.46%	5.54%
6/18/2010	10.30%	4.46%	5.84%
8/9/2010	12.55%	4.41%	8.14%
8/17/2010	10.10%	4.40%	5.70%
9/16/2010	9.60%	4.31%	5.29%
9/16/2010	10.00%	4.31%	5.69%
9/16/2010	10.00%	4.31%	5.69%
9/16/2010	10.30%	4.31%	5.99%
10/21/2010	10.40%	4.20%	6.20%
11/2/2010	9.75%	4.17%	5.58%
11/2/2010	9.75%	4.17%	5.58%
11/3/2010	10.75%	4.17%	6.58%
11/19/2010	10.20%	4.15%	6.05%
12/1/2010	10.00%	4.13%	5.87%
12/6/2010	9.56%	4.12%	5.44%
12/6/2010	10.09%	4.12%	5.97%
12/9/2010	10.25%	4.12%	6.13%
12/14/2010	10.33%	4.11%	6.22%
12/17/2010	10.10%	4.11%	5.99%
12/20/2010	10.10%	4.11%	5.99%
12/23/2010	9.92%	4.10%	5.82%
1/6/2011	10.35%	4.09%	6.26%
1/12/2011	10.30%	4.09%	6.21%

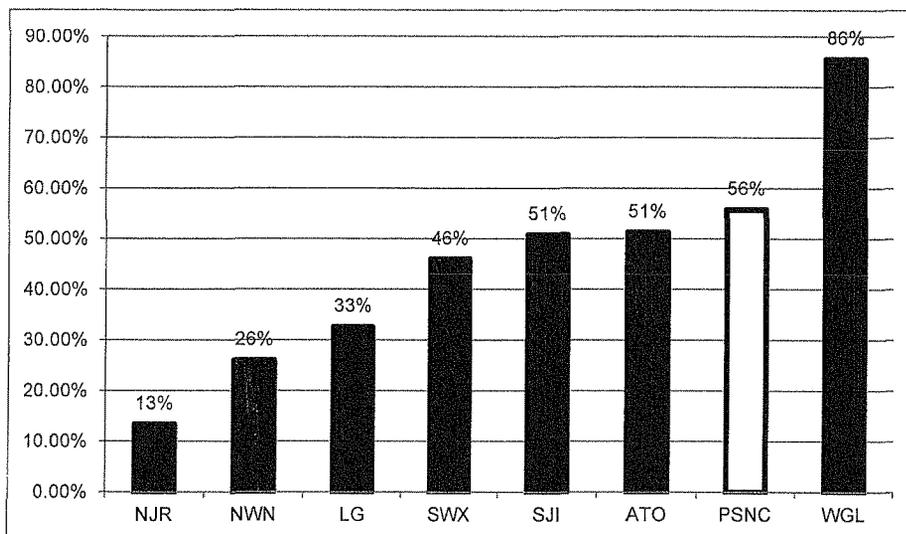
Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
1/13/2011	10.30%	4.09%	6.21%
3/10/2011	10.10%	4.16%	5.94%
3/31/2011	9.45%	4.20%	5.25%
4/18/2011	10.05%	4.23%	5.82%
5/26/2011	10.50%	4.32%	6.18%
6/21/2011	10.00%	4.36%	5.64%
6/29/2011	8.83%	4.38%	4.45%
8/1/2011	9.20%	4.41%	4.79%
9/1/2011	10.10%	4.33%	5.77%
11/14/2011	9.60%	3.93%	5.67%
12/13/2011	9.50%	3.76%	5.74%
12/20/2011	10.00%	3.72%	6.28%
12/22/2011	10.40%	3.70%	6.70%
1/10/2012	9.06%	3.59%	5.47%
1/10/2012	9.45%	3.59%	5.86%
1/10/2012	9.45%	3.59%	5.86%
1/23/2012	10.20%	3.53%	6.67%
1/31/2012	10.00%	3.49%	6.51%
4/24/2012	9.50%	3.16%	6.34%
4/24/2012	9.75%	3.16%	6.59%
5/7/2012	9.80%	3.13%	6.67%
5/22/2012	9.60%	3.10%	6.50%
5/24/2012	9.70%	3.09%	6.61%
6/7/2012	10.30%	3.06%	7.24%
6/15/2012	10.40%	3.05%	7.35%
6/18/2012	9.60%	3.05%	6.55%
7/2/2012	9.75%	3.04%	6.71%
10/24/2012	10.30%	2.92%	7.38%
10/26/2012	9.50%	2.92%	6.58%
10/31/2012	9.30%	2.92%	6.38%
10/31/2012	9.90%	2.92%	6.98%
10/31/2012	10.00%	2.92%	7.08%
11/1/2012	9.45%	2.91%	6.54%
11/8/2012	10.10%	2.91%	7.19%
11/9/2012	10.30%	2.90%	7.40%
11/26/2012	10.00%	2.89%	7.11%
11/28/2012	10.40%	2.88%	7.52%
11/28/2012	10.50%	2.88%	7.62%
12/4/2012	10.00%	2.87%	7.13%
12/4/2012	10.50%	2.87%	7.63%
12/20/2012	9.50%	2.84%	6.66%
12/20/2012	10.10%	2.84%	7.26%
12/20/2012	10.25%	2.84%	7.41%
12/20/2012	10.30%	2.84%	7.46%
12/20/2012	10.40%	2.84%	7.56%
12/20/2012	10.50%	2.84%	7.66%
12/26/2012	9.80%	2.83%	6.97%
2/22/2013	9.60%	2.86%	6.74%
3/14/2013	9.30%	2.89%	6.41%
3/27/2013	9.80%	2.92%	6.88%
4/23/2013	9.80%	2.96%	6.84%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
5/10/2013	9.25%	2.96%	6.29%
6/13/2013	9.40%	3.01%	6.39%
6/18/2013	9.28%	3.02%	6.26%
6/18/2013	9.28%	3.02%	6.26%
6/25/2013	9.80%	3.04%	6.76%
9/23/2013	9.60%	3.33%	6.27%
11/6/2013	10.20%	3.42%	6.78%
11/13/2013	9.84%	3.44%	6.40%
11/14/2013	10.25%	3.44%	6.81%
11/22/2013	9.50%	3.47%	6.03%
12/5/2013	10.20%	3.50%	6.70%
12/13/2013	9.60%	3.52%	6.08%
12/16/2013	9.73%	3.53%	6.20%
12/17/2013	10.00%	3.53%	6.47%
12/18/2013	9.08%	3.53%	5.55%
12/23/2013	9.72%	3.55%	6.17%
12/30/2013	10.00%	3.57%	6.43%
1/21/2014	9.65%	3.66%	5.99%
1/22/2014	9.18%	3.66%	5.52%
2/20/2014	9.30%	3.71%	5.59%
2/21/2014	9.85%	3.72%	6.13%
2/28/2014	9.55%	3.73%	5.83%
3/16/2014	9.72%	3.74%	5.98%
4/21/2014	9.50%	3.73%	5.77%
4/22/2014	9.80%	3.73%	6.07%
5/8/2014	9.10%	3.71%	5.39%
5/8/2014	9.59%	3.71%	5.88%
6/6/2014	10.40%	3.66%	6.74%
6/12/2014	10.10%	3.66%	6.44%
6/12/2014	10.10%	3.66%	6.44%
6/12/2014	10.10%	3.66%	6.44%
7/7/2014	9.30%	3.63%	5.67%
7/25/2014	9.30%	3.60%	5.70%
7/31/2014	9.90%	3.59%	6.31%
9/4/2014	9.10%	3.50%	5.60%
9/24/2014	9.35%	3.46%	5.89%
9/30/2014	9.75%	3.44%	6.31%
10/29/2014	10.80%	3.37%	7.43%
11/6/2014	10.20%	3.35%	6.85%
11/14/2014	10.20%	3.33%	6.87%
11/14/2014	10.30%	3.33%	6.97%
11/26/2014	10.20%	3.30%	6.90%
12/3/2014	10.00%	3.29%	6.71%
1/13/2015	10.30%	3.16%	7.14%
1/21/2015	9.05%	3.13%	5.92%
1/21/2015	9.05%	3.13%	5.92%
4/9/2015	9.50%	2.88%	6.62%
5/11/2015	9.80%	2.82%	6.98%
6/17/2015	9.00%	2.79%	6.21%
8/21/2015	9.75%	2.78%	6.97%
10/7/2015	9.55%	2.82%	6.73%

Date of Natural Gas Rate Case	Return on Equity	30-Year Treasury Yield	Risk Premium
10/13/2015	9.75%	2.83%	6.92%
10/15/2015	9.00%	2.83%	6.17%
10/30/2015	9.80%	2.86%	6.94%
11/19/2015	10.00%	2.89%	7.11%
12/3/2015	10.00%	2.91%	7.09%
12/9/2015	9.60%	2.92%	6.68%
12/11/2015	9.90%	2.92%	6.98%
12/18/2015	9.50%	2.93%	6.57%
1/6/2016	9.50%	2.96%	6.54%
1/6/2016	9.50%	2.96%	6.54%
1/28/2016	9.40%	2.97%	6.43%
2/10/2016	9.60%	2.95%	6.65%
		Average:	4.52%
		Count:	1,031

I/A

Capital Expenditures
Capital Expenditures Relative to Net Plant



Company	Ticker	3-Year CAPEX / 2014 Net Plant [1]
Atmos Energy Corporation	ATO	51.27%
Laclede Group, Inc. (The)	LG	32.59%
New Jersey Resources Corporation	NJR	23.91%
Northwest Natural Gas Company	NWN	25.99%
South Jersey Industries, Inc.	SJI	50.79%
Southwest Gas Corporation	SWX	45.96%
WGL Holdings, Inc.	WGL	85.54%
Median		45.96%
Public Service Company of North Carolina [2]		55.76%

Notes:

[1] Source: Value Line; Value Line estimates 2016 and 2018-2020 CAPEX

[2] Source: SCANA 2015 10-K, at 34; PSNC 2014 LDC Gas Filing

I/A

Small Size Premium

	[1]	[2]
	Customers (Mil)	(\$Mil)
Public Service Company of North Carolina Equity	0.539	\$0.508
Median Market to Book for Comp Group		1.85
Public Service Company of North Carolina Implied Market Cap		\$0.938

Company Name	Ticker	[3] Customers (Mil)	[4] Market Cap (\$Bil)	[5] Market to Book Ratio
Atmos Energy Corporation	ATO	3.2	\$6.70	2.07
Laclede Group, Inc.	LG	1.6	\$2.65	1.68
New Jersey Resources Corporation	NJR	0.5	\$2.95	2.63
Northwest Natural Gas Company	NWN	0.7	\$1.40	1.85
South Jersey Industries, Inc.	SJI	0.4	\$1.68	1.76
Southwest Gas Corporation	SWX	1.9	\$2.72	1.76
WGL Holdings, Inc.	WGL	1.1	\$3.19	2.55
MEDIAN		1.1	\$2.72	1.85
MEAN		1.3	\$3.04	2.04

Market Capitalization (\$Mil) [6]				
Decile	Low	High	Size Premium	
2	\$ 10,170.746	\$ 24,272.837	0.65%	
3	\$ 5,864.266	\$ 10,105.622	0.94%	
4	\$ 3,724.624	\$ 5,844.592	1.05%	
5	\$ 2,552.441	\$ 3,724.186	1.65%	
6	\$ 1,688.895	\$ 2,542.913	1.63%	
7	\$ 1,011.278	\$ 1,686.860	1.77%	
8	\$ 549.056	\$ 1,010.634	2.18%	
9	\$ 300.752	\$ 548.839	2.64%	
10	\$ 3.037	\$ 300.725	5.72%	
Proxy Group Median	\$	2.721	1.63%	
8th Decile Size Premium	\$	0.938	2.18%	
Difference from Proxy Group Median			0.55%	

Notes:

[1] SCANA Corporation SEC Form 10-K for the fiscal year ended December 31, 2015, at 5

[2] Equals Proposed Equity Ratio x Rate Base

[3] Source: SNL Financial

[4] Source: SNL Financial, 30-day average

[5] Source: SNL Financial, 30-day average

[6] Source: Ibbotson Associates, 2015 Ibbotson SBBI Market Report

I/A

Infrastructure Recovery Mechanisms

Local Distribution Company	Ticker	State	Mechanism	Mechanism Name
Atmos Energy Corporation	ATO	KS	✓	Gas System Reliability Surcharge
Atmos Energy Corporation	ATO	KY	✓	Pipeline Replacement Rider
Atmos Energy Corporation	ATO	LA	✓	Rate Stabilization Clause
Atmos Energy Corporation	ATO	MS	✓	Formula Rate Plan Rider
Atmos Energy Corporation	ATO	TN	✓	Annual Review Mechanism
Atmos Energy Corporation	ATO	TX	✓	Gas Reliability Infrastructure Program
Atmos Energy Corporation	ATO	VA	✓	Infrastructure Reliability and Replacement Adjustment
Atmos Energy Corporation	ATO	CO		
Alabama Gas Corporation	LG	AL	✓	Rate Stabilization and Equalization Plan
Missouri Gas Energy	LG	MO	✓	Infrastructure System Replacement Surcharge
Laclede Gas Company	LG	MO	✓	Infrastructure System Replacement Surcharge
New Jersey Natural Gas Company	NJR	NJ	✓	NJ RISE
Northwest Natural Gas Company	NWN	OR	✓	System Integrity Program
Northwest Natural Gas Company	NWN	WA		
South Jersey Gas Company	SJI	NJ	✓	SHARP
Southwest Gas Corporation	SWX	AZ	✓	Customer Owned Yard Line Replacement Program, TRIMP rider
Southwest Gas Corporation	SWX	CA	✓	Infrastructure Reliability & Replacement Adjustment Mechanism
Southwest Gas Corporation	SWX	NV	✓	Gas Infrastructure Replacement
Washington Gas Light Company	WGL	DC	✓	ACRP surcharge, VMCREP surcharge
Washington Gas Light Company	WGL	MD	✓	STRIDE Rider
Washington Gas Light Company	WGL	VA	✓	SAVE Rider

Summary of Recently Authorized ROEs for Natural Gas Distribution Utilities

State	Company	Docket No	Decision Date	Authorized ROE	RRA Ranking
Maryland	Baltimore Gas and Electric Co	C-9299 (gas)	2/22/2013	9 60%	Below Average / 2
New York	Niagara Mohawk Power Corp	D-12-G-0202	3/14/2013	9 30%	Average / 2
Idaho	Avista Corp	C-AVU-G-12-07	3/27/2013	9 80%	Average / 2
Montana	NorthWestern Corp	D-D2012 9 94	4/23/2013	9 80%	Below Average / 1
District of Columb	Washington Gas Light Co	FC-1093	5/10/2013	9 25%	Below Average / 1
New York	Brooklyn Union Gas Co	C-12-G-0544	6/13/2013	9 40%	Average / 2
Illinois	North Shore Gas Co	D-12-0511	6/18/2013	9 28%	Below Average / 1
Illinois	Peoples Gas Light & Coke Co	D-12-0512	6/18/2013	9 28%	Below Average / 1
Washington	Puget Sound Energy Inc	D-UG-130138	6/25/2013	9 80%	Average / 3
Maryland	Columbia Gas of Maryland Inc	C-9316	9/23/2013	9 60%	Below Average / 2
Wisconsin	Wisconsin Public Service Corp	D-6690-UR-122 (Gas)	11/6/2013	10 20%	Above Average / 2
Ohio	Duke Energy Ohio Inc	C-12-1685-GA-AIR	11/13/2013	9 84%	Average / 2
Michigan	Michigan Gas Utilities Corp	C-U-17273	11/14/2013	10 25%	Average / 1
Maryland	Washington Gas Light Co	C-9322	11/22/2013	9 50%	Below Average / 2
Wisconsin	Northern States Power Co - WI	D-4220-UR-119 (Gas)	12/5/2013	10 20%	Above Average / 2
Maryland	Baltimore Gas and Electric Co	C-9326 (gas)	12/13/2013	9 60%	Below Average / 2
Nevada	Sierra Pacific Power Co	D-13-06003	12/16/2013	9 73%	Average / 2
North Carolina	Piedmont Natural Gas Co	D-G-9, Sub 631	12/17/2013	10 00%	Average / 1
Illinois	Ameren Illinois	D-13-0192	12/18/2013	9 08%	Below Average / 1
Colorado	Public Service Co of CO	D-12AL-1268G	12/23/2013	9 72%	Average / 1
North Dakota	MDU Resources Group Inc	C-PU-13-803	12/30/2013	10 00%	Average / 1
Oregon	Avista Corp	D-UG-246	1/21/2014	9 65%	Average / 3
Connecticut	CT Natural Gas Corp	D-13-06-08	1/22/2014	9 18%	Below Average / 2
New York	Consolidated Edison Co of NY	C-13-G-0031	2/20/2014	9 30%	Average / 2
Utah	Questar Gas Co	D-13-057-05	2/21/2014	9 85%	Average / 2
Massachusetts	Bay State Gas Company	DPU 13-75	2/28/2014	9 55%	Average / 3
Colorado	Atmos Energy Corp	D-13AL-0496G	3/16/2014	9 72%	Average / 1
New Hampshire	Northern Utilities Inc	D-DG-13-086	4/21/2014	9 50%	Average / 3
Kentucky	Atmos Energy Corp	C-2013-00148	4/22/2014	9 80%	Average / 1
Minnesota	CenterPoint Energy Resources	D-G-008/GR-13-316	5/8/2014	9 59%	Average / 2
New York	National Fuel Gas Dist Corp	C-13-G-0136	5/8/2014	9 10%	Average / 2
Wisconsin	Wisconsin Power and Light Co	D-6680-UR-119 (Gas)	6/6/2014	10 40%	Above Average / 2
California	Southwest Gas Corp	A-12-12-024 (SoCal)	6/12/2014	10 10%	Average / 1
California	Southwest Gas Corp	A-12-12-024 (NoCal)	6/12/2014	10 10%	Average / 1
California	Southwest Gas Corp	A-12-12-024 (LkTah)	6/12/2014	10 10%	Average / 1
Arkansas	SourceGas Arkansas Inc	D-13-079-U	7/7/2014	9 30%	Average / 2
Arkansas	Arkansas Oklahoma Gas Corp	D-13-078-U	7/25/2014	9 30%	Average / 2
Wyoming	Cheyenne Light Fuel Power Co	D-30005-182-GR-13	7/31/2014	9 90%	Average / 2
Kansas	Atmos Energy Corp	D-14-ATMG-320-RTS	9/4/2014	9 10%	Average / 2
Minnesota	Minnesota Energy Resources	D-G-011/GR-13-617	9/24/2014	9 35%	Average / 2
New Jersey	South Jersey Gas Co	D-GR-13111137	9/30/2014	9 75%	Average / 3
Missouri	Summit Natural Gas of Missouri	C-GR-2014-0086	10/29/2014	10 80%	Average / 2
Wisconsin	Wisconsin Public Service Corp	D-6690-UR-123 (Gas)	11/6/2014	10 20%	Above Average / 2
Wisconsin	Wisconsin Electric Power Co	D-05-UR-107 (WEP-Gas)	11/14/2014	10 20%	Above Average / 2
Wisconsin	Wisconsin Gas LLC	D-05-UR-107 (WG)	11/14/2014	10 30%	Above Average / 2
Wisconsin	Madison Gas and Electric Co	D-3270-UR-120 (Gas)	11/26/2014	10 20%	Above Average / 2
Missouri	Liberty Utilities (Midstates)	C-GR-2014-0152	12/3/2014	10 00%	Average / 2
Michigan	Consumers Energy Co	C-U-17643	1/13/2015	10 30%	Average / 1
Illinois	North Shore Gas Co	D-14-0224	1/21/2015	9 05%	Below Average / 1
Illinois	Peoples Gas Light & Coke Co	D-14-0225	1/21/2015	9 05%	Below Average / 1
Oregon	Avista Corp	D-UG-284	4/9/2015	9 50%	Average / 3
Tennessee	Atmos Energy Corp	D-14-00146	5/11/2015	9 80%	Average / 1
New York	Central Hudson Gas & Electric	C-14-G-0319	6/17/2015	9 00%	Average / 2
Virginia	Columbia Gas of Virginia Inc	C-PUE-2014-00020	8/21/2015	9 75%	Above Average / 2
Massachusetts	Bay State Gas Company	DPU 15-50	10/7/2015	9 55%	Average / 3
West Virginia	Mountaineer Gas Company	C-15-0003-G-42T	10/13/2015	9 75%	Below Average / 1
New York	Orange & Rockland Utilts Inc	C-14-G-0494	10/15/2015	9 00%	Average / 2
Massachusetts	NSTAR Gas Co	DPU 14-150	10/30/2015	9 80%	Average / 3
Wisconsin	Wisconsin Public Service Corp	D-6690-UR-124 (Gas)	11/19/2015	10 00%	Above Average / 2
Wisconsin	Northern States Power Co - WI	D-4220-UR-121 (Gas)	12/3/2015	10 00%	Above Average / 2
Illinois	Ameren Illinois	D-15-0142	12/9/2015	9 60%	Below Average / 1
Michigan	Michigan Gas Utilities Corp	C-U-17880	12/11/2015	9 90%	Average / 1
Idaho	Avista Corp	C-AVU-G-15-01	12/18/2015	9 50%	Average / 2
Oklahoma	Oklahoma Natural Gas Co	Ca-PUD201500213	1/6/2016	9 50%	Average / 2
Washington	Avista Corp	D-UG-150205	1/6/2016	9 50%	Average / 3
Arkansas	SourceGas Arkansas Inc	D-15-011-U	1/28/2016	9 40%	Average / 2
Massachusetts	Liberty Utilities (NE Nat Gas)	DPU 15-75	2/10/2016	9 60%	Average / 3

Median Authorized ROE / RRA Ranking
10 20% Above Average
9 72% Average
9 39% Below Average

Average Authorized ROE / RRA Ranking
9 98% Average / 1

Flotation Cost Adjustment

Two most recent open market common stock issuances per company, if available

Company	Date	Shares Issued	Offering Price	Underwriting Discount	Offering Expense	Net Proceeds Per Share	Total Flotation Costs	Gross Equity Issue Before Costs	Net Proceeds	Flotation Cost Percentage
SCANA Corporation	5/11/2010	7,150,000	\$37.00	\$1,295.00	\$350,000	\$35.66	\$9,609,250	\$264,550,000	\$254,940,750	3.632%
SCANA Corporation	12/31/2008	2,500,000	\$35.50	\$0,532.50	\$350,000	\$34.83	\$1,681,250	\$88,750,000	\$87,068,750	1.894%
Atmos Energy Corporation	2/11/2014	9,200,000	\$44.00	\$1,540.00	\$350,000	\$42.42	\$14,518,000	\$404,800,000	\$390,282,000	3.586%
Atmos Energy Corporation	12/7/2006	6,325,000	\$31.50	\$1,102.50	\$400,000	\$30.33	\$7,373,313	\$199,237,500	\$191,864,188	3.701%
Laclede Group, Inc (The)	6/5/2014	10,350,000	\$46.25	\$1,711.30	\$1,000,000	\$44.44	\$18,711,438	\$478,687,500	\$459,976,063	3.909%
Laclede Group Inc (The)	5/22/2013	10,065,000	\$44.50	\$1,724.40	\$1,000,000	\$42.68	\$18,252,372	\$445,222,500	\$426,970,128	4.100%
Northwest Natural Gas Company	3/30/2004	1,290,000	\$31.00	\$1,010.00	\$175,000	\$29.85	\$1,477,900	\$39,990,000	\$38,512,100	3.696%
WGL Holdings, Inc	6/20/2001	2,058,500	\$26.73	\$0,895.00	\$56,218	\$25.81	\$1,898,576	\$55,023,705	\$53,125,130	3.450%
Mean							\$9,190,262	\$247,032,651		WEIGHTED AVERAGE FLOTATION COSTS 3.720%

Constant Growth Discounted Cash Flow Model Adjusted for Flotation Costs - 30 Day Average Stock Price

Company	Ticker	[1]	[2]	[3]	[4]		[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
		Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield Current	Expected Dividend Yield Adjusted for Flot Costs	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Retention Growth	Average Earnings Growth	DCF k(e)	Flotation Adjusted DCF k(e)	
Atmos Energy Corporation	ATO	\$1.68	\$65.65	2.56%	2.65%	2.75%	6.60%	6.40%	7.00%	8.21%	7.05%	9.70%	9.80%	
Laclede Group, Inc (The)	LG	\$1.96	\$61.14	3.21%	3.30%	3.43%	4.80%	4.78%	10.00%	4.90%	6.12%	9.42%	9.55%	
New Jersey Resources Corporation	NJR	\$0.96	\$34.36	2.79%	2.87%	2.98%	6.50%	6.50%	4.00%	5.81%	5.70%	8.58%	8.69%	
Northwest Natural Gas Company	NWN	\$1.87	\$51.25	3.65%	3.73%	3.88%	4.00%	4.00%	7.00%	3.73%	4.68%	8.42%	8.56%	
South Jersey Industres, Inc	SJI	\$1.06	\$24.21	4.36%	4.50%	4.67%	NA	6.00%	7.00%	6.56%	6.52%	11.02%	11.19%	
Southwest Gas Corporation	SWX	\$1.62	\$57.43	2.82%	2.90%	3.02%	5.00%	4.00%	7.00%	7.53%	5.86%	8.78%	8.90%	
WGL Holdings, Inc	WGL	\$1.95	\$64.08	3.04%	3.14%	3.26%	7.30%	8.00%	5.50%	5.11%	6.48%	9.62%	9.74%	
PROXY GROUP MEAN				3.20%	3.30%	3.43%						9.36%	9.49%	
														DCF Result Adjusted For Flotation Costs 9.49%
														DCF Result Unadjusted For Flotation Costs 9.36%
														Difference (Flotation Cost Adjustment) 0.13% [12]

Notes

The proxy group DCF result is adjusted for flotation costs by dividing each company's expected dividend yield by (1 - flotation cost). The flotation cost adjustment is derived as the difference between the unadjusted DCF result and the DCF result adjusted for flotation costs. Overallotment reflects shares exercised.

- [1] Source: Bloomberg Professional
- [2] Source: Bloomberg Professional
- [3] Equals [1] / [2]
- [4] Equals [3] x (1 + 0.5 x [10])
- [5] Equals [4] / (1 - 0.0372)
- [6] Source: Zacks
- [7] Source: Yahoo! Finance
- [8] Source: Value Line
- [9] Source: Schedule RBH-3
- [10] Equals Average([6], [7], [8], [9])
- [11] Equals [4] + [10]
- [12] Equals [5] + [10]
- [13] Equals average [12] - average [11]

I/A

Proxy Group Capital Structure

Company	Ticker	% Common Equity								
		2015Q4	2015Q3	2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	Average
Atmos Energy Corporation	ATO	57.13%	56.54%	56.88%	56.12%	55.52%	55.68%	55.93%	55.99%	56.22%
Laclede Group, Inc (The)	LG	46.36%	45.94%	46.97%	47.01%	45.31%	44.90%	61.10%	57.06%	49.33%
New Jersey Resources Corporation	NJR	57.11%	56.43%	55.97%	61.02%	59.92%	60.43%	61.42%	61.52%	59.23%
Northwest Natural Gas Company	NWN	56.45%	54.98%	55.55%	54.26%	53.64%	53.20%	51.65%	51.24%	53.87%
South Jersey Industries, Inc	SJI	50.04%	48.26%	50.64%	49.04%	48.02%	46.12%	49.47%	54.19%	49.47%
Southwest Gas Corporation	SWX	50.37%	49.84%	50.16%	50.47%	47.42%	50.09%	51.36%	51.62%	50.17%
WGL Holdings, Inc	WGL	57.05%	56.19%	55.99%	56.70%	55.52%	64.06%	67.15%	67.63%	60.04%
Mean		53.50%	52.60%	53.17%	53.52%	52.19%	53.50%	56.87%	57.03%	54.05%

Company	Ticker	% Long-Term Debt								
		2015Q4	2015Q3	2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	Average
Atmos Energy Corporation	ATO	42.87%	43.46%	43.12%	43.88%	44.48%	44.32%	44.07%	44.01%	43.78%
Laclede Group, Inc (The)	LG	53.64%	54.06%	53.03%	52.99%	54.69%	55.10%	38.90%	42.94%	50.67%
New Jersey Resources Corporation	NJR	42.89%	43.57%	44.03%	38.98%	40.08%	39.57%	38.58%	38.48%	40.77%
Northwest Natural Gas Company	NWN	43.55%	45.02%	44.45%	45.74%	46.36%	46.80%	48.35%	48.76%	46.13%
South Jersey Industries, Inc	SJI	49.96%	51.74%	49.36%	50.96%	51.98%	53.88%	50.53%	45.81%	50.53%
Southwest Gas Corporation	SWX	49.63%	50.16%	49.84%	49.53%	52.58%	49.91%	48.64%	48.38%	49.83%
WGL Holdings, Inc	WGL	42.95%	43.81%	44.01%	43.30%	44.48%	35.94%	32.85%	32.37%	39.96%
Mean		46.50%	47.40%	46.83%	46.48%	47.81%	46.50%	43.13%	42.97%	45.95%

Source: SNL Financial

I/A

2014-2016 Rate Cases Summary of Authorized Return on Equity, Rate of Return

State	Case Identification	Company	Decision Date	Authorized ROR	Authorized ROE	RRA Ranking
New York	C-14-G-0319	Central Hudson Gas & Electric	6/17/2015	6 62%	9 00%	5
New York	C-15-G-0284	NY State Electric & Gas Corp	6/15/2016	6 68%	9 00%	5
New York	C-14-G-0494	Orange & Rockland Utilis Inc	10/15/2015	7 10%	9 00%	5
New York	C-15-G-0286	Rochester Gas & Electric Corp	6/15/2016	7 55%	9 00%	5
Illinois	D-14-0224	North Shore Gas Co	1/21/2015	6 26%	9 05%	3
Illinois	D-14-0225	Peoples Gas Light & Coke Co	1/21/2015	6 56%	9 05%	3
Kansas	D-14-ATMG-320-RTS	Atmos Energy Corp	9/4/2014	7 75%	9 10%	5
New York	C-13-G-0136	National Fuel Gas Dist Corp	5/8/2014	7 56%	9 10%	5
Connecticut	D-13-06-08	CT Natural Gas Corp	1/22/2014	7 88%	9 18%	2
Arkansas	D-13-078-U	Arkansas Oklahoma Gas Corp	7/25/2014	6 18%	9 30%	5
Arkansas	D-13-079-U	SourceGas Arkansas Inc	7/7/2014	5 71%	9 30%	5
New York	C-13-G-0031	Consolidated Edison Co of NY	2/20/2014	7 10%	9 30%	5
Minnesota	D-G-011/GR-13-617	Minnesota Energy Resources	9/24/2014	7 30%	9 35%	5
Arkansas	D-15-011-U	SourceGas Arkansas Inc	1/28/2016	5 33%	9 40%	5
Oregon	D-UG 288	Avista Corp	2/29/2016	7 46%	9 40%	4
Minnesota	D-G-008/GR-15-424	CenterPoint Energy Resources	5/5/2016	7 07%	9 49%	5
Colorado	D-15AL-0135G	Public Service Co of CO	2/16/2016	7 33%	9 50%	6
Idaho	C-AVU-G-15-01	Avista Corp	12/18/2015	7 42%	9 50%	5
New Hampshire	D-DG-13-086	Northern Utilities Inc	4/21/2014	8 28%	9 50%	4
Oklahoma	Ca-PUD201500213	Oklahoma Natural Gas Co	1/6/2016	7 31%	9 50%	5
Oregon	D-UG-284	Avista Corp	4/9/2015	7 52%	9 50%	4
Washington	D UG-150205	Avista Corp	1/6/2016	7 29%	9 50%	4
Massachusetts	DPU 15-50	Bay State Gas Company	10/7/2015	7 75%	9 55%	4
Massachusetts	DPU 13-75	Bay State Gas Company	2/28/2014	7 83%	9 55%	4
Maine	D-2015-00005	Maine Natural Gas	6/1/2016	7 28%	9 55%	5
Minnesota	D-G-008/GR-13-316	CenterPoint Energy Resources	5/8/2014	7 42%	9 59%	5
Illinois	D-15-0142	Ameren Illinois	12/9/2015	7 65%	9 60%	3
Massachusetts	DPU 15-75	Liberty Utilities (NE Nat Gas)	2/10/2016	7 99%	9 60%	4
Maryland	C-9406 (gas)	Baltimore Gas and Electric Co	6/3/2016	7 23%	9 65%	2
Oregon	D-UG-246	Avista Corp	1/21/2014	7 47%	9 65%	4
Colorado	D-13AL-0496G	Atmos Energy Corp	3/16/2014	8 07%	9 72%	6
New Jersey	D-GR-13111137	South Jersey Gas Co	9/30/2014	7 10%	9 75%	4
Virginia	C-PUE-2014-00020	Columbia Gas of Virginia Inc	8/21/2015	7 35%	9 75%	8
West Virginia	C-15-0003-G-42T	Mountaineer Gas Company	10/13/2015	7 96%	9 75%	3
Kentucky	C-2013-00148	Atmos Energy Corp	4/22/2014	7 71%	9 80%	6
Massachusetts	DPU 15-81	Fitchburg Gas & Electric Light	4/29/2016	8 46%	9 80%	4
Massachusetts	DPU 14-150	NSTAR Gas Co	10/30/2015	7 72%	9 80%	4
Tennessee	D-14-00146	Atmos Energy Corp	5/11/2015	7 73%	9 80%	6
Utah	D-13-057-05	Questar Gas Co	2/21/2014	7 64%	9 85%	5
Michigan	C-U-17880	Michigan Gas Utilities Corp	12/11/2015	5 51%	9 90%	6
Wyoming	D-30005-182-GR-13	Cheyenne Light Fuel Power Co	7/31/2014	7 98%	9 90%	5
Missouri	C-GR-2014-0152	Liberty Utilities (Midstates)	12/3/2014	7 22%	10 00%	5
Wisconsin	D-4220-UR-121 (Gas)	Northern States Power Co - WI	12/3/2015	7 81%	10 00%	8
Wisconsin	D-6690-UR-124 (Gas)	Wisconsin Public Service Corp	11/19/2015	7 80%	10 00%	8
California	A-12-12-024 (SoCal)	Southwest Gas Corp	6/12/2014	6 83%	10 10%	6
California	A-12-12-024 (NoCal)	Southwest Gas Corp	6/12/2014	8 18%	10 10%	6
California	A-12-12-024 (LkTah)	Southwest Gas Corp	6/12/2014	8 18%	10 10%	6
Wisconsin	D-3270-UR-120 (Gas)	Madison Gas and Electric Co	11/26/2014	7 98%	10 20%	8
Wisconsin	D-05-UR-107 (WEP-	Wisconsin Electric Power Co	11/14/2014	8 60%	10 20%	8
Wisconsin	D-6690-UR-123 (Gas)	Wisconsin Public Service Corp	11/6/2014	7 95%	10 20%	8
Michigan	C-U-17643	Consumers Energy Co	1/13/2015	NA	10 30%	6
Wisconsin	D-05-UR-107 (WG)	Wisconsin Gas LLC	11/14/2014	8 36%	10 30%	8
Wisconsin	D-6680-UR-119 (Gas)	Wisconsin Power and Light Co	6/6/2014	NA	10 40%	8
Missouri	C-GR-2014-0086	Summit Natural Gas of Missouri	10/29/2014	7 54%	10 80%	5

Summary of Authorized ROEs since 2014 [1]

	RRA Ranking			
	Above Average	Average	Below Average	Overall
Average	10 13%	9 60%	9 38%	9 65%
Median	10 20%	9 55%	9 39%	9 60%
Maximum	10 40%	10 80%	9 75%	10 80%
Minimum	9 75%	9 00%	9 05%	9 00%
Count	8	40	6	54

Summary of Authorized RORs since 2014

	RRA Ranking			
	Above Average	Average	Below Average	Overall
Average	7 98%	7 34%	7 26%	7 41%
Median	7 95%	7 46%	7 44%	7 53%
Maximum	8 60%	8 46%	7 96%	8 60%
Minimum	7 35%	5 33%	6 26%	5 33%
Count	7	39	6	52

Notes
Source SNL Financial

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Proxy Group Capital Structure

		Common Equity										Average
Company	Ticker	2016Q2	2016Q1	2015Q4	2015Q3	2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	
Atmos Energy Corporation	ATO	52.58%	52.04%	50.41%	52.30%	54.47%	53.95%	50.48%	53.77%	55.93%	55.99%	53.19%
New Jersey Resources Corporation	NJR	48.90%	54.49%	51.67%	54.58%	55.97%	56.63%	52.65%	50.85%	55.55%	59.30%	54.06%
Northwest Natural Gas Company	NWN	51.69%	51.51%	47.44%	47.27%	49.14%	49.23%	46.08%	46.90%	49.20%	50.17%	48.86%
South Jersey Industnes, Inc	SJI	51.13%	43.59%	41.57%	40.93%	42.52%	43.11%	42.62%	42.71%	44.28%	45.04%	43.75%
Southwest Gas Corporation	SWX	52.67%	53.47%	50.09%	49.84%	50.16%	50.47%	47.34%	50.09%	51.36%	51.62%	50.71%
Spire Inc	SR	48.04%	44.40%	41.80%	41.82%	44.24%	43.85%	40.55%	41.36%	61.10%	56.02%	46.32%
WGL Holdings, Inc	WGL	47.61%	47.80%	46.24%	48.86%	52.38%	52.69%	48.01%	51.96%	59.74%	58.21%	51.35%
Mean		50.37%	49.61%	47.03%	47.94%	49.84%	49.99%	46.82%	48.24%	53.88%	53.76%	49.75%
Maximum		52.67%	54.49%	51.67%	54.58%	55.97%	56.63%	52.65%	53.77%	61.10%	59.30%	54.06%
Minimum		47.61%	43.59%	41.57%	40.93%	42.52%	43.11%	40.55%	41.36%	44.28%	45.04%	43.75%

		Long Term Debt										Average
Company	Ticker	2016Q2	2016Q1	2015Q4	2015Q3	2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	
Atmos Energy Corporation	ATO	37.25%	38.21%	37.83%	40.20%	41.30%	42.19%	40.45%	42.80%	44.07%	44.01%	40.83%
New Jersey Resources Corporation	NJR	40.89%	38.63%	38.80%	42.15%	44.03%	36.18%	35.22%	33.30%	34.89%	37.09%	38.12%
Northwest Natural Gas Company	NWN	38.44%	37.96%	36.15%	38.71%	38.82%	40.98%	39.82%	41.25%	46.06%	47.74%	40.59%
South Jersey Industnes, Inc	SJI	43.05%	42.88%	41.14%	43.89%	41.44%	44.80%	46.14%	49.90%	45.22%	38.08%	43.65%
Southwest Gas Corporation	SWX	47.33%	46.53%	49.34%	50.16%	49.84%	49.53%	52.50%	49.91%	48.64%	48.38%	49.22%
Spire Inc	SR	49.36%	48.90%	48.36%	49.20%	49.95%	49.42%	48.94%	50.76%	38.90%	42.16%	47.59%
WGL Holdings, Inc	WGL	40.30%	40.92%	34.82%	38.09%	41.17%	40.23%	38.47%	29.14%	29.23%	27.87%	36.02%
Mean		42.37%	42.00%	40.92%	43.20%	43.79%	43.33%	43.08%	42.44%	41.00%	40.76%	42.29%
Maximum		49.36%	48.90%	49.34%	50.16%	49.95%	49.53%	52.50%	50.76%	48.64%	48.38%	49.22%
Minimum		37.25%	37.96%	34.82%	38.09%	38.82%	36.18%	35.22%	29.14%	29.23%	27.67%	36.02%

		Short Term Debt										Average
Company	Ticker	2016Q2	2016Q1	2015Q4	2015Q3	2015Q2	2015Q1	2014Q4	2014Q3	2014Q2	2014Q1	
Atmos Energy Corporation	ATO	10.17%	9.75%	11.76%	7.50%	4.24%	3.87%	9.08%	3.43%	0.00%	0.00%	5.98%
New Jersey Resources Corporation	NJR	10.22%	6.88%	9.53%	3.27%	0.00%	7.18%	12.13%	15.84%	9.57%	3.61%	7.82%
Northwest Natural Gas Company	NWN	9.87%	10.53%	16.40%	14.02%	12.04%	9.80%	14.10%	11.85%	4.74%	2.10%	10.54%
South Jersey Industnes, Inc	SJI	5.82%	13.53%	17.29%	15.19%	16.04%	12.09%	11.23%	7.39%	10.50%	16.88%	12.60%
Southwest Gas Corporation	SWX	0.00%	0.00%	0.57%	0.00%	0.00%	0.00%	0.16%	0.00%	0.00%	0.00%	0.07%
Spire Inc	SR	2.60%	6.70%	9.85%	8.98%	5.81%	6.74%	10.51%	7.87%	0.00%	1.82%	6.09%
WGL Holdings, Inc	WGL	12.09%	11.28%	18.94%	13.05%	6.45%	7.07%	13.52%	18.90%	11.03%	13.93%	12.63%
Mean		7.25%	8.38%	12.05%	6.86%	6.37%	6.68%	10.10%	9.33%	5.12%	5.48%	7.96%
Maximum		12.09%	13.53%	18.94%	15.19%	16.04%	12.09%	14.10%	18.90%	11.03%	16.88%	12.63%
Minimum		0.00%	0.00%	0.57%	0.00%	0.00%	0.00%	0.16%	0.00%	0.00%	0.00%	0.07%

Source: SNL Financial

OTD

Operations Technology Development



As natural gas utilities grapple with an aging infrastructure, new pipeline integrity regulations, climate change, environmental impacts, alternative sources of supply and a continuous effort to improve operating efficiencies, OTD's work has become increasingly important. Initiatives supported by OTD have successfully addressed these growing issues for natural gas distribution utilities.

Since 2003, OTD has focused on infrastructure needs ranging from simple tools like the pavement breaker lift assist that helps utility personnel reduce the risk of personal injury to game-changing technologies like the use of sophisticated GPS devices for sub-foot tracking and tracing of utility assets and an acoustic pipe locator that is able to find plastic pipe without the use of tracer wire.

OTD is a not-for-profit corporation led by its 22 members who serve over 28 million natural gas consumers in 27 states and Canada. Through collaborative research and technology development, OTD member companies pool their resources and leverage available funding to ensure that complex tasks are becoming easier to accomplish, expensive activities are becoming less costly, and risk is becoming more manageable.

One thing that remains constant is change. The energy industry will continue to evolve, and OTD provides its members the ability to anticipate changes and adapt their operations through technology improvements.

What follows is a small sample of the many projects that OTD has sponsored on behalf of the natural gas industry and its customers.

Technology supporting natural gas infrastructure



Safe
&
Secure

OTD Technology Highlights

Product Pipeline



“They are clearly strong in collaboration. I think their collaboration model is unique in our industry and they manage that well. They pull together member companies and collaborate effectively to accomplish things these companies couldn’t do individually. We rely on them for shared ideas from all over the country to make the outcome greater.

They’re very aware of what the industry faces and they’re looking at projects that align with that.”

*Hart Gilchrist,
Intermountain Gas
OTD Member*

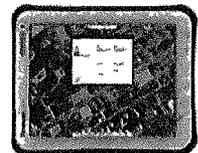
High-Accuracy GPS for Tablets and Smart Phones

An application developed by OTD and GTI as part of the 3-GIS Mobile 2.1 platform allows users to collect sub-foot accurate GPS data in real time with no need for back-office processing or data conversion. The application provides disconnected editing and barcode scanning to automatically populate the GIS with attribute information. It is compatible with Android devices and modular options allow users to select hardware based on individual needs.

GTI has established LocusView Solutions, a wholly owned subsidiary, to provide mobile mapping and field data collection services, including software configuration, hardware selection and set-up, cloud hosting, deployment and implementation, training, and back-office integration. Visit www.locusview.com to learn more.

GPS-Enabled Leak Surveying

Automating the leak surveying and pinpointing process with GPS eliminates paper records, providing increased efficiency and reliable compliance documentation. Implementation of the GPS-enabled system with the VeroTrack AST™ software application is under way at several utility companies.



Keyhole Pipeline Inspection Camera System

The PRX250K keyhole camera is an internal inspection system designed for visual assessment of live mains through conventional pits or small keyholes. The system is easily maneuverable through tight bends, allowing utilities to examine pipe segments without the need to drill additional access holes.

Lift Assists for Pavement Breakers and Rock Drills

These devices, available from Integrated Tool Solutions, provide two new tools, pavement and rock breakers. They assist workers in lifting the pavement breaker and rock drill after the bit has broken through the surface of the street or concrete and needs to be repositioned for the next penetration. By eliminating the need to manually lift and re-position the heavy tools, these lift assists make pavement and concrete breaking easier and less physically demanding.



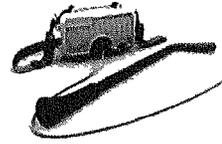
Metallic Joint Locator (MJD)

The SENSIT Ultra-Trac® MJD accurately locates bell joints, valves, pressure control fittings, repair clamps, mechanical couplings and service connections on metallic piping systems, significantly reducing excavation areas and pavement restoration costs.

Efficient

Portable Methane Detector (PMD)

The handheld SENSIT® PMD uses optical-detection technology to provide sensitivity and cost advantages over conventional techniques employing flame ionization detectors. The PMD improves the efficiency of leak surveys, is less costly to maintain than other technologies, and can detect leaks from low ppm to 100% gas.



Handheld Acoustic Pipe Locator

The acoustic-based pipe locator provides the ability to locate plastic pipes before excavations and construction. Now commercially available, in tests the system was shown to be capable of detecting multiple buried plastic pipes at depths up to five feet. Commercially available from SENSIT Technologies.



Analytical Tools and Reports

RFID Marker Technology Implementation Guidelines

A set of guidelines was developed for the implementation and application of integrated Global Positioning Systems (GPS), RFID Marker Technology Implementation Guidelines Geographic Information Systems (GIS), and "Smart Tag" technologies to streamline public-improvement project planning and prevent damage caused by excavations.



Cross Bores Best Practices Guide & Videos

Significant research was conducted to investigate gas line/ sewer line cross bores. The Guide and "how-to" videos (available through the OTD website) provide recommendations and procedures for preventing and detecting cross bores.

Underground Facility Pinpointing

Reports from this project present the results of research conducted on several technologies used by utilities to locate underground pipes and facilities. Researchers investigated standard electromagnetic locators, ground-penetrating radar, and alternative imaging tools. The reports provide a comparative, technical evaluation of tools that are currently available.

Polyurea Coating Testing and Assessment for Gas-Industry Use

A Final Report is available on research into field-applied polyurea coatings for gas industry use. Through a new initiative, long-term field trials will be conducted to evaluate these additional coatings and determine a cost-effective coating application method and process.

Inspection Technology Strategy Tool

An on-line software tool was developed to assist pipeline operators in evaluating and selecting appropriate inspection tools. A website provides a centralized resource for technical information and expertise related to internal inspection issues and concerns.

Leak-Rupture Boundary Report and Calculator

This report and associated software allows operators to determine the leak-rupture boundary for a pipe segment based on properties such as the diameter, toughness, and yield strength. Operators can use the calculator for risk modeling and consequence analysis.

Retirable

Software applications and technical reports can be found on the OTD website at www.otd-co.org or are available for purchase through Technical Toolboxes at www.ttoolbox.com/products/OTD

“We wouldn’t be able to be involved in this level of R&D if we weren’t a member of OTD.

I think their technical expertise and their project management skills are two of their strengths. Because they stay abreast of pipeline safety regulations and are very knowledgeable about the gas industry in general, they have the ability to take on many different types of projects.

They have proven that they can get projects completed within a reasonable time-frame and on budget and have gotten numerous products put into service. After the initial R&D, they have the ability to move a product through a ‘proof of concept’ and have been successful in finding commercializers to get products into the marketplace.”

*Mike J. Leger,
Entergy
OTD Member*

Operations Technology Development, NFP

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Field-Applied Pipeline Coatings: Short- and Long-Term Performance

This report presents the culmination of a 10-year research program to assess more than 80 different commercially available field-applied pipeline-coating products. The goal was to establish an unbiased, third-party basis for operators to select the most appropriate coating system for particular applications. field-applied pipeline-coating products.



Evaluation of Guided Wave Technology as a Hydrotest Equivalent



This report details an evaluation conducted to demonstrate and validate the use of Guided Wave Ultrasonic Testing as an equivalent to a hydrotest. A draft standard was developed and is currently under review by the National Association of Corrosion Engineers (NACE) for incorporation into an industry standard.

Flaw Acceptance Criteria and Repair Options for Low-Stress Natural Gas Pipelines

Researchers partnered with pipeline companies and industry organizations to develop modified assessment criteria for low-stress pipelines. The goal, as outlined in this report, was to develop criteria for discriminating flaws that truly affect pipeline integrity from flaws that have no significant impact.

Tracer Wire for HDD Applications

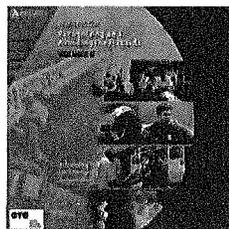
Extensive research and testing culminated in the release of a report that provides valuable information on the properties and performance of various tracer-wire products for use in horizontal directional drilling (HDD) operations.

Integrating GPS into Routine Operations

This report provides a set of recommendations and GPS implementation strategies developed through pilot programs, literature searches, and reviews of existing applications. Operations that were considered included meter reading, leak surveying, new installations, corrosion monitoring, and valve inspections.

Electrofusion Coupling Evaluation and Best Practices

Researchers investigated techniques used to perform electrofusion joining of plastic gas pipe in an effort to develop guidelines for the use and operation of electrofusion coupling. With a detailed set of guidelines, the gas industry can enhance the performance and safety of its plastic piping systems.



First Responders DVDs

To help gas companies better educate first-responding personnel about natural gas emergencies, gas industry researchers and training experts developed DVD-based learning modules with realistic scenarios covering a variety of issues. Designed to enhance public and worker safety, the training product also serves to improve emergency-response effectiveness and coordination.

For More Information

Ron Snedic, OTD President; 847-768-0572; ron.snedic@otd-co.org

I/A

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PRESENT RATES & CHARGES

Rate No.	Description	Facilities Charge	Billing Rate	CUT Increment/ (Decrement)	Clean Tariff Rate (a)
101	Residential Service				
	Facilities Charge - Per Month	\$10.00			
	Energy Charge - Per Therm				
	Winter - November through April		\$0.74340	\$0.00596	\$0.73744
	Summer- May through October		\$0.67577	\$0.00596	\$0.66981
102	Residential Service				
	Facilities Charge - Per Month	\$10.00			
	Energy Charge - Per Therm				
	Winter - November through April		\$0.69340	\$0.00596	\$0.68744
	Summer- May through October		\$0.62577	\$0.00596	\$0.61981
115	Open Flame Gas Lanterns				
	Facilities Charge - Per Month	\$10.00			
	Energy Charge - Per Therm				
	Winter - November through April		\$0.73744		\$0.73744
	Summer- May through October		\$0.66981		\$0.66981
125	Small General Service				
	Facilities Charge - Per Month	\$17.50			
	Energy Charge - Per Therm				
	First 500		\$0.61179	(\$0.01809)	\$0.62988
	Next 4,500		\$0.55143	(\$0.01809)	\$0.56952
	All Over 5,000		\$0.50750	(\$0.01809)	\$0.52559
126	Small General Service - Cooling				
	Facilities Charge - Per Month	\$30.00			
	Energy Charge - Per Therm		\$0.52559		\$0.52559
127	Small General Service				
	Facilities Charge - Per Month	\$17.50			
	Energy Charge - Per Therm				
	First 500		\$0.56179	(\$0.01809)	\$0.57988
	Next 4,500		\$0.50143	(\$0.01809)	\$0.51952
	All Over 5,000		\$0.45750	(\$0.01809)	\$0.47559
135	Natural Gas Vehicle Fuel				
	Energy Charge - Per Therm		\$0.70130		\$0.70130
	Energy Charge - Per GGE (b)				
145	Large-Quantity General Service				
	Facilities Charge - Per Month	\$300.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.41914		\$0.41914
	Next 15,000		\$0.39732		\$0.39732
	Next 15,000		\$0.37782		\$0.37782
	Next 15,000		\$0.35236		\$0.35236
	All Over 60,000		\$0.33117		\$0.33117

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PRESENT RATES & CHARGES

Rate No.	Description	Facilities Charge	Billing Rate	CUT Increment/ (Decrement)	Clean Tariff Rate
					(a)
150	Large-Quantity Interruptible Commercial & Industrial Service				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.35261		\$0.35261
	Next 15,000		\$0.33171		\$0.33171
	Next 70,000		\$0.31085		\$0.31085
	Next 500,000		\$0.29027		\$0.29027
	All Over 600,000		\$0.26941		\$0.26941
160	Special Sales Rate				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm		See Rate Schedule No. 160		
165	Special Transportation Rate				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm		See Rate Schedule No. 165		
175	Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145				
	Facilities Charge - Per Month	\$300.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.14542		\$0.14542
	Next 15,000		\$0.12360		\$0.12360
	Next 15,000		\$0.10410		\$0.10410
	Next 15,000		\$0.07864		\$0.07864
	All Over 60,000		\$0.05745		\$0.05745
180	Interruptible Transportation Service For Customers Qualifying For Service on Rate Schedule No. 150				
	Facilities Charge - Per Month	\$600.00			
	Energy Charge - Per Therm				
	First 15,000		\$0.10166		\$0.10166
	Next 15,000		\$0.08076		\$0.08076
	Next 70,000		\$0.05990		\$0.05990
	Next 500,000		\$0.03932		\$0.03932
	All Over 600,000		\$0.01846		\$0.01846

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PRESENT RATES & CHARGES

Rate No.	Description	Facilities Charge	Billing Rate	CUT Increment/ (Decrement)	Clean Tariff Rate
	Rider A - Emergency Services				
	Energy Charge - Per Therm				
	Limited Emergency Service		\$1.00000	plus cost of gas	
	On-Peak Emergency Service		\$1.50000	plus cost of gas	
	Unauthorized Gas		\$2.50000	plus cost of gas	
	Miscellaneous Fees				
	Returned Checks and Bank Drafts	\$25.00			
	Reconnection (c)				
	Residential – Regular Hours	\$65.00			
	After 5 p.m., weekends, holidays	\$95.00			
	Non-Residential – Regular Hours	\$95.00			
	After 5 p.m., weekends, holidays	\$125.00			

- (a) Rates do not include applicable sales tax.
(b) The rate converts 1.26 Therms to 1 Gasoline Gallon Equivalent (GGE).
(c) All reconnections that exceed one hour shall be billed the indicated rates per hour.

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED RATES AND CHARGES

Rate No.	Description	Facilities Charge	Billing Rate
			(a)
101	Residential Service		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$0.80425
	Summer- May through October		\$0.73662
102	Residential Service		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$0.75425
	Summer- May through October		\$0.68662
115	Open Flame Gas Lanterns		
	Facilities Charge - Per Month	\$12.00	
	Energy Charge - Per Therm		
	Winter - November through April		\$0.80425
	Summer- May through October		\$0.73662
125	Small General Service		
	Facilities Charge - Per Month	\$25.00	
	Energy Charge - Per Therm		
	First 500		\$0.64869
	Next 4,500		\$0.58833
	All Over 5,000		\$0.54440
126	Small General Service - Cooling		
	Facilities Charge - Per Month	\$30.00	
	Energy Charge - Per Therm		\$0.54440
127	Small General Service		
	Facilities Charge - Per Month	\$25.00	
	Energy Charge - Per Therm		
	First 500		\$0.59869
	Next 4,500		\$0.53833
	All Over 5,000		\$0.49440
135	Natural Gas Vehicle Fuel		
	Energy Charge - Per Therm		\$0.73068
	Energy Charge - Per GGE (b)		\$0.92066

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED RATES AND CHARGES

Rate No.	Description	Facilities Charge	Billing Rate
			(a)
140	Medium General Service		
	Facilities Charge - Per Month	\$100.00	
	Energy Charge - Per Therm		
	First 1,000		\$0.57869
	All Over 1,000		\$0.51833
145	Large-Quantity General Service		
	Facilities Charge - Per Month	\$300.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.47292
	Next 15,000		\$0.45110
	Next 15,000		\$0.43160
	Next 15,000		\$0.40614
	All Over 60,000		\$0.38495
150	Large-Quantity Interruptible Commercial & Industrial Service		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.38199
	Next 15,000		\$0.36109
	Next 70,000		\$0.34023
	Next 500,000		\$0.31965
	All Over 600,000		\$0.29879
160	Special Sales Rate		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		See Rate Schedule No. 160
165	Special Transportation Rate		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		See Rate Schedule No. 165

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED RATES AND CHARGES

Rate No.	Description	Facilities Charge	Billing Rate (a)
175	Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145		
	Facilities Charge - Per Month	\$300.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.19921
	Next 15,000		\$0.17739
	Next 15,000		\$0.15789
	Next 15,000		\$0.13243
	All Over 60,000		\$0.11124
180	Interruptible Transportation Service For Customers Qualifying For Service on Rate Schedule No. 150		
	Facilities Charge - Per Month	\$600.00	
	Energy Charge - Per Therm		
	First 15,000		\$0.13104
	Next 15,000		\$0.11014
	Next 70,000		\$0.08928
	Next 500,000		\$0.06870
	All Over 600,000		\$0.04784
	Rider A - Emergency Services		
	Energy Charge - Per Dekatherm		
	Emergency Service		\$20.00 plus cost of gas
	Unauthorized Gas		\$50.00 plus cost of gas
	Miscellaneous Fees		
	Late Payments		1% of balance in arrears per month
	Returned Checks and Bank Drafts	\$25.00	
	Reconnection (c)		
	Residential – Regular Hours	\$80.00	
	After 5 p.m., weekends, holidays	\$120.00	
	Non-Residential – Regular Hours	\$120.00	
	After 5 p.m., weekends, holidays	\$150.00	

- (a) Rates do not include applicable sales tax.
- (b) The rate converts 1.26 Therms to 1 Gasoline Gallon Equivalent (GGE).
- (c) All reconnections that exceed one hour shall be billed the indicated rates per hour.

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PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED RATE DESIGN

Paton Exhibit 3

Rate	Block	Bills	Therms	Proposed Facilities Charge	Proposed Energy Charge	Facilities Charge Revenue	Energy Charge Revenue	Total Revenue	Present Rates	Change	% Change
101 - Residential Service											
Summer Energy Charge - Per Therm	All	2,902,725	39,468,249	\$12 00	\$0 73662	\$34,832,700	\$29,073,102	\$63,905,802			
Winter Energy Charge - Per Therm	All	2,933,135	251,453,093	\$12 00	\$0 80425	\$35,197,620	\$202,231,150	\$237,428,770			
	Total		290,921,342					\$301,334,572	\$281,440,196	\$19,894,376	7 07%
102 - Residential Service											
Summer Energy Charge - Per Therm	All	49,613	680,425	\$12 00	\$0 68662	\$595,356	\$467,193	\$1,062,549			
Winter Energy Charge - Per Therm	All	48,872	3,740,335	\$12 00	\$0 75425	\$586,464	\$2,821,148	\$3,407,612			
	Total		4,420,760					\$4,470,161	\$4,275,313	\$194,848	4 56%
115 - Unmetered Lighting Service											
Summer Energy Charge - Per Therm	All	257	32,898	\$12 00	\$0 73662	\$3,084	\$24,233	\$27,317			
Winter Energy Charge - Per Therm	All	258	32,799	\$12 00	\$0 80425	\$3,096	\$26,379	\$29,475			
	Total		65,697					\$56,792	\$51,372	\$5,420	10 55%
125 - Small General Service											
Energy Charge - Per Therm	First 500	511,491	72,557,176	\$25 00	\$0 64869	\$12,787,275	\$47,067,114	\$59,854,389			
	Next 4,500		44,807,527		\$0 58833		\$26,361,612	\$26,361,612			
	All Over 5,000		1,229,200		\$0 54440		\$669,176	\$669,176			
	Total		118,593,903					\$86,885,178	\$80,701,177	\$6,184,002	7 66%
126 - Small General Service - Cooling											
Energy Charge - Per Therm	All	50	61,972	\$30 00	\$0 54440	\$1,500	\$33,738	\$35,238	\$34,072	\$1,166	3 42%
127 - Small General Service											
Energy Charge - Per Therm	First 500	1,104	349,731	\$25 00	\$0 59869	\$27,600	\$209,380	\$236,980			
	Next 4,500		601,690		\$0 53833		\$323,908	\$323,908			
	All Over 5,000		48,311		\$0 49440		\$23,885	\$23,885			
	Total		999,732					\$584,773	\$556,701	\$28,072	5 04%
135 - Natural Gas Vehicle Fuel											
Energy Charge - Per Therm			250,145		\$0 73068		\$182,776	\$182,776	\$175,427	\$7,349	4 19%
140 - Medium General Service											
Energy Charge - Per Therm	First 1,000	10,644	9,091,463	\$100 00	\$0 57869	\$1,064,400	\$5,261,139	\$6,325,539			
	All Over 1,000		21,745,693		\$0 51833		\$11,271,445	\$11,271,445			
	Total		30,837,156					\$17,596,984	\$17,853,879	(\$256,895)	-1 44%
145 - Large-Quantity General Service											
Energy Charge - Per Therm	First 15,000	2,488	19,565,494	\$300 00	\$0 47292	\$746,400	\$9,252,913	\$9,999,313			
	Next 15,000		4,140,335		\$0 45110		\$1,867,705	\$1,867,705			
	Next 15,000		1,739,802		\$0 43160		\$750,899	\$750,899			
	Next 15,000		883,094		\$0 40614		\$358,660	\$358,660			
	All Over 60,000		1,153,367		\$0 38495		\$443,989	\$443,989			
	Total		27,482,092					\$13,420,566	\$11,942,579	\$1,477,987	12 38%
150 - Large-Quantity Interruptible Commercial & Industrial Service											
Energy Charge - Per Therm	First 15,000	93	1,181,777	\$600 00	\$0 38199	\$55,800	\$451,427	\$507,227			
	Next 15,000		808,253		\$0 38109		\$291,852	\$291,852			
	Next 70,000		1,940,466		\$0 34023		\$660,205	\$660,205			
	Next 500,000		2,773,747		\$0 31965		\$886,628	\$886,628			
	All Over 800,000		0		\$0 29879		\$0	\$0			
	Total		6,704,243					\$2,345,912	\$2,148,942	\$196,970	9 17%
175 - Firm Transportation Service For Customers Qualifying For Service On Rate Schedule No. 145											
Energy Charge - Per Therm	First 15,000	3,764	44,858,552	\$300 00	\$0 19921	\$1,129,200	\$8,936,272	\$10,065,472			
	Next 15,000		23,405,021		\$0 17739		\$4,151,817	\$4,151,817			
	Next 15,000		15,198,266		\$0 15789		\$2,399,654	\$2,399,654			
	Next 15,000		11,009,530		\$0 13243		\$1,457,992	\$1,457,992			
	All Over 60,000		80,431,271		\$0 11124		\$8,947,175	\$8,947,175			
	Total		174,902,640					\$27,022,110	\$17,614,097	\$9,408,013	53 41%
180 - Interruptible Transportation Service For Customers Qualifying For Service on Rate Schedule No. 150											
Energy Charge - Per Therm	First 15,000	1,598	21,570,397	\$600 00	\$0 13104	\$958,800	\$2,826,585	\$3,785,385			
	Next 15,000		18,099,962		\$0 11014		\$1,993,530	\$1,993,530			
	Next 70,000		45,277,277		\$0 08928		\$4,042,355	\$4,042,355			
	Next 500,000		42,865,089		\$0 06870		\$2,946,206	\$2,946,206			
	All Over 800,000		13,929,615		\$0 04784		\$666,393	\$666,393			
	Total		141,762,340					\$13,433,866	\$9,268,892	\$4,164,976	44 93%
Total Rate Schedule Revenue								\$467,368,929	\$426,062,647	\$41,306,282	
Rounding								\$164	\$0	\$164	
Special Contract Revenue								\$792,254	\$792,254	\$0	
Total Revenues								\$468,161,347	\$426,854,901	\$41,306,446	9 68%

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TARIFF
OF
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
FILED WITH THE
NORTH CAROLINA UTILITIES COMMISSION

Summary of Rates and Charges			
<u>RATE SCHEDULE NO. AND DESCRIPTION</u>		<u>CHARGES (a)</u>	
101 -	RESIDENTIAL SERVICE		
	Facilities Charge	\$4012.00	per month
	Winter Energy Charge – November through April	\$0.743400	per tTherm
		.80425	
	Summer Energy Charge – May through October	\$0.675770	per tTherm
		.73662	
102 -	HIGH-EFFICIENCY RESIDENTIAL SERVICE		
	Facilities Charge	\$4012.00	per month
	Winter Energy Charge – November through April	\$0.693400	per tTherm
		.75425	
	Summer Energy Charge – May through October	\$0.625770	per tTherm
		.68662	
115 -	UNMETERED LIGHTING SERVICE		
	Facilities Charge	\$4012.00	per month
	Winter Energy Charge – November through April	\$0.737440	per tTherm
		.80425	
	Summer Energy Charge – May through October	\$0.669840	per tTherm
		.73662	
125 -	SMALL GENERAL SERVICE		
	Facilities Charge	\$17.5025.	per month
		00	
	Energy Charge First 500	\$0.641790	per tTherm
		.64869	
	Next 4,500	\$0.551430	per tTherm
		.58833	
	All Over 5,000	\$0.507500	per tTherm
		.54440	
126 -	SMALL GENERAL SERVICE - COOLING		
	Facilities Charge	\$30.00	per month
	Energy Charge	\$0.525590	per therm
		.54440	
127 -	HIGH-EFFICIENCY SMALL GENERAL SERVICE		
	Facilities Charge	\$17.5025.	per month
		00	
	Energy Charge First 500	\$0.561790	per tTherm
		.59869	
	Next 4,500	\$0.501430	per tTherm
		.53833	
	All Over 5,000	\$0.457500	per Therm
		.49440	
135 -	NATURAL GAS VEHICLE FUEL		
	Energy Charge	\$0.701300	per tTherm
		.73068	
	Energy Charge	\$0.8840.	per GGE (b)
		92066	
140 -	MEDIUM GENERAL SERVICE		
	Facilities Charge	\$100.00	per month
	Energy Charge First 1,000	\$0.57869	per Therm
	All Over 1,000	\$0.51833	per Therm
145 -	LARGE-QUANTITY GENERAL SERVICE		

PUBLIC SERVICE COMPANY OF N.C., INC.
N.C.U.C. TARIFF

	Facilities Charge	\$300.00	per month
	Energy Charge First 15,000	<u>\$0.419140</u>	per tTherm
		<u>.47292</u>	
	Next 15,000	<u>\$0.397320</u>	per tTherm
		<u>.45110</u>	
	Next 15,000	<u>\$0.377820</u>	per tTherm
		<u>.43160</u>	
	Next 15,000	<u>\$0.352360</u>	per tTherm
		<u>.40614</u>	
	All Over 60,000	<u>\$0.331170</u>	per tTherm
		<u>.38495</u>	
150 -	LARGE-QUANTITY INTERRUPTIBLE COMMERCIAL AND INDUSTRIAL SERVICE		
	Facilities Charge	\$600.00	per month
	Energy Charge First 15,000	<u>\$0.352640</u>	per tTherm
		<u>.38199</u>	
	Next 15,000	<u>\$0.331740</u>	per tTherm
		<u>.36109</u>	
	Next 70,000	<u>\$0.310860</u>	per tTherm
		<u>.34023</u>	
	Next 500,000	<u>\$0.290270</u>	per tTherm
		<u>.31965</u>	
	All Over 600,000	<u>\$0.269410</u>	per tTherm
		<u>.29879</u>	

Summary of Rates and Charges

<u>RATE SCHEDULE NO. AND DESCRIPTION</u>		<u>CHARGES (a)</u>	
160 -	SPECIAL SALES RATE Facilities Charge Energy Charge	\$600.00 See Rate Schedule No. 160	per month
165 -	SPECIAL TRANSPORTATION RATE Facilities Charge Energy Charge	\$600.00 See Rate Schedule No. 165	per month
175 -	FIRM TRANSPORTATION SERVICE CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 145 Facilities Charge Transportation Charge First 15,000 Next 15,000 Next 15,000 Next 15,000 All Over 60,000	\$300.00 \$0.145420 .19921 \$0.123600 .17739 \$0.104100 .15789 \$0.078640 .13243 \$0.057450 .11124	per month per tTherm per tTherm per tTherm per therm
180 -	INTERRUPTIBLE TRANSPORTATION SERVICE FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 150 Facilities Charge Energy Charge First 15,000 Next 15,000 Next 70,000 Next 500,000 All Over 600,000	\$600.00 \$0.101660 .13104 \$0.080760 .11014 \$0.050900 .08928 \$0.030320 .06870 \$0.018460 .04784	per month per tTherm per tTherm per tTherm per tTherm
Rider A -	EMERGENCY SERVICES Limited-Emergency Service On-Peak Emergency Service Unauthorized Gas	\$1.0020.00 plus cost of gas \$1.50 plus cost of gas \$2.5050.00 plus cost of gas	per Dekatherm per therm per Dekatherm
<u>MISCELLANEOUS FEE SCHEDULE</u>			
	LATE PAYMENTS	1% of balance in arrears per month	
	RETURNED CHECKS AND BANK DRAFTS	\$25.00	

PUBLIC SERVICE COMPANY OF N.C., INC.
N.C.U.C. TARIFF

RECONNECTION (c)

Residential – Regular Hours	\$6580.00
--After 5 p.m., weekends, holidays	\$95120.00
Non-Residential – Regular Hours	\$95120.00
--After 5 p.m., weekends, holidays	\$125150.00

- (a) Rates do not include applicable sales tax.
- (b) The rate converts 1.26 Therms to 1 Gasoline Gallon Equivalent (GGE).
- (c) All reconNECTIONs that exceed one hour shall be billed the indicated rates per hour.

RATE SCHEDULE NO. 101

RESIDENTIAL SERVICE

This Rate Schedule is available to residential Customers. Family care homes as defined in G.S. 168-21 may elect Service under this Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker ~~procedure~~ set forth under Rider C of this Tariff and the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 102

HIGH-EFFICIENCY RESIDENTIAL SERVICE

This Rate Schedule is available to a residential Customer who qualifies for Service on Rate Schedule No. 101 and whose ~~residence-Residence~~ is certified to meet the standards of the Energy Star program of the U.S. Department of Energy and U.S. Environmental Protection Agency. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule will begin after Customer has provided PSNC with certification that Customer's ~~residence-Residence~~ meets the Energy Star standards and will continue to be available at such ~~residence-Residence~~ provided the ~~residence-Residence~~ and any modifications thereto continue to meet the applicable standards. PSNC shall have the right to inspect Customer's Premises for compliance with these requirements.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker ~~procedure~~ set forth under Rider C of this Tariff and the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 115

UNMETERED LIGHTING SERVICE

This Rate Schedule is available for Customer owned unmetered gas lighting Service located wherever Gas is available within the certificated Service territory of PSNC. All Gas delivered is for use exclusively in permanently installed Gas lighting devices, including Gas lanterns, connected to PSNC's distribution system. Monthly consumption for billing under this Rate Schedule is determined based upon the manufacturer's BTU rating for each Gas lighting device according to the following formula:

$$\text{monthly consumption (Therms)} = \frac{\text{BTU rating (BTU/hour)} \times 24 \text{ hours/day} \times 365.25 \text{ days/year}}{12 \text{ months/year} \times 100,000 \text{ BTU/Therm}}$$

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

One Facilities Charge will be billed per Account. However, if an existing Customer adds a Gas lighting device at Premises currently receiving Service, no additional Facilities Charge will be billed beyond that currently billed to Customer.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 25 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 4% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of the Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 125

SMALL GENERAL SERVICE

This Rate Schedule is available to commercial and small industrial Customers that are primarily engaged in the sale of goods or services, manufacturing, schools, institutions, and governmental agencies, including single-metered health care facilities. This Rate Schedule is available to master metered apartment buildings, but is not available to any individual Customer who qualifies for Service under Rate Schedule No. 101. Family care homes as defined in G.S. 168-21 may elect Service under Rate Schedule No. 101. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker ~~procedure~~ set forth under Rider C of this Tariff and the Integrity Management Tracker set forth in Rider E of this Tariff.

The rates shown on the Summary of Rates and Charges for this Rate Schedule do not include applicable federal, state, or local highway motor fuel use taxes. Where applicable, bills rendered under this Rate Schedule will include such taxes.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 4% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 126

SMALL GENERAL SERVICE - COOLING

This Rate Schedule is available to commercial and small industrial Customers that are primarily engaged in the sale of goods or services, manufacturing, schools, institutions, and governmental agencies, including single-metered health care facilities. This Rate Schedule is available to master metered apartment buildings, but is not available to any individual Customer who qualifies for Service under Rate Schedule No. 101. Family care homes as defined in G.S. 168-21 may elect Service under Rate Schedule No. 101. This Rate Schedule is also available to Customers utilizing Gas-fired desiccant dehumidification systems or Gas-fired absorption or Gas engine-driven air conditioning units. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customers or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 127

HIGH-EFFICIENCY SMALL GENERAL SERVICE

This Rate Schedule is available to a commercial or small industrial Customer that qualifies for Service on Rate Schedule No. 125 and that occupies a building that is LEED-certified by the U.S. Green Building Council. Separate Meters, separate Accounts, and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule will begin after Customer has provided PSNC with the LEED certification for the building that Customer occupies and will continue to be available at such location provided the building and any modifications thereto continue to have LEED certification. PSNC shall have the right to inspect Customer's Premises for compliance with these requirements.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker procedure set forth under Rider C of this Tariff and the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year ~~12 months~~.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 135

NATURAL GAS VEHICLE FUEL

This Rate Schedule is available to Customers for the consumption of Gas as a motor fuel. Service under this Rate Schedule shall be metered by PSNC for purposes of providing public access to compressed natural gas fueling facilities. The nature of Service provided under this Rate Schedule is interruptible sales Service.

Rate

The applicable Energy Charge is set forth in the currently effective Summary of Rates and Charges of this Tariff and is incorporated herein by reference. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

The rates shown on the Summary of Rates and Charges for this Rate Schedule do not include applicable federal, state, or local highway motor fuel use taxes. Charges at the filling stations will include such taxes.

Payment of Charges

Charges shall be paid at the time of Service with a valid credit or debit card accepted by PSNC, except that Customers who have been issued an access key by PSNC will be billed on a monthly basis. Such bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for Customers whose Service was discontinued for nonpayment of bill.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 140

MEDIUM GENERAL SERVICE

This Rate Schedule is available to commercial and industrial Customers using in excess of 25,000 Therms per year. Separate Meters, separate Accounts and separate locations may not be combined for billing under this Rate Schedule.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Bills under this Rate Schedule are subject to the Customer Usage Tracker set forth under Rider C of this Tariff and the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balance in arrears on the next billing date. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 145

LARGE-QUANTITY GENERAL SERVICE

This Rate Schedule is available to any large commercial ~~and or~~ industrial Customer using in excess of 60,000 Therms ~~Dekatherms~~ per year, subject to an adequate supply of Gas and delivery capability at the location of the Customer's Premises.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following August 31; provided, however, that a new, qualifying Customer may change its election from this Rate Schedule to Rate Schedule No. 175 one time during the initial twelve-month period of Service. Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 175 by giving written notice to PSNC prior to June 1 of any year. Proper notice having been provided, Customer shall discontinue Service under this Rate Schedule effective the ~~first following~~ September 1 ~~following the notice~~.

Customer may switch between this Rate Schedule and Rate Schedule No. 150 one time during any twelve-month period, provided that Customer qualifies for Service under Rate Schedule No. 150 before switching to Service under that Rate Schedule.

All Gas purchased under this Rate Schedule shall be separately measured from any Gas purchased or transported under any other Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined in determining quantities for billing purposes.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Rates expressed in Therms in the Summary of Rates and Charges shall be converted to Dekatherms prior to billing. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year ~~12 months~~.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customers or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 150

LARGE-QUANTITY INTERRUPTIBLE COMMERCIAL AND INDUSTRIAL SERVICE

This Rate Schedule is available to any large commercial ~~and or~~ industrial Customer using in excess of 500 Therms ~~Dekatherms~~ per day on an annual basis, adjusted for curtailment, ~~subject to an adequate supply of Gas and delivery capability at the location of the Customer's Premises.~~

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following August 31; provided, however, that a new, qualifying Customer may change its election from this Rate Schedule to Rate Schedule No. 180 one time during the initial twelve-month period of Service. Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 180 by giving written notice to PSNC prior to June 1 of any year. Proper notice having been provided, Customer shall discontinue Service under this Rate Schedule effective the ~~first following~~ September 1 ~~following the notice.~~

Customer may switch between this Rate Schedule and Rate Schedule No. 145 one time during any twelve-month period, provided that PSNC's consent is obtained before Customer may switch to Service under Rate Schedule No. 145. PSNC will grant such consent if it has, or is able to acquire under commercially reasonable terms and conditions, the necessary Gas supplies and capacity to provide Service to Customer under Rate Schedule No. 145.

All Gas purchased under this Rate Schedule shall be separately measured from any Gas purchased or transported under any other Rate Schedule. Separate Meters, separate Accounts, and separate locations may not be combined in determining quantities for billing.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Energy Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Rates expressed in Therms in the Summary of Rates and Charges shall be converted to Dekatherms prior to billing. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

When Customer has the installed and operable capability to burn an alternate fuel and the equivalent alternate fuel cost is less than the Energy Charge under this Rate Schedule, Customer may be served under Rate Schedule No. 160. In order to receive Service under Rate Schedule No. 160, Customer must maintain separately metered Accounts for each type of alternate fuel.

The minimum monthly bill is the Facilities Charge. The Facilities Charge will be waived in any month when PSNC is unable to deliver any Gas during that billing month. Service under this Rate Schedule is subject to Rider A of this Tariff.

Curtailment

Although not required to maintain alternate fuel capability in order to receive Service under this Rate Schedule, Customer exclusively bears all business, operational, mechanical, or other risks associated with the interruption or curtailment of Service. PSNC may require curtailment of Service for any reason it deems necessary or appropriate. Customer must be capable of being 100% curtailed, other than an allowance of 10 Therms per day for pilot usage, on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when necessary, in PSNC's sole opinion, to protect Service to higher margin Customers.

Notice of a curtailment is effective when issued and posted on PSNC's electronic bulletin board. Customer shall provide PSNC with the names, titles, telephone numbers, and email addresses of at least two representatives authorized by Customer to receive curtailment notices and shall promptly notify PSNC of any changes to such information.

RATE SCHEDULE NO. 150 (Continued)

Unauthorized Gas

Emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any curtailment period, up to a maximum of 10 Dekatherms per day, at the rate for Emergency Service set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. Emergency Service above 10 Dekatherms per day may be available to Customers at PSNC's sole discretion, and upon prior written notification and approval. If PSNC does not authorize Emergency Service above 10 Dekatherms per day and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Gas under this Rate Schedule is not available, all Gas so used shall be paid for by Customer at the rate for Unauthorized Gas set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. In addition, Customer shall reimburse PSNC for any expenses caused by Customer's failure to discontinue use of Gas, including but not limited to any incremental charges, assessments, or penalties imposed by an upstream interstate pipeline and the cost of any Gas used or purchased by PSNC during the day of Customer's failure to the extent that the cost of such Gas per Dekatherm exceeds the cost of Gas calculated under Rider A.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month~~. A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customers or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 160

SPECIAL SALES RATE

This Rate Schedule is available to any Rate Schedule No. 150 Customer that has installed and operable alternate fuel capability on those occasions when PSNC has Gas available that is not needed to provide Service under its other Rate Schedules containing fixed rates. PSNC may require Customer to demonstrate that its alternate fuel capability is able to operate prior to providing Service under this Rate Schedule. ~~This Rate Schedule is designed to permit PSNC to sell such Gas.~~ All sales under this Rate Schedule are provided only in accordance with PSNC's guidelines as may be revised from time to time.

All Gas purchased under this Rate Schedule shall be measured separately from Gas purchased or transported under any other Rate Schedule. Service under this Rate Schedule is temporary and PSNC has the right to discontinue such Service on two hours' notice. Service under this Rate Schedule will be provided at PSNC's sole discretion.

In order to receive Service under this Rate Schedule, Customer must maintain separately metered Accounts for each type of alternate fuel. On any given Account, all equipment must be able to accept 100% curtailment on two hours' notice and be capable of burning the same type of alternate fuel. Customer must be capable of being 100% curtailed on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when it is necessary in PSNC's sole opinion to protect Service to higher margin Customers.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

Customer shall pay PSNC for all Service provided under this Rate Schedule at a rate determined prior to delivery, plus the Facilities Charge which is set forth on the currently effective Summary of Rates and Charges of this Tariff and incorporated herein by reference. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month.~~ A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year ~~12 months.~~

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Curtailment

Customer exclusively bears all business, operational, mechanical, or other risks associated with the interruption or curtailment of Service. PSNC may require curtailment of Service for any reason it deems necessary or appropriate.

Notice of a curtailment is effective when issued and posted on PSNC's electronic bulletin board. Customer shall provide PSNC with the names, titles, telephone numbers, and email addresses of at least two representatives authorized by Customer to receive curtailment notices and shall promptly notify PSNC of any changes to such information.

Unauthorized Gas

At PSNC's sole discretion, and upon prior written notification and approval, emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any billing period when Customer is served under this Rate Schedule. If PSNC does not authorize emergency Service, and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Service under this Rate Schedule is not available, all Gas so used shall be paid for by Customer at the rate for Unauthorized Gas set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. In addition, Customer shall reimburse PSNC for any expenses and liabilities imposed on PSNC caused by Customer's failure to discontinue use of Gas, including but not limited to any incremental charges, assessments, or penalties imposed by an upstream interstate pipeline and

the cost of any Gas used or purchased by PSNC during the day of Customer's failure to the extent that the cost of such Gas per Dekatherm exceeds the cost of Gas calculated under Rider A.

RATE SCHEDULE NO. 160 (Continued)

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO.165

SPECIAL TRANSPORTATION RATE

This Rate Schedule is available to any Rate Schedule No. 180 Customer that has installed and operable alternate fuel capability on those occasions when PSNC has transportation Service available that is not needed to provide Service under its other Rate Schedules containing fixed rates. PSNC may require Customer to demonstrate that its alternate fuel capability is able to operate prior to providing Service under this Rate Schedule. ~~This Rate Schedule is designed to permit PSNC to sell such transportation Service.~~ All sales under this Rate Schedule are provided only in accordance with PSNC's guidelines as may be revised from time to time.

All transportation Service purchased under this Rate Schedule shall be measured separately from Gas purchased or transported under any other Rate Schedule. Service under this Rate Schedule is temporary and PSNC has the right to discontinue such Service on two hours' notice. Service under this Rate Schedule will be provided at PSNC's sole discretion.

In order to receive Service under this Rate Schedule, Customer must maintain separately metered Accounts for each type of alternate fuel. On any given Account, all equipment must be able to accept 100% curtailment on two hours' notice and be capable of burning the same type of alternate fuel. Customer must be capable of being 100% curtailed on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when it is necessary in PSNC's sole opinion to protect Service to higher margin Customers.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

Customer shall pay PSNC for all Service provided under this Rate Schedule at a rate determined prior to delivery, plus the Facilities Charge which is set forth on the currently effective Summary of Rates and Charges of this Tariff and incorporated herein by reference. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month.~~ A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past year 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

Curtailment

Customer exclusively bears all business, operational, mechanical, or other risks associated with the interruption or curtailment of Service. PSNC may require curtailment of Service for any reason it deems necessary or appropriate.

Notice of a curtailment is effective when issued and posted on PSNC's electronic bulletin board. Customer shall provide PSNC with the names, titles, telephone numbers, and email addresses of at least two representatives authorized by Customer to receive curtailment notices and shall promptly notify PSNC of any changes to such information.

RATE SCHEDULE NO. 165 (Continued)

Unauthorized Gas

At PSNC's sole discretion, and upon prior written notification and approval, emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any billing period when Customer is served under this Rate Schedule. If PSNC does not authorize emergency Service, and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Service under this Rate Schedule is not available, all Gas so used shall be paid for by Customer at the rate for Unauthorized Gas set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. In addition, Customer shall reimburse PSNC for any expenses and liabilities imposed on PSNC caused by Customer's failure to discontinue use of Gas, including but not limited to any incremental charges, assessments, or penalties imposed by an upstream interstate pipeline and the cost of any Gas used or purchased by PSNC during the day of Customer's failure to the extent that the cost of such Gas per Dekatherm exceeds the cost of Gas calculated under Rider A.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 175

FIRM TRANSPORTATION SERVICE
FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 145

Firm transportation Service under this Rate Schedule may be offered to a large commercial or industrial Customer that is presently connected to PSNC's system, has qualified for Service on Rate Schedule No. 145, has obtained an independent supply of Gas, and has made arrangements to have Gas delivered to ~~one of PSNC's existing Receipt Points~~ the City Gate through an authorized pooler designated by Customer, and has made accommodation for the installation of telemetry for the purpose of daily measurement readings. All transportation under this Rate Schedule is provided in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following August 31. Subject to the consent of PSNC, Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 145 by giving written notice to PSNC prior to June 1 of any year. PSNC will grant such consent if it has, or is able to acquire under commercially reasonable terms and conditions, the necessary Gas supplies and capacity to provide Service to Customer under Rate Schedule No. 145. Proper notice having been provided and consent obtained, Customer shall discontinue Service under this Rate Schedule effective the ~~first following~~ September 1 following the notice.

Customer may switch between this Rate Schedule and Rate Schedule No. 180 one time during any twelve-month period, provided that Customer qualifies for Service under Rate Schedule No. 180 before switching to Service under that Rate Schedule.

Gas transported under this Rate Schedule shall be separately measured from Gas purchased or transported under any other Rate Schedule. Neither separate Accounts nor separate locations may be combined to qualify for the minimum quantity provision of this Rate Schedule.

PSNC may refuse Service under this Rate Schedule if PSNC determines that:

- 1) it does not have Gas delivery capacity in excess of the requirements of its other existing Customers; or
- 2) the requested Service would require an uneconomic enlargement or extension of PSNC's facilities.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff.

Rate

The applicable monthly Facilities Charge and the applicable Transportation Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Rates expressed in Therms in the Summary of Rates and Charges shall be converted to Dekatherms prior to billing. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

The minimum monthly bill is the Facilities Charge.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date ~~at the rate of 1% per month.~~ A charge will be imposed for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~ 12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

RATE SCHEDULE NO. 175 (Continued)

Balancing of Transportation Quantities

At any time when Customer is consistently using more or less Gas than is being delivered to PSNC for Customer's Account, it shall be Customer's or its agent's responsibility to bring its supply and requirements into balance in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time. Customer, Customer's agent, and PSNC shall strive to keep the transportation quantities within a reasonable operating balance at all times. Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported.

Inability to Obtain Independent Supply of Gas

In the event Customer is unable to obtain its independent supply of Gas, PSNC may, at its sole discretion, supply Gas to Customer. The Energy Charge for such Gas will be the Rate Schedule No. 145 Energy Charge set forth in the currently effective Summary of Rates and Charges of this Tariff; provided that, when PSNC is required to purchase incremental quantities of Gas to accommodate Customer's supply requirements, the Energy Charge shall be calculated on a daily basis as the higher of: (a) the Rate Schedule No. 145 Energy Charge or (b) the sum of the daily commodity cost of Gas supplied and the Rate Schedule No. 175 Transportation Charge. The daily commodity cost of Gas shall be the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

RATE SCHEDULE NO. 180

INTERRUPTIBLE TRANSPORTATION SERVICE
FOR CUSTOMERS QUALIFYING FOR SERVICE ON RATE SCHEDULE NO. 150

Interruptible transportation Service under this Rate Schedule may be offered to a large commercial or industrial Customer that is presently connected to PSNC's system, has qualified for Service on Rate Schedule No. 150, has obtained an independent supply of Gas, and has made arrangements to have Gas delivered to one of PSNC's existing Receipt Points the City Gate through an authorized pooler designated by Customer, and has made accommodation for the installation of telemetry for the purpose of daily measurement readings. All transportation under this Rate Schedule is provided in accordance with PSNC's Transportation Pooling Agreement, as may be revised from time to time.

Once a qualified Customer elects Service under this Rate Schedule, Service will be provided for a term extending through the following August 31. Subject to the consent of PSNC, Customer may elect to discontinue Service under this Rate Schedule and receive Service from Rate Schedule No. 150 by giving written notice to PSNC prior to June 1 of any year. PSNC will grant such consent if it has, or is able to acquire under commercially reasonable terms and conditions, the necessary Gas supplies and capacity to provide Service to Customer under Rate Schedule No. 150. Proper notice having been provided and consent obtained, Customer shall discontinue Service under this Rate Schedule effective the first following September 1 following the notice.

Customer may switch between this Rate Schedule and Rate Schedule No. 175 one time during any twelve-month period provided that PSNC's consent is obtained before Customer may switch to Service under Rate Schedule No. 175. PSNC will grant such consent if it has, or is able to acquire under commercially reasonable terms and conditions, the necessary Gas delivery capacity to provide Service to Customer under Rate Schedule No. 175.

Gas transported under this Rate Schedule shall be separately measured from Gas purchased or transported under any other Rate Schedule. Neither separate Accounts nor separate locations may be combined to qualify for the minimum quantity provision of this Rate Schedule.

Service under this Rate Schedule is subject to review and possible reclassification to a different Rate Schedule pursuant to Rider B of this Tariff. PSNC may refuse transportation Service if PSNC determines that:

- ~~1) it does not have Gas delivery capacity in excess of the requirements of its other existing Customers; or~~
- ~~2) the requested Service would require an uneconomic enlargement or extension of PSNC's facilities; or~~
- ~~3) the provision of the requested Service might unreasonably increase the average cost of Gas purchased by PSNC for sales to other Customers due to PSNC's demand charge obligations, minimum bill obligations, or the take or pay obligations of Transcontinental Pipe Line Corporation.~~

~~PSNC will attempt to deliver Gas transported for Customer's Account under this Rate Schedule on a day-to-day basis in accordance with Customer's requirements; however, PSNC reserves the right to suspend Service on any day when, in PSNC's sole opinion, its operating conditions are such that this is necessary.~~

Rate

The applicable monthly Facilities Charge and the applicable Transportation Charge are set forth in the currently effective Summary of Rates and Charges of this Tariff and are incorporated herein by reference. Rates expressed in Therms in the Summary of Rates and Charges shall be converted to Dekatherms prior to billing. Bills under this Rate Schedule are subject to the Integrity Management Tracker set forth in Rider E of this Tariff.

When Customer has the installed and operable capability to burn an alternate fuel and the equivalent alternate fuel cost is less than the combined cost of Gas received from Customer's independent supply and the Transportation Charge applicable under this Rate Schedule, Customer may be served under Rate Schedule No. 165. In order to receive Service under Rate Schedule No. 165, Customer must maintain separately metered Accounts for each type of alternate fuel.

The minimum monthly bill is the Facilities Charge. The Facilities Charge will be waived in any month when PSNC is unable to deliver any Gas during that billing month. Service under this Rate Schedule is subject to Rider A of this Tariff.

Payment of Bills

Bills are due and payable upon receipt and become past due 15 days after the billing date. Late payment charges will be added to the total balances in arrears on the next billing date at the rate of 1% per month. A charge will be imposed

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for checks and drafts returned to PSNC. Reconnection charges will be made to restore Service for: (a) Customers whose Service was discontinued for nonpayment of bill or (b) Customers whose Service was discontinued and reconnected at the request of Customer at the same Premises within the past ~~year~~12 months.

The charges above are set forth in the currently effective Summary of Rates and Charges of this Tariff under the heading of Miscellaneous Fee Schedule and are described in PSNC's approved Rules and Regulations.

RATE SCHEDULE NO. 180 (Continued)

Balancing of Transportation Quantities

At any time when Customer is consistently using more or less Gas than is being delivered to PSNC for Customer's Account, it shall be Customer's or its agent's responsibility to bring its supply and requirements into balance in accordance with PSNC's Transportation Pooling Agreement, as it may be revised from time to time. Customer, Customer's agent, and PSNC shall strive to keep the transportation quantities within a reasonable operating balance at all times. Customer or its agent shall notify PSNC immediately in the event of increases or reductions in the quantity of Gas being transported.

Inability to Obtain Independent Supply of Gas

In the event Customer is unable to obtain its independent supply of Gas, PSNC may, at its sole discretion, supply Gas to Customer. The Energy Charge for such Gas will be the Rate Schedule No. 150 Energy Charge set forth in the currently effective Summary of Rates and Charges of this Tariff; provided that, when PSNC is required to purchase incremental quantities of Gas to accommodate Customer's supply requirements, the Energy Charge shall be calculated on a daily basis as the higher of: (a) the Rate Schedule No. 150 Energy Charge or (b) the sum of the daily commodity cost of Gas supplied and the Rate Schedule No. 180 Transportation Charge. The daily commodity cost of Gas shall be the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.

Curtailment

Although not required to maintain alternate fuel capability in order to receive Service under this Rate Schedule, Customer exclusively bears all business, operational, mechanical, or other risks associated with the interruption or curtailment of Service. PSNC may require curtailment of Service for any reason it deems necessary or appropriate. Customer must be capable of being 100% curtailed on two hours' notice. In case of non-compliance with a curtailment order, PSNC shall have the right to valve off Service when necessary, in PSNC's sole opinion, to protect Service to higher margin Customers.

Notice of a curtailment is effective when issued and posted on PSNC's electronic bulletin board. Customer shall provide PSNC with the names, titles, telephone numbers, and email addresses of at least two representatives authorized by Customer to receive curtailment notices and shall promptly notify PSNC of any changes to such information.

Unauthorized Gas

Emergency Service as defined in Rider A of this Tariff shall be available to Customers served during any curtailment period, up to a maximum of 10 Dekatherms per day, at the rate for Emergency Service set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. Emergency Service above 10 Dekatherms per day may be available to Customers at PSNC's sole discretion, and upon prior written notification and approval. If PSNC does not authorize Emergency Service above 10 Dekatherms per day, and in the event a Customer fails to discontinue the use of Gas after two hours' notice that Gas under this Rate Schedule is not available, all Gas so used, other than an allowance of 40 Therms per day for pilot usage, shall be paid for by Customer at the rate for Unauthorized Gas set forth in the currently effective Summary of Rates and Charges of this Tariff plus the cost of Gas used, as calculated under Rider A of this Tariff. In addition, Customer shall reimburse PSNC for any expenses or liabilities imposed on PSNC that are caused by Customer's failure to discontinue use of Gas, including but not limited to any incremental charges, assessments, or penalties imposed by an upstream interstate pipeline and the cost of any Gas used or purchased by PSNC during the day of Customer's failure to the extent that the cost of such Gas per Dekatherm exceeds the cost of Gas calculated under Rider A.

Rules and Regulations

Service under this Rate Schedule is subject to all lawful orders, rules, and regulations of duly constituted governmental authorities having jurisdiction over either PSNC or Customer, or both, including any orders of the Commission requiring PSNC to curtail or discontinue Service hereunder or setting priorities for such curtailment or discontinuance of Service. PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation by reason of PSNC's curtailing Service in accordance with any order by a duly constituted governmental authority or in accordance with any order of priorities which may be deemed practicable under existing conditions by PSNC. Service under this Rate Schedule is subject to PSNC's Rules and Regulations as approved by the Commission, which are incorporated herein by reference.

CURTAILMENT OF SERVICE UNDER NCUC RULE R6-19 2
AND EMERGENCY SERVICES - RIDER A

- 1 PSNC shall curtail service to its Customers in accordance with Rule R6-19 2, as promulgated, and amended from time to time, by the Commission
- 2 PSNC does not maintain metering by priority but shall do so if required by Rule R6-19 2
- 3 Nothing shall be construed to require PSNC to curtail any Customer if such curtailment will not make additional Gas available for Service to higher margin Customers
- 4 The definition of alternate fuel in Rule R6-19 2 applies only to the priority system For purposes of PSNC's Rate Schedules, alternate fuel capability is defined as the actual installed capability to burn any fuel other than Gas An alternate fuel is that fuel which is predominately burned when Service is curtailed and includes the type, grade, and sulfur content of the fuel
- 5 The cost of Gas for Emergency Service under this Rider A and for Unauthorized Gas under PSNC's Rate Schedules is calculated by using the higher of (a) the monthly contract index price for the applicable month as published in Inside F E R C 's Gas Market Report, "Prices of Spot Gas Delivered to Pipelines," "Transcontinental Gas Pipe Line Corp - Zone 3 (pooling points)," "Index," plus the one hundred percent (100%) load factor rate under Transcontinental Gas Pipe Line Corporation's Company LLC's currently effective Rate Schedule FT for deliveries from Zone 3 to Zone 5, including applicable fuel retention and surcharges, or (b) the absolute high price for the day of consumption as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used
- 6 Emergency Service shall be made available to any Customer during a curtailment under this Rider A up to a maximum of 10 Dekatherms per day at the rate for Emergency Service set forth in the currently effective Summary of Rates and Charges of PSNC's Tariff, plus the cost of the Gas supplied as calculated under paragraph 5 of this Rider A
- 7 Limited-Additional Emergency Service may be made available to any Customer that would otherwise be curtailed under this Rider A if such Customer is unable to continue operations on its standby or alternate energy source because of some bona fide existing or threatened emergency when and if PSNC has Gas available from its regular allocated storage volumes or some outside source other than its regular services PSNC, in its sole discretion, may furnish such Limited-additional Emergency Service for such specific times and for such specific controlled quantities at the rate for this Emergency Service set forth in the currently effective Summary of Rates and Charges of PSNC's Tariff, plus the cost of the Gas supplied as calculated under paragraph 5 of this Rider A
- ~~7 On-Peak Emergency Service may be made available to any Customer, that would otherwise be curtailed, while PSNC is utilizing a peak shaving capability (e.g., liquefied natural Gas) PSNC shall determine the extent and timing of such Service, and Service may be discontinued at the sole discretion of PSNC If, at any time or during any twenty four (24) hour period commencing at 8:00 a.m., PSNC, in its sole opinion, determines to operate a peak shaving facility to inject liquefied natural Gas into the system, then all Emergency Service Gas purchased by the Customer during such day or days shall be considered to be On-Peak Emergency Service for billing and operating purposes and shall be provided at the rate for this Service set forth in the currently effective Summary of Rates and Charges, plus the cost of the Gas supplied as calculated under paragraph 5 of this Rider A~~
- ~~8 AllSuch Emergency Service is of a discretionary nature and implies no present or future obligation of PSNC to any Customer to provide any such Service on either a temporary or continuing basis Deliveries of Gas hereunder shall be made pursuant only to advance operating arrangements agreed to in writing by PSNC's Gas Dispatching DepartmentControl and the Customer and shall be subject to curtailment and interruption at any time that PSNC in its sole discretion deems such curtailment or interruption necessary~~
- 98 PSNC shall not be liable for any damages that may result to Customer or any other person, firm, or corporation, by reason of PSNC's curtailing regular or emergency Service in accordance with any order of priorities which may be necessary under existing conditions

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409. All programs, agreements, contracts, Rate Schedules, and rules and regulations for Service by PSNC are subject to change and modification from time to time by PSNC, as such are approved by the Commission or otherwise imposed by lawful authority.

Issued by D. Russell Harris, President and Chief Operating Officer

Issued on ~~November 1, 2008~~, 2016

Issued under North Carolina Utilities Commission Docket No. G-5, Sub 495565

Effective November 1, 2008 2016

METHODOLOGY FOR DETERMINING PROPER RATE SERVICE PRIORITY CLASSIFICATION
PURSUANT TO COMMISSION RULES R6-12 & R6-19.2 – RIDER B

I. Definitions

- (a) "Actual Annual Usage" means the actual quantities of Gas sold to or transported for Customer by PSNC for a given Review Period as reflected on PSNC's invoices for that Customer.
- (b) "Classification Usage" means Gas quantities in an amount equal to Actual Annual Usage for a Customer for a Review Period divided by the Service Days for that same period.
- (c) "Involuntary Curtailment Days" means those days or portions of days in a given Review Period when curtailment of Customer's Service was imposed by PSNC's decision to curtail.
- (d) "Prospective Priority Classification" means the then current priority curtailment classification a Customer would otherwise qualify for based solely on the Classification Usage for a given Review Period.
- (e) "Prospective Rate Schedule" means PSNC's then current Rate Schedule that a Customer would otherwise qualify for based solely on the Classification Usage for a given Review Period.
- (f) "Review Period" means the twelve (12) months ended June 30.
- (g) "Service Days" means 365 less the number of Involuntary Curtailment Days.

II. Procedure

- (a) During July and August of each year, the Prospective Rate Schedule for each Customer for the Review Period just ended shall be determined.
- (b) If the Prospective Rate Schedule is the same rate schedule on which Customer is currently billed, no further Rate Schedule review is necessary. Customer shall remain on that Rate Schedule.
- (c) If the Prospective Rate Schedule is different from the Rate Schedule on which Customer is currently billed, the Prospective Rate Schedule for Customer for the Review Period immediately preceding the one used in Section (b)(1) shall also be determined.
- (d) If the Prospective Rate Schedule determined in (a) is the same as that determined in (c), Customer shall be reclassified to that Prospective Rate Schedule effective the following September 1.
- (e) The reclassified Customer will be given notice of such reclassification as required by Commission Rule R6 12(7).
- (f) A similar procedure will be followed for determining the proper curtailment priority for each Customer by using Prospective Priority Classification.

III. Exceptions

If a Customer adds or retires a major piece of gas-burning equipment, changes the hours of operations, or otherwise materially alters the Customer's business that will clearly increase or decrease the Customer's consumption on an ongoing basis to a level that will change the Customer's ability to qualify for a particular Rate Schedule, the Customer shall report such changes to PSNC and afford PSNC an opportunity to inspect any change in equipment and to meet with the Customer to review and discuss the anticipated future level of consumption. If PSNC is satisfied that reclassification is appropriate, the reclassification will occur within two months after the new equipment is in place and operational, or the retirement is completed, and the first Meter reading reflects the higher anticipated usage resulting from the new equipment or the lower anticipated usage resulting from the retirement. Any reclassification pursuant to this exception is subject to correction if actual experience so warrants.

CUSTOMER USAGE TRACKER - RIDER C

I. Definitions

- (a) "Customer Usage Deferred Account" shall mean a deferred account established under this Rider C subject to the Customer Usage Deferred Account Adjustment for such account.
- (b) "Customer Usage Deferred Account Adjustment" shall mean a monthly adjustment to the applicable Customer Usage Deferred Account as calculated under this Rider C.
- (c) "Customer Usage Adjustment" shall mean a per-Therm amount calculated under this Rider C, as a decrement or increment, to refund or recover the balance in the applicable Customer Usage Deferred Account.
- (d) "Relevant Rate Order" shall mean the final Order of the Commission in PSNC's most recent rate case fixing PSNC's rates or the most recent final order of the Commission specifically prescribing the factors and procedures to be used in the application of this Rider C.

II. Applicable Rate Schedules

The base rates for Service under PSNC's Rate Schedule Nos. 101, 102, 125, ~~and 127~~, and 140 shall be subject to a Customer Usage Adjustment in accordance with this Rider C.

III. Computation of Customer Usage Deferred Account Adjustment

The Customer Usage Deferred Account Adjustment for each of the applicable rate classes shall be computed monthly to the nearest dollar using the following formulas:

Base Load Therms_i = Actual Customers_i x Base Load_i

Heat Sensitive Therms_i = Actual Customers_i x Heat Sensitivity Factor_i x Normal Degree Days

Normalized Therms_i = Base Load Therms_i + Heat Sensitive Therms_i

Normalized Margin_i = Normalized Therms_i x R Factor_i

Actual Margin_i = Actual Therms_i x R Factor_i

Customer Usage Deferred Account Adjustment_i = Normalized Margin_i - Actual Margin_i

Where:

i = any particular rate class

Actual Customers_i = actual customers billed for the billing cycle month for the ith rate class

Actual Therms_i = actual Therms used for the billing cycle month for the ith rate class

R Factor = base rate (approved rate less fixed and commodity cost of Gas) for the ith rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Heat Sensitivity Factor_i = heat sensitivity factor for the ith rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Normal Degree Days = average normal heating degree days used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

Base Load_i = base load sales for the ith rate class used by the Commission in the Relevant Rate Order for the purpose of determining normalized test year revenues

IV. Monthly Reports

PSNC will file with the Commission monthly reports that include: (a) computation of each Customer Usage Deferred Account Adjustment; (b) a schedule showing the effective date of each Customer Usage Deferred Account Adjustment; and (c) a schedule showing the factors of values derived from the Relevant Rate Order used in calculating each Customer Usage Deferred Account Adjustment. Such reports will be filed within 45 ~~dates~~ days after the end of the applicable month.

V. Computation of Customer Usage Adjustment

Effective for the first day of the April billing cycle month and the first day of the October billing cycle month, the Customer Usage Adjustment for each of the applicable Rate Schedules shall be calculated to the nearest one-thousandth of a cent per Therm using the following formula:

$$\text{Customer Usage Adjustment}_i = \text{Customer Usage Deferred Account Balance}_i / \text{Annual Therms}_i$$

Where:

$i =$ any particular rate class

Customer Usage Deferred Account Balance_i = balance of Customer Usage Deferred Account as of the end of January or July, as applicable

Annual Therms_i = normalized volumes assigned by the Commission in the Relevant Order

VI. Interest

Interest will be applied to the Customer Usage Deferred Account at PSNC's overall rate of return authorized by the Commission in the Relevant Rate Order.

VII. Filing with Commission

PSNC will file a revision to its Tariff for Commission approval upon 14 days' notice to implement a decrement or increment each April and October. The filing will include the computation of each Customer Usage Adjustment.

PURCHASED GAS ADJUSTMENT PROCEDURES - RIDER D

I. Definitions

- (a) "Gas Costs" shall mean the total delivered cost of gas paid or to be paid to Suppliers, including but not limited to all commodity/gas charges, all direct transaction-related costs arising from PSNC's prudent efforts to stabilize or hedge commodity gas costs, demand charges, peaking charges, surcharges, emergency gas purchases, over-run charges, capacity charges, standby charges, reservation fees, gas inventory charges, minimum bill charges, minimum take charges, take-or-pay charges, take-and-pay charges, storage charges, service fees and transportation charges, and any other similar charges associated with the purchase, storage, or transportation of gas for PSNC's system supply.
- (b) "Suppliers" shall mean any person or entity, including an affiliate of PSNC, who locates, produces, purchases, sells, stores and/or transports gas or its equivalent for or on behalf of PSNC, or who provides hedging tools, including, but not limited to financial tools, designed to stabilize PSNC's commodity prices. Suppliers may include, but are not limited to, interstate pipeline transmission companies, producers, brokers, marketers, associations, intrastate pipeline transmission companies, joint ventures, providers of Liquefied Natural Gas, Liquefied Petroleum Gas, Synthetic Natural Gas and other hydrocarbons used as feed stock, other Local Distribution Companies, and end-users.
- (c) "Benchmark Commodity Gas Costs" shall mean PSNC's estimate of the City Gate Delivered Gas Costs for long-term gas supplies, excluding Demand Charges and Storage Charges as approved in PSNC's last general rate case or gas cost adjustment proceeding.
- (d) "City Gate Delivered Gas Costs" shall mean the total delivered Gas Costs to PSNC at its city gate.
- (e) "Commodity and Other Charges" shall mean all Gas Costs other than Demand Charges and Storage Charges and any other Gas Costs determined by the Commission to be properly recoverable from sales customers.
- (f) "Demand Charges and Storage Charges" shall mean all Gas Costs which are not based on the quantity of gas actually purchased or transported by PSNC and any other Gas Costs determined by the Commission to be properly recoverable from customers.
- (g) "Other Gas Supply Charges" shall mean the per therm supply reservation fees. These charges shall be determined on an annual basis by dividing the total estimated reservation fees to be paid under the firm supply contracts by the total estimated quantities to be purchased under these contracts.

II. Rate Adjustments Under These Procedures

(a) If PSNC anticipates a change in its City Gate Delivered Gas Costs, it may apply and file revised tariffs effective on 14 days' notice in order to increase or decrease its rates to its customers as hereinafter provided. The Commission may issue an order allowing the rate change to become effective simultaneously with the effective date of the change or at any time ordered by the Commission. If the Commission has not issued an order within 120 days after the application, PSNC may place the requested rate adjustment into effect.

4.(i) Demand Charges and Storage Charges. Whenever PSNC anticipates a change in the Demand Charges and Storage Charges, it may (as hereinabove provided) change its rates to customers under each applicable Rate Schedule by an amount computed as follows:

$$\frac{\text{(Total Anticipated Demand Charges and Storage Charges - Prior Demand Charges and Storage Charges) x Rate Schedule Percentage}^*}{\text{Sales \& Transportation Quantities}^* \text{ (by Rate Schedule)}} = \text{Increase (Decrease) Per Unit}$$

* Established by the Commission in the last general rate case.

2-(ii) Commodity and Other Charges Whenever PSNC's estimate of its Benchmark Commodity Gas Costs changes, it may (as hereinabove provided) change the rates to its customers purchasing gas under sales rate schedules, incorporating the Benchmark Commodity Gas Costs, by an amount computed as follows

$$\frac{\text{Quantities of gas purchased* (excluding Company Use and Unaccounted For) x (New Benchmark Commodity Gas Costs - Old Benchmark Commodity Gas Costs)}}{\text{Quantities of gas purchased for System Supply* (excluding Company Use and Unaccounted For)}} = \text{Increase (Decrease) Per Unit}$$

* Established by the Commission in the last general rate case

3-(iii) Company Use and Unaccounted For Whenever PSNC's estimate of its Benchmark Commodity Gas Costs changes, it may (as hereinabove provided) change the rates to its customers, by an amount computed as follows

$$\frac{\text{Quantities of Company Use and Unaccounted For Gas* x (New Benchmark Commodity Gas Costs - Old Benchmark Commodity Gas Costs)}}{\text{Sales \& Transportation Quantities*}} = \text{Increase (Decrease) Per Unit}$$

* Established by the Commission in the last general rate case

4-(b) Other Changes in Purchased Gas Costs The intent of these procedures is to permit PSNC to recover its actual prudently incurred Gas Costs. If any other Gas Costs are incurred, they will be handled as in Section 1 if they are similar to Demand Charges and Storage Charges, or as in Section 2 if they are similar to Commodity and Other Charges

III. True-up of Gas Costs

(a) Demand Charges and Storage Charges On a monthly basis, PSNC shall determine the difference between (a) Demand Charges and Storage Charges billed to its customers in accordance with the Commission-approved allocation of such costs to PSNC's various Rate Schedules and (b) PSNC's actual Demand Charges and Storage Charges. This difference shall be recorded in PSNC's deferred account for demand and storage charges. Increments and decrements for this deferred account, including the portion of the Commodity and Other Charges true-up calculated under Section 4-(b) and apportioned to this deferred account, flow to applicable sales and transportation rate schedules

(b) Commodity and Other Charges On a monthly basis, PSNC shall determine with respect to gas sold (including company use and unaccounted for) during the month, the difference between (a) the actual Commodity and Other Charges incurred and (b) the actual Commodity and Other Charges billed to customers. This difference shall be apportioned each month to PSNC's deferred account for commodity and other charges based on the ratio of volumes sold to the volumes purchased for that month. The residual portion of the difference not apportioned to PSNC's deferred account for commodity and other charges shall be apportioned each month to PSNC's deferred account for Demand Charges and Storage Charges. On a monthly basis, PSNC shall determine with respect to gas sold in previous months under its residential and commercial rate schedules, the difference between amounts billed for Gas Costs and the amounts actually recovered from customers for such Gas Costs. Such uncollectible Gas Costs shall be recorded in PSNC's deferred account for commodity and other charges. Any such deferred amounts that are subsequently paid by customers shall be credited to PSNC's deferred account for commodity and other charges. Increments and decrements for Commodity and Other Charges shall flow to all sales rate schedules incorporating the Benchmark Commodity Gas Costs

(c) Supplier Refunds and Direct Bills If PSNC receives supplier refunds or direct bills with respect to gas previously purchased, the amount of such supplier refunds or direct bills will be recorded in the appropriate deferred Account unless directed otherwise by the Commission

IV. Other

- (a) Gas Costs changes not tracked concurrently shall be recorded in the appropriate deferred account.
- (b) The Commodity and Other Charges portion of gas inventories shall be recorded at actual cost and the difference in that cost and the Benchmark Commodity Gas Costs most recently approved shall be recorded in the deferred account when the gas is withdrawn from inventory.
- (c) PSNC shall file with the Commission (with a copy to the Public Staff) a complete monthly accounting of the computations under these procedures, including all supporting workpapers, journal entries, etc., within 45 days after the end of each monthly reporting period. All such computations shall be deemed to be in compliance with these procedures unless within 60 days of such filing the Commission or the Public Staff notifies PSNC that the computations may not be in compliance; provided, however, that if the Commission or the Public Staff requests *additional information reasonably required to evaluate such filing*, the running of the 60 day period will be suspended for the number of days taken by PSNC to provide the additional information.
- (d) Periodically, PSNC may file to adjust its rates to refund or collect balances in these deferred accounts through decrements or increments to current rates. In filing for an increment or decrement, PSNC shall state the amount in the deferred account, the time period during which the increment or decrement is expected to be in effect, the rate classes to which the increment or decrement is to apply, and the level of quantities estimated to be delivered to those classes. Any such increments or decrements shall be made on a percentage basis for all affected rate classes as determined in PSNC's most recent general rate case, unless otherwise ordered by the Commission.
- (e) PSNC may negotiate with commercial and industrial customers on its sales and transportation rates to avoid the loss of deliveries to these customers. All margin loss from those customers served under Rate Schedule No. 160 which would otherwise have purchased or transported gas under Rate Schedule Nos. 150 and 180 shall be recorded in the deferred account for Demand Charges and Storage Charges. Such margin loss shall be based on the currently effective rates. PSNC may offset negotiated losses in any manner authorized by the Commission.

INTEGRITY MANAGEMENT TRACKER - RIDER E

I. Definitions

- (a) "Integrity Management Adjustment" means a per-Therm amount calculated under this Rider E as an increment and applied to the applicable rate schedules to recover the IMRR biannually for the six-month periods ending June 30th and December 31st.
- (b) "Integrity Management Deferred Account" means a deferred account established under this Rider E subject to the Integrity Management Deferred Account Adjustment for such account.
- (c) "Integrity Management Deferred Account Adjustment" means a monthly adjustment to the Integrity Management Deferred Account as calculated under this Rider E.
- (d) "Integrity Management Deferred Account True-Up Adjustment" means an annual adjustment to recover the balance in the Integrity Management Deferred Account as of January 31st as calculated under this Rider E.
- (e) "Integrity Management Month Factor" means the percentage of annualized and normalized Therms as set forth in the Relevant Rate Order by month for the applicable rate schedules.
- (f) "Integrity Management Plant Investment" means the gross plant and associated costs incurred by PSNC resulting from prevailing federal standards for pipeline integrity and safety and not otherwise included in current base rates. At the time of PSNC's next general rate case proceeding, all prudently incurred Integrity Management Plant Investment associated with this Rider E shall be included in base rates.
- (g) "Integrity Management Revenue Requirement" or "IMRR" means the total annual revenue requirement for the Integrity Management Plant Investment as calculated under this Rider E.
- (h) "Relevant Rate Order" means the final order of the Commission in PSNC's most recent rate case fixing PSNC's rates or the most recent final order of the Commission specifically prescribing the factors and procedures to be used in the application of this Rider E.
- (i) "Vintage year" means the fiscal year during which the Integrity Management Plant Investment is made.

II. Applicable Rate Schedules

The base rates for Service under PSNC's Rate Schedule Nos. 101, 102, 115, 125, 126, 127, 135, 140, 145, 150, 160, 165, 175, and 180 shall be subject to an Integrity Management Adjustment in accordance with this Rider E.

III. Computation of Integrity Management Revenue Requirement

- (a) PSNC shall file by January 31st and July 31st of each year information showing the computation of the IMRR that forms the basis of the biannual Integrity Management Adjustment for the six-month period ending the prior December 31st and June 30th, respectively.
- (b) The total revenue requirement will be calculated for each Vintage Year of Integrity Management Plant Investment, as follows:

	<u>\$X,XXX,XXX</u>
<u>Integrity Management Plant Investment</u>	
<u>Less: Accumulated Depreciation</u>	<u>XXX,XXX</u>
<u>Less: Accumulated Deferred Income Taxes</u>	<u>XXX,XXX</u>
<u>Net Plant Investment</u>	<u>\$X,XXX,XXX</u>
<u>Pre-Tax ROR set forth in the Relevant Rate Order</u>	<u>X.XX%</u>
<u>Allowed Pre-Tax Return</u>	<u>\$X,XXX,XXX</u>
<u>Plus: Depreciation Expense</u>	<u>XXX,XXX</u>
<u>Total</u>	<u>\$X,XXX,XXX</u>

- (c) The total of the annual revenue requirements for each Vintage Year of Integrity Management Plant Investment is the annual IMRR.
- (d) Each month PSNC will charge its Integrity Management Deferred Account for the portion of the IMRR that corresponds to that month. The monthly IMRR is the product of the annual IMRR and the Integrity Management Month Factor.

IV. Computation of Integrity Management Adjustment

- (a) PSNC will file for Commission approval by February 15th and August 15th of each year a revision to its Tariff and information showing the computation of the Integrity Management Adjustment for each rate schedule that it proposes to charge during the six-month period beginning the following March 1st and September 1st, respectively. To compute the Integrity Management Adjustment, the IMRR shall first be apportioned to each customer class based on margin apportionment percentages established in the Relevant Rate Order. The amount of the IMRR apportioned to each rate schedule will then be divided by the annual Therms as set forth in the Relevant Rate Order for each rate schedule to determine the Integrity Management Adjustment to the nearest one-thousandth cent per Therm.
- (b) Each month PSNC will credit the Integrity Management Deferred Account for the amount of the Integrity Management Adjustment collected from customers. The amount of the Integrity Management Adjustment collected from Customers will be computed by multiplying the Integrity Management Adjustment for each rate schedule by the corresponding actual Therms of usage billed Customers for the month.

V. Computation of Integrity Management Deferred Account True-Up Adjustment

- (a) PSNC will file with the Commission by February 15th to recover through an Integrity Management Deferred Account True-Up Adjustment the balance in the Integrity Management Deferred Account as of the prior January 31st.
- (b) The Integrity Management Deferred Account True-Up Adjustment will be computed by multiplying the balance of the Integrity Management Deferred Account as of January 31st by the customer class apportionment percentages determined in Section IV above. The Integrity Management Deferred Account balance apportioned to each customer class shall then be divided by the annual Therms of throughput for each of the applicable rate schedules to determine the Integrity Management Deferred Account True-Up Adjustment applicable to each rate schedule for the following twelve-month period beginning March 1st. The Integrity Management Deferred Account True-Up Adjustment will be computed to the nearest one-thousandth cent per Therm.
- (c) PSNC may, at its discretion, file for further Integrity Management Deferred Account True-Up Adjustments throughout the year, upon 14 days' notice to the Commission

VI. Interest

Interest will be applied to the Integrity Management Deferred Account at PSNC's overall rate of return authorized by the Commission in the Relevant Rate Order.

VII. Integrity Management Deferred Account

PSNC shall maintain an Integrity Management Deferred Account for the purpose of recording the monthly (a) IMRR, (b) Integrity Management Adjustment, (c) Integrity Management Deferred Account True-Up Adjustment, and (d) interest on the Integrity Management Deferred Account.

VIII. Filings with Commission

- (a) PSNC shall file monthly (a) detail of the current month's Integrity Management Plant Investment, including supporting documentation for the amount incurred, (b) the cumulative Integrity Management Plant Investment subject to this Rider E, and (c) a report of the activity recorded for the month in the Integrity Management Deferred Account. Such reports will be filed within 45 days after the end of the month for which the report is being filed.
- (b) PSNC shall file by January 31st its projected three-year plan of Integrity Management Plant Investment, which will encompass Integrity Management Plant Investment planned for its next three fiscal years.
- (c) PSNC shall file an annual report summarizing the Integrity Management Plant Investment for the prior 12-month period ending December 31st and the data substantiating and supporting its IMRR calculation for the next biannual Integrity Management Adjustment by January 31st.

1. APPLICABILITY

- (a) These Rules and Regulations apply to all services provided by Public Service Company of North Carolina, Incorporated ("PSNC") under its rate schedules on file with, and subject to the jurisdiction of, the North Carolina Utilities Commission ("Commission") and are adopted for the mutual protection of both the Customer and PSNC. They provide standards for PSNC's practices, promote safe and adequate service to the public, and establish a reasonable basis for meeting the public's demands for natural gas service.
- (b) The rates, terms and other conditions, and rules and regulations stated in this tariff are subject to change upon PSNC's application to the Commission and approval of such application by the Commission, or upon order of the Commission, in the manner prescribed by law at any time. In the event of such change, the new rates, terms and conditions, and rules and regulations prescribed by the Commission will apply to Service received hereunder from the date such change is made effective. Customer agrees to accept and be bound by all such rates, terms and conditions, and rules and regulations in connection with such Service, which are now or may hereafter be filed with, or issued or promulgated by, the Commission or other governmental bodies having jurisdiction thereof.
- (c) If a conflict exists between these Rules and Regulations and the provisions of the applicable currently effective Rate Schedule, the provisions of the Rate Schedule shall govern. The Rules and Regulations of the Commission shall govern in the event of a conflict with these Rules and Regulations.

2. DEFINITIONS

For the purposes of PSNC's Tariff, Rate Schedules, and these Rules and Regulations, the following capitalized terms shall be defined as follows:

- (a) "Account" means ~~service~~ Service provided to any Person at a single location on a single Rate Schedule.
- (b) "Applicant" means any Person applying for Service.
- (c) "British Thermal Unit" or "BTU" means the amount of heat required to raise the temperature of one pound of water from 58.5° to 59.5° Fahrenheit at a pressure of 14.73 pounds per square inch absolute.
- (~~e~~) "BTU Factor" means the factor used to convert a volume of Gas measured in Cubic Feet (e.g. 100 cubic feet ("CCF")) into Therms or Dekatherms, as applicable.
- (~~e~~) "CIAC" means a non-refundable cash contribution in aid of construction made by a Customer to PSNC to defray the cost of construction of Excess Facilities installed by PSNC to provide Service to that Customer.
- (~~e~~) "City Gate" means point(s) where Gas is delivered to PSNC's system.
- (~~f~~) "Commission" means the North Carolina Utilities Commission, which regulates gas utilities operating within the State of North Carolina, including PSNC.
- (h) "Cubic Foot" or "Cubic Feet" is the volume of Gas that occupies one cubic foot at a temperature of 60° Fahrenheit at a pressure of 14.73 pounds per square inch absolute.
- (~~g~~) "Customer" means any Account being supplied Service by PSNC.
- (~~h~~) "Customer Facilities" means any piping, appliances, gas burning devices, regulating, or other gas delivery Facilities located downstream of the Delivery Point.
- (~~k~~) "Customer Usage Tracker" is the mechanism ~~approved by the Commission in Rider C~~ that tracks and trues up variations in average per customer usage from levels approved in PSNC's last general rate case for residential and commercial customers Customers receiving service on Rate Schedule Nos. 101, 102 and 125, 127, and 140. See ~~Rider C~~.
- (~~j~~) "Dekatherm" or "Dt" means the unit of energy equivalent to 10 Therms, or 1,000,000 British Thermal Units ("BTU"). ~~PSNC's purchases of Gas are measured in Dts.~~
- (~~k~~) "Delivery Point" means the physical point in the Gas delivery system where Customer Facilities meets the outlet of PSNC's Meter Assembly.

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- (ln) "Excess Facilities" means Gas Service Lines and Mains in excess of 100 feet or any additional PSNC Facilities required to supply service different from standard service from a high pressure (above 60 pounds per square inch gauge) Main
- (mo) "Facilities" means all infrastructure to deliver natural gas
- (np) "Facilities Charge" means a fixed amount billed each month to cover the basic cost of providing Service regardless of the amount of Gas used
- (eq) "Farm Tap" means a connection to a high pressure (above 60 pounds per square inch gauge) Main including Facilities to reduce the delivery pressure to supply Service to one or more Customers
- (pr) "Feasibility Test" means an economic test performed by PSNC which compares the ~~Net Present Value ("NPV")~~ net present value of the cost of certain PSNC Facilities to the anticipated ~~NPV~~ net present value of the revenue to be received by PSNC from Service through those same PSNC Facilities
- (qs) "Force Majeure" means any acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, acts of sabotage or terrorism, war, blockades, insurrections, riots, epidemics, landslides, unusual conditions of weather or temperature, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people civil disturbances, explosions, breakage of or accidents to PSNC Facilities, supplier's or transporter's Facilities, Customer Facilities, lines of pipe, or PSNC's peak shaving plants, freezing of wells or lines of pipe, partial or complete curtailment of deliveries from PSNC's supplier(s) or transporters as a result of force majeure under the supplier(s) Gas purchase contracts, inability to obtain rights of way, franchises, permits, materials, Facilities, supplies, or an inability to obtain an unlimited supply of gas from PSNC's supplier(s), inadequate delivery pressure from PSNC's transporters, and any other causes, whether of the kind herein enumerated or otherwise, not within the control of PSNC and/or its supplier(s), transporters or the Customer and which by the exercise of due diligence either PSNC and/or its supplier(s), transporters or the Customer is unable to prevent or overcome
- (rt) "Gas" means undiluted natural gas, or a substitute for natural gas, or any mixture of natural gas and a substitute for natural gas, as delivered by PSNC
- (su) "Gas Service Line" means the pipeline, owned by PSNC, that runs between a Main and a Meter
- (v) "Integrity Management Tracker" means the mechanism in Rider E that tracks capital costs of integrity management projects between rate cases and recovers such costs from residential and commercial Customers receiving service on Rate Schedule Nos 101, 102, 115, 125, 126, 127, 135, 140, 145, 150, 160, 165, 175, and 180
- (tw) "Main" means a gas pipeline other than a Gas Service Line, owned, operated or maintained by PSNC, which is used for the purpose of transmission or distribution of Gas
- (ux) "Meter" or "Meter Assembly" means any of PSNC's meter, regulator, piping, valves, vents, relief valves, gauges, and/or other apparatus, including automated or remote meter reading devices, used to measure, communicate, and control flow or pressure of Gas
- (vy) "Person" means an individual, partnership, corporation, trust, governmental agency, or other association
- (wz) "Premises" means the land or real estate, including buildings and other appurtenances thereon, where a Customer receives Service
- (xaa) "PSNC" means Public Service Company of North Carolina, Incorporated, a South Carolina corporation d/b/a PSNC Energy, a natural gas utility operating under the jurisdiction of the Commission
- (ybb) "PSNC Facilities" means any piping, ~~mains~~ Mains, Gas Service Lines, Meters, Meter Assemblies, regulating or other Facilities of whatever nature owned by PSNC, ~~including any such Facilities located downstream of the Delivery Point~~
- (zcc) "Rate Schedule" means the portion of PSNC's approved Tariff on file with the Commission describing the rates and charges, and the terms and conditions, for Service
- (aa) "~~Receipt Point~~" means the physical point where PSNC's system connects with its transporter's system

(bbdd) "Residence" means any single or multiple family residence, condominium, townhouse, mobile or modular home, or apartment that is individually metered and has Gas used for any domestic usage such as space heating, air conditioning, water heating, cooking, or any other residential usage

(eeee) "Service" means the delivery, and all other activities incidental to the delivery, of Gas by PSNC to a Customer at its Delivery Point

(dfff) "Therm" means the unit of energy equivalent to 100,000 BTUs ~~PSNC bills on the basis of the Therms used by a Customer.~~

(eegg) "Transportation Pooling Agreement" means an agreement executed by PSNC and a Customer or a Customer's agent that details the procedures to be followed when a Customer obtains an independent supply of Gas and arranges to have the Gas delivered to ~~the City Gate~~ ~~one of PSNC's existing Receipt Points~~. The required form of the Transportation Pooling Agreement is Appendix A to these Rules and Regulations

3. AGREEMENT

- (a) PSNC shall not be required to provide Service unless and until application for Service has been made and any charges for Excess Facilities have been paid by Customer to PSNC. When no charges for Excess Facilities are involved, an Applicant's application for Service and PSNC's acceptance may be oral. In the absence of a written agreement, such agreement shall be conclusively presumed to exist if Gas is made available by PSNC for use by Customer or on the Customer's Premises. Service will be supplied pursuant to PSNC's standard service agreement, the applicable Rate Schedule(s), these Rules and Regulations, and the rules, regulations, and orders of the Commission.
- (b) PSNC's obligations to provide Service and the Customer's obligations upon receipt of Service are set forth in the applicable provisions of Chapter 62 of the North Carolina General Statutes, the applicable Commission Rules and Regulations, the applicable Rate Schedule(s), these Rules and Regulations, and any written application or other document approved in form by the Commission and executed by PSNC and Customer pertaining to such Service.
- (c) Copies of the Rate Schedules and these Rules and Regulations are available from PSNC. Upon Customer request, PSNC will provide Customer with a copy of the applicable Rate Schedule(s), these Rules and Regulations, any written application for Service, and all or other documents executed by PSNC and Customer pertaining to such Service. No promise, statement, or representation by any PSNC employee, agent, or representative, or by any other Person, shall bind PSNC to provide Service, or to change the terms and conditions upon which Service will be provided, unless the same is in writing and is executed by an authorized PSNC representative and Customer, no amendment, change, or modification to any such document shall be effective unless in writing and signed by an authorized PSNC representative and Customer.

4. ESTABLISHMENT AND REESTABLISHMENT OF CREDIT; DEPOSITS

(a) Establishment and Reestablishment of Credit

- (1) Before the commencement of Service, the Applicant (whether a former Customer or not) must satisfactorily establish credit in accordance with Commission Rule R12-2. An Applicant for residential Service shall not be denied Service for failure to pay bills for any non-residential Service.
- (2) If the conditions of Service or the basis on which credit was originally established have materially changed, PSNC may require a Customer to reestablish credit in accordance with Commission Rule R12-2.
- (3) If a disagreement arises with respect to the establishment or reestablishment of credit with PSNC it shall be the Applicant's or Customer's right to have this problem reviewed and acted upon by PSNC's supervisory personnel. If unresolved after that review, then the Applicant or Customer shall have the right to have the problem reviewed by the Commission pursuant to Commission Rule R12-7.

(b) Deposits

- (1) PSNC may require payment of a cash deposit prior to establishing or reestablishing Service to an Applicant or a Customer in accordance with the provisions of Commission Rule R12-2 through R12-4.
- (2) Interest on deposits will be paid in accordance with Commission Rule R12-4.

(3) Deposits will be refunded in accordance with Commission Rule R12-5.

5. DENYING OR DISCONTINUING SERVICE

(a) PSNC shall have the right to discontinue Service or to deny Service for any of the following reasons:

- (1) PSNC determines that a hazardous condition exists;
- (2) Service to Customer adversely affects PSNC Facilities or PSNC's Service to others;
- (3) PSNC Facilities have been tampered with;
- (4) The unauthorized use of Gas by Customer;
- (5) Any material misrepresentation made by Customer or refusal to provide identification in connection with the application for Service;
- (6) Any material breach of these Rules and Regulations or any terms and conditions of the applicable Rate Schedule(s) or service agreement(s), or any violation of any statute, or any order, regulation, or rule of the Commission or any governmental agency;
- (7) Customer's failure to fulfill Customer's agreements and contractual obligations for Service subject to regulation by the Commission;
- (8) Customer's failure either to establish or reestablish satisfactory credit pursuant to Commission Rule R12-2;
- (9) Customer's failure to permit PSNC reasonable access to PSNC Facilities and/or Customer Facilities;
- (10) Nonpayment of bill pursuant to Commission Rules R12-8 and R12-10;
- (11) Customer's failure to furnish such Customer Facilities, permits, certificates, and/or rights-of-way as required by PSNC as a condition to obtaining or continuing Service; or
- (12) Customer Facilities are installed or are in use on Customer's Premises which permits the Gas to be used without passing through the Meter(s), which prevents or interferes with the measuring of the Gas by the Meter(s), or which interconnects fuel systems supplied on separate Rate Schedules.

(b) **Prior Indebtedness:** PSNC reserves the right to deny service to any Applicant who is found to be indebted to PSNC for Service previously furnished to that Applicant at any Premises served by PSNC until satisfactory arrangements have been made for the payment of all such indebtedness. Further, where the Service has been discontinued to a Premises for nonpayment, PSNC shall have the right to refuse Service at the same Premises where there is clear, documented evidence of action taken by the Applicant with the intent to evade payment for utility services. PSNC may require reasonable proof of identity of the Applicant as a condition to providing Service.

(c) **Discontinuing Service:**

(1) PSNC may discontinue or suspend Service without notice to Customer under the following circumstances:

- i. In the event of a condition determined by PSNC to be hazardous;
- ii. In the event of Customer use of equipment in such a manner as to adversely affect PSNC equipment or PSNC service to others;
- iii. In the event of tampering with the equipment furnished and owned by PSNC; or
- iv. In the event of unauthorized use.

(2) For any reason not listed in 5(c)(1) above and not otherwise addressed in Commission Rules R12-8 and R12-10, PSNC shall give Customer at least 10 days written notice that ~~his/her service~~ Service is subject to termination. This notice of proposed termination shall, at a minimum, contain the following:

- i. A clear explanation of the reasons which underlie the proposed termination;
- ii. The date of the proposed termination, which shall not be less than 10 days from the date of issuance of such notice;
- iii. Statements advising how Customer can avoid termination; and

- iv. Statements advising Customer that ~~Customer~~he/she should first contact PSNC with any questions ~~he/she may have~~, and that in cases of dispute, a proposed termination action may thereafter be appealed informally to the Commission either by calling the Public Staff-North Carolina Utilities Commission, Consumer Services Division at (919) 733-9277 or toll free at 1-866-380-9816 or by appearing in person or by writing the Public Staff-North Carolina Utilities Commission, Consumer Services Division, 4326 Mail Service Center, Raleigh, NC 27699-4326.
- (3) Customer is entitled to personal contact prior to termination as detailed in Commission Rule R12-10(i), and Customer retains all ~~his/her~~rights as detailed in the Commission Rules, with special attention to Rules R6-16, R6-17, R12-8, and R12-10.
- (d) No Liability for Discontinuing or Denying Service: PSNC shall have no liability to Customer or to any other Person for any damages incurred as a result of the discontinuance or denial of Service to the Premises such as, but not limited to, frozen water pipes, damaged Facilities, damages to any building or structure, or any other damage or injury of any type.

6. RECONNECTION TERMS AND FEES

- (a) Where Service has been discontinued at Customer's request and reconnection of Service is requested by the same Customer at the same Premises within one (1) year after the date of discontinuance, a reconnection fee shown in the Summary of Rates and Charges of PSNC's Tariff shall be charged.
- (b) All reconnections that require more than one hour to complete will be billed the applicable reconnection rate per hour shown in the Summary of Rates and Charges of PSNC's Tariff.
- (c) In cases where Service is discontinued for nonpayment of bills, Customer shall do the following before PSNC is obligated to restore Service:
- (1) pay the arrears portion of the bill in full;
 - (2) reestablish credit in accordance with Commission Rule R12-3;
 - (3) pay the applicable reconnection fee.

7. ACCESS TO CUSTOMER PREMISES

Customer shall grant to PSNC the right of ingress and egress to, over, across, and through Customer Premises, for any and all purposes associated with the Service or the exercise of any and all rights under the Rate Schedule, service agreement, or these Rules and Regulations. Customer authorizes PSNC's representatives to enter Customer Premises to inspect Customer lines and appliances that use Gas, and to install, read, inspect, test, maintain, repair, or remove any or all of PSNC Facilities. Customer agrees that if a condition exists on Customer Premises, which, in PSNC's sole opinion, is dangerous to PSNC's representatives or PSNC Facilities, and/or prevents reasonable access to PSNC Facilities, PSNC may remove or relocate PSNC Facilities at Customer's sole expense.

8. RIGHT-OF-WAY

- (a) PSNC shall not be required to extend its Facilities for the purpose of rendering Service to the Customer until satisfactory rights-of-way, easements, or permits have been obtained from government agencies and property owners, at Customer expense, to permit the installation, operation, and maintenance of PSNC Facilities. Customer in requesting or accepting Service thereby grants PSNC, without charge, necessary rights-of-way and privileges for PSNC Facilities on, along, across, and under property controlled by Customer to the extent that such rights-of-way required or necessary to enable PSNC to supply Service to the Customer and Customer also grants PSNC the right to continue or extend PSNC Facilities on, along, across, or under property, with necessary rights to serve other Customers. Customer shall maintain such right-of-way so as to grant PSNC continued access to PSNC Facilities by PSNC personnel, vehicles, and other power-operated equipment. Customer's application for Service and acceptance of such Service from PSNC shall be deemed to grant to PSNC an implied right-of-way on, along, across, and under the Premises, if Customer has not executed a written right-of-way agreement as requested by PSNC. PSNC shall not be liable to Customer for any failure to provide Service because of PSNC's inability to secure or retain such rights-of-way.
- (b) Customer may make full use and enjoyment of the Premises included within the right-of-way granted by this Section 8 in any manner not inconsistent with the use and purposes of the Premises by PSNC; provided, however,

that Customer, its heirs, successors, and assigns, shall not construct, nor permit to be constructed, any house, structure, or obstruction, nor impound any water, nor permit any water to be impounded, on or over the right-of-way, and Customer, its heirs, successors, and assigns, further agrees that Customer, and its heirs, successors, and assigns, will not change the grade over the pipeline(s) in any manner which will reduce or increase the depth of the pipeline(s) Customer shall also furnish suitable space and satisfactory protection for PSNC Facilities installed on the Premises

9. VACATED PREMISES

Customer shall notify PSNC at least twenty-four (24) hours before vacating the Premises served and will pay upon presentation all bills due for Service provided to the Premises PSNC shall have no liability to Customer or to any other Person for any damages incurred as a result of Customer vacating the Premises such as, but not limited to, frozen water pipes, damaged Facilities, damages to any building or structure, or any other damage or injury of any type

10. NON-ASSIGNABILITY

Customer's rights to Service and rights provided under any service agreement are personal and shall not be transferred or assigned by Customer without the prior written consent of PSNC, which PSNC, in its sole discretion, may refuse to grant

11. INTERRUPTIONS

Except where interruptions of Service are permitted by PSNC's Tariff or in accordance with Commission Rule R6-19 2, PSNC shall make reasonable efforts to avoid interruptions of Service If interruptions occur for any reason, PSNC shall restore Service within the shortest time practical under the conditions PSNC shall not be liable, in any manner to Customer or any other Person, for any loss or damage resulting from such failure or interruptions of Service

12. ACTION TO MAINTAIN SYSTEM INTEGRITY

If PSNC, in its sole discretion, determines that it is necessary to curtail or interrupt Service to maintain the integrity of its system or to provide for its or the public's safety, PSNC shall have the right to curtail or interrupt delivery of Gas to any Customer PSNC shall not be liable, in any manner to Customer or any other Person, for any loss or damage resulting from such curtailment or interruptions of Service

13. EMERGENCY USES

It is expressly understood and agreed that PSNC does not furnish uninterruptible Service for pumping water, emergency power generation, or any other emergency use. If Customer uses Gas for emergency uses, Customer, at all times, shall maintain a standby supply of energy so that it shall not be necessary to rely on Gas during a time of emergency PSNC shall not be liable, in any event, to any Customer, any inhabitants of any municipal Customer, or any other Person, for any loss or injury of or to property or persons occasioned by, or resulting directly or indirectly from, the failure of any fire protection or other emergency apparatus to operate, whether said failure shall be due to any act or omission of PSNC or otherwise

14. INTERCONNECTIONS

If PSNC supplies Service to Customer under more than one of the Rate Schedules in this Tariff, Customer shall not use the higher priority Service as a standby for any lower priority Service, nor shall Customer install, or permit to be installed, any interconnection between the fuel lines supplying Gas delivered under separate Accounts

15. PRESSURE

PSNC will generally provide Gas at a pressure of approximately 0 25 pounds per square inch gauge ("psig") PSNC and Customer, however, may mutually agree upon a higher pressure at which Gas may be provided PSNC shall supply only one delivery pressure per Account In no event shall PSNC be required to furnish Gas to Customer at a pressure exceeding two (2) psig for residential Service, or five (5) psig for all other classes of Service, except to the extent that PSNC has agreed to do so in writing

16. METERS AND OTHER PSNC FACILITIES; RELOCATION OF PSNC METERS AND FACILITIES; INTERFERENCE OR TAMPERING WITH PSNC PROPERTY

- (a) **Meters** PSNC shall furnish, install, and maintain on Customer's Premises a Meter or Meters of suitable capacity and design to measure the quantity of Gas used by Customer, and such Meter or Meters shall be and remain the property of PSNC. Customer shall (i) provide suitable space for Meters and other PSNC Facilities, (ii) protect all of PSNC Facilities from damage or injury, and (iii) permit no Person other than PSNC's representative or agent, or a person otherwise lawfully authorized, to disturb or remove the same, and PSNC's representatives are hereby expressly authorized to enter Customer Premises at all hours to inspect Customer lines and appliances that use Gas, and to read, inspect, maintain, repair, or remove Meters and other Facilities. References to Meters do not apply to Rate Schedule No. 115, Unmetered Lighting Service.
- (b) **Other Facilities** PSNC shall also furnish, install, and maintain all other PSNC Facilities required to provide Service. PSNC shall have the right, at its option and at its own expense, to place additional PSNC Facilities on the Premises for billing, testing, system monitoring, or other purposes related to the provision of Service. If PSNC elects to install remote or automated Meter reading devices, Customer shall cooperate with PSNC to effect installation of any power, phone, or other service to the Meter site. Customer shall also provide suitable site(s) for any required communication antennas, batteries, and/or solar panels. All PSNC Facilities shall be and remain the sole property and sole responsibility of PSNC, regardless of whether the Customer was required to make a CIAC.
- (c) **Meter Tests** PSNC shall have the right to test its Meters and PSNC Facilities periodically. Customer shall provide adequate access, including vehicle access, to allow for testing of Facilities.
- (d) **Failure or Inaccuracy of Meter** In case of any failure, inaccuracy or nonregistering of a Meter, Customer's bills for the period of such failure or inaccuracy shall be calculated as provided in Commission Rule R6-15.
- (e) **Relocation of PSNC Facilities and Rights-of-Way** PSNC may change the location of PSNC Facilities and rights-of-way upon Customer's request, but Customer shall bear the expense of the change, provided, however, no change will be made where it will interfere with or jeopardize PSNC's Service, either to Customer requesting the change or to any other Customer(s). All privileges of PSNC incident to the original location shall apply to the new location. When a Meter is relocated at PSNC's option, all expense in connection with such change shall be borne by PSNC. If the relocation is made at Customer's request, all expense will be borne by Customer. If a change in the right-of-way is made, Customer shall be subject to the restrictions set forth in Section 8 of these Rules and Regulations with respect to the new right-of-way.
- (f) If Service is discontinued, PSNC shall have the right to remove all PSNC Facilities from Customer's Premises. Such removal shall be at PSNC's sole expense.

17. INTERFERENCE WITH PSNC PROPERTY

Customer shall not interfere with, alter, or remove PSNC Facilities, or permit the same to be done by others unless authorized in writing by PSNC. Damage or loss to PSNC Facilities caused or permitted by Customer shall be paid by Customer. When unauthorized use of Service is discovered, PSNC may discontinue Service and Customer shall be required to pay for the estimated unauthorized usage and the costs of inspection, investigation, disconnection, and reconnection before Service is restored.

18. UNSAFE CONDITIONS

If Customer creates an unsafe condition for PSNC's Facilities, all expenses to correct the condition shall be borne by Customer. Unsafe conditions include, but are not limited to, erecting structures, and planting trees or bushes over or in close proximity to PSNC Facilities.

19. BILLING

- (a) **Bills** Bills for Service shall be rendered and paid monthly. PSNC or its agent shall read Meters, and PSNC shall render bills monthly on a cycle basis of approximately thirty (30) days. Facilities Charges shall not be prorated unless a billing adjustment is being made that covers more than forty-five (45) days of Service that has been previously provided and billed. Rate changes occurring from general rate cases and purchased gas adjustment proceedings shall be implemented on a "service rendered" or prorated basis.
- (b) **Payment** All bills are due when rendered and are payable by mail, bank draft, other electronic means, or at authorized payment centers. Residential bills become past due twenty-five (25) days after the billing date. All other bills become past due fifteen (15) days after the billing date. If any bill is not paid before becoming past due, a late payment charge of 1% per month will be applied at the next billing date to the balance in arrears and thereafter until the amount due is paid. This charge is applicable to all Customers and all classes of Service.

- (c) **Returned Check Charge** A charge equal to the approved state charge for returned items set forth in North Carolina General Statutes § 25-3-506 and shown in the Summary of Rates and Charges of PSNC's Tariff shall be imposed for checks or drafts tendered on Customer's account and returned to PSNC
- (d) **Valid Billing Address** PSNC will deliver to Customer a monthly bill of the amount due to PSNC by mailing the bill by first class mail to the mailing address furnished by Customer or by electronic billing when agreed to by PSNC and Customer. Customer will be responsible for keeping PSNC informed of the proper billing address. If Customer fails to do so, delivery to the Premises address shall be deemed delivery to Customer. Failure to receive a bill will not entitle Customer to any extension of time for payment beyond the past due date. For a Customer that receives bills electronically, notices regarding rate or Service changes, account status, or other matters shall also be provided electronically.
- (e) **Past Due Balance** If PSNC, with good cause, determines a likelihood that Customer cannot pay the outstanding Gas bill, and Customer's deposit, if one has been provided, does not provide PSNC with adequate security, PSNC may accelerate the past due or delinquent date and proceed with disconnect procedures under Commission Rule R12-8 by issuing a written statement of cause to Customer and filing a copy of such statement with the Commission
- (f) **Estimate** If a Meter is not read for any reason at the regular reading date, PSNC may estimate the amount of Service used by Customer to that date by referring, where possible, to Customer's consumption for a similar prior period. PSNC will bill Customer on the basis of that estimated use and will make any necessary adjustment on the bill when the Meter is next read
- (g) **Multiple Meters** PSNC does not allow the combining of Meters for purposes of billing unless the design of the metering facilities requires the use of multiple Meters. PSNC will set an additional Meter when requested to do so by Customer, and Customer bears all costs of such installation. When PSNC provides an additional Meter, it establishes a separate Account, and Customer is responsible for paying a separate Facilities Charge and separate billing through the steps of the Rate Schedule, if applicable. Some current Customers receiving Service as of October 7, 1994, have been allowed to combine Meters for billing purposes. PSNC will grandfather these Accounts by coding them in its Customer database to allow them to remain as combined Accounts at their current locations and in their present configurations. If, in the future, additional Meters are set for these Customers, new Accounts will be established for such additional Meters and Customer will not be allowed to combine Service provided by such Meters with the existing Accounts
- (h) **Offsets Against Bills** No claim which Customer has, or may claim to have, against PSNC shall be offset or counterclaimed against the payment of any sum of money due PSNC by Customer for Service(s) provided. All sums due PSNC shall be paid in accordance with the terms of the bill, these Rules and Regulations~~rules and regulations~~, and the service agreement~~Service Agreement~~ regardless of such claim
- (i) **Equal Payment Plans for Residential and Commercial Customers**
- (1) An equal payment plan is available to any Customer receiving residential or commercial Service whose Account has not been removed from an equal payment plan for late payment of a bill within the previous three (3) months
- (2) At the request of an eligible Customer, PSNC will estimate Customer's bills for the next twelve (12) months based on actual consumption during the previous twelve (12) months (adjusted for normal weather), PSNC's currently approved margin rates, an estimated purchased gas adjustment factor for the upcoming twelve (12)-month period, and applicable fees and taxes. If Customer has an outstanding balance, the balance will be added to the estimated annual amount. Customer's monthly payment under the equal payment plan will be calculated by dividing the estimated annual billing amount by twelve (12)
- (3) At the end of the twelve-(12) month period, Customer's bill will be recalculated based on actual consumption during the period and compared to Customer's payments under the equal payment plan. Any underage may be paid by Customer or added to the estimated annual amount used to calculate Customer's monthly payments for the next twelve (12) months, at Customer's election, and any overage will be deducted from the estimated annual amount. Unless otherwise requested, Customer will remain on the equal payment plan during the next annual period with a new monthly payment based upon the factors set forth above
- (4) PSNC may adjust Customer's monthly payment under the equal payment plan as necessary to avoid a large balance in Customer's Account

20. FORCE MAJEURE

In the event either PSNC or its transporter or supplier or Customer is unable, wholly or in part, by reason of Force Majeure to carry out its obligations, other than to make payments for the Service received, it is agreed that on giving notice of such Force Majeure as soon as possible after the occurrence of the cause relied on, then the obligations of PSNC or Customer so far as they are affected by such Force Majeure, shall be suspended during the continuance of any inability so caused but for no longer period, and such cause shall as far as possible be remedied with all reasonable dispatch.

It is understood and agreed that the settlement of strikes or lockouts shall be entirely within the discretion of the Person affected, and the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes or lockouts when such course is inadvisable in the discretion of the Person affected thereby.

21. POSSESSION OF GAS; GAS QUALITY AND MEASUREMENT

(a) Customer agrees that PSNC is responsible only for Service to the Delivery Point, and PSNC shall not be liable to Customer or any of Customer's agents, contractors or employees, or to any Person(s) whomsoever, for any loss, damage, or injury to any Person(s) or property resulting from the Gas or its use after it leaves Delivery Point. Customer shall assume all risks downstream of the Delivery Point, except when caused by the exclusive gross negligence or willful acts of the employees of PSNC.

(b) PSNC shall not be responsible for the transmission, use, or control of Gas beyond the Delivery Point. PSNC shall not be liable for any loss, damage, or injury to Person(s) or property whatsoever, accruing or resulting in any manner, from the receipt, use, or discontinuance of the use of the Gas beyond the Delivery Point, defective Customer Facilities, or any cause not resulting from the direct, exclusive gross negligence or willful acts of PSNC.

(c) All Gas delivered to PSNC's system is subject to the quality specifications of the interstate transporter's Federal Energy Regulatory Commission-approved tariff. As such, PSNC shall have no liability for damages of any kind related to or arising from the quality or constituent characteristics of Gas delivered or sold to Customer. **ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT MIGHT OTHERWISE ATTACH OR BE APPLICABLE TO THE SALE OF GAS FOR RESALE IS HEREBY DISCLAIMED AND WAIVED.** PSNC shall further have no responsibility to process, condition, or otherwise modify Gas delivered to its system for transmission or sale to Customers. It is Customer's sole responsibility to install, adjust, maintain, and operate its Gas burning equipment in a manner consistent with the prevailing quality of Gas delivered to PSNC.

(d) PSNC shall measure all Gas in Cubic Feet and convert the volume of gas measured to Therms or Dekatherms, as applicable, for billing purposes by multiplying such volume by the BTU Factor. The BTU Factor shall be based on the weighted average BTU content of Gas entering PSNC's system for the days of Customer's billing cycle.

22. REPORTS OF LEAKS

Customer shall give immediate notice to PSNC when any leakage of Gas is discovered or suspected. Customer agrees not to use any potential source of ignition such as flame, electrical source, or other igniting medium, in the proximity of escaping Gas, which could ignite such Gas. PSNC shall not be liable for any leakage of Gas, or any damage or loss arising out of, or caused by, any leakage of Gas, except when due to the exclusive gross negligence or willful acts of the employees of PSNC.

23. EXTENSION OF SERVICE; CIAC

(a) PSNC will extend Mains along the route selected by PSNC in streets that are at an established final grade for distances up to 100 feet without charge to Customer. If a Main extension exceeds 100 feet, PSNC will perform a Feasibility Test and may require a CIAC to reimburse PSNC for the cost of any Main extension in excess of 100 feet and any other Excess Facilities necessary to extend service if the anticipated revenue does not produce a reasonable return on the total cost of such Excess Facilities.

(b) PSNC will install up to 100 feet of Gas Service Line (measured from the Premises' property line to the Meter on Customer's Premises) at no charge. For installations requiring more than 100 feet of Gas Service Line, PSNC may require Customer to pay a CIAC based on the results of a Feasibility Test.

- (c) If Excess Facilities are required, PSNC shall perform a Feasibility Test to determine whether or not these additional facilities will require Customer to pay a CIAC
- (d) A CIAC may be required for Facilities located at a point other than that selected by PSNC or deviating from the route selected by PSNC
- (e) If a Feasibility Test is required, PSNC shall also calculate the estimated cost of (i) the Main in excess of the 100 feet of Main for which no CIAC is required and (ii) the Service Line in excess of the 100 feet of Service Line for which no CIAC is required for new Customers occupying existing structures. For proposed new sub-divisions, the allowances for extensions of Mains and Service Lines will be considered only for existing structures that plan to use Gas at the time the Main is to be extended. Any CIAC shall be the lesser of (i) the CIAC calculated in the Feasibility Test, or (ii) the full cost of extending the lines beyond the initial allowances of 100 feet of Main and Service Line. The Feasibility Test shall include all costs directly associated with the Service extension.
- (f) Notwithstanding Paragraphs (a), (b), and (e) above, PSNC shall perform a Feasibility Test to determine whether a CIAC is required for all extensions of Service when the Applicant's/Customer's request for Service does not include the use of Gas for either central space heating or water heating. Failure to install or utilize Gas Facilities as agreed upon within ninety (90) days of the time of Facilities extension may result in the Customer being charged for the cost of PSNC Facilities and installation, if Customer has been given written notice that such Customer may be charged for the cost of PSNC Facilities and installation if Gas is not used within ninety (90) days.
- (g) Location of Privately Owned Structures. Customer shall locate privately owned structures such as septic tanks, drain lines, water lines, and sprinkler systems prior to PSNC installing a Gas Service Line to Customer's Premises. PSNC and its contractors, if any, are not responsible for damages to privately owned facilities that are not adequately located.

24. FARM TAP SERVICE

- (a) Whenever an Applicant requests Service which can only be supplied from a high pressure (above 60 pounds per square inch gauge) Main, PSNC, subject to the results of a Feasibility Test, may tap the Main, install regulating Facilities, and extend its Facilities to the Delivery Point on Customer's Premises. Customer will provide PSNC with all necessary rights-of-way (including a station site) on its Premises at no expense to PSNC as set forth in Section 8 and shall execute a written right-of-way as requested by PSNC. Whether a CIAC is required of Customer prior to the installation of such Facilities shall be determined by the results of the Feasibility Test.
- (b) For a Farm Tap Customer, a Feasibility Test shall be performed which includes all costs less an allowance for the cost of (i) the actual feet of Main required to serve Customer, not to exceed 100 feet, (ii) the actual feet of Gas Service Line required to serve Customer, not to exceed 100 feet, and (iii) the actual number of Meter set(s).
- (c) Charges for Service shall be billed on the applicable PSNC Rate Schedule. All other terms and conditions of the applicable PSNC Rate Schedule(s) apply to Customers using Farm Tap service.

25. CUSTOMER FACILITIES

- (a) An Applicant shall supply PSNC a list of Customer Facilities located on the Premises which may increase Customer's load to enable PSNC to determine the feasibility of providing Service. PSNC shall provide information concerning the availability of Service (including whether PSNC can serve the increased load), delivery pressure, Meter location and size, and other information which may be pertinent to the installation.
- (b) Customer Facilities must be installed and maintained in accordance with the manufacturer's instructions, approved installation standards, and the requirements of applicable local, state, and federal agencies. All Customer Facilities shall be maintained by, and be the sole responsibility of, Customer and/or the owner of the Premises.
- (c) If Customer Facilities have the potential to create a vacuum, back pressure, or any other condition, which, in PSNC's sole opinion, could cause operating difficulties on PSNC's system, a device meeting PSNC's specifications must be installed and maintained by Customer at Customer's sole expense to protect fully and completely PSNC's system.
- (d) Customer shall not introduce and/or store any flammable or combustible material within close proximity to a Gas appliance or other Facilities.

26. REQUESTS TO INCREASE LOAD OR PRESSURE

Customer shall make a request to PSNC, and shall receive PSNC's permission before increasing Gas loads or pressure and before changing the purpose for which Customer uses Gas. The request shall specify, at a minimum, the name of Customer, type of Service needed, estimated monthly Gas consumption, required delivery pressure, and the date needed. If, in PSNC's sole opinion, it has the capability to provide the additional or changed Service without interfering with its ability to provide Service to its other Customers, PSNC shall allow Customer to increase Customer's load and/or pressure or to change the purpose for which Customer uses Gas. A CIAC may be required depending on the nature of the request.

27. EXCAVATION NEAR PSNC FACILITIES

Customer shall inform PSNC of any excavation activities near PSNC Facilities located on Customer's Premises by calling ~~The North Carolina One-Call Center~~ 811, Inc. at 811 or 1-800-632-4949 not less than three (3) ~~two (2)~~ working days nor more than twelve (12) ~~ten (10)~~ working days prior to such activities. Customer will give a similar notice to PSNC prior to any additions or changes in Customer's Premises over, under, or near PSNC Facilities. Any damages incurred or losses of Gas resulting from any such activity shall be billed to, and paid by, Customer.

28. PROHIBITION AGAINST RESALE OF GAS

Customer shall not directly or indirectly sell, resell, assign, or otherwise transfer Gas to any Person unless such transfer is pursuant to a contract or franchise acceptable to PSNC and, if required, approved by the Commission. This prohibition against resale shall not apply to sales to housing authorities which, on October 1, 1996, purchased Gas from PSNC for resale to the residents of such housing authorities; or to any housing authority which, after October 1, 1996, received authorization to purchase Gas from PSNC for resale to the residents of such housing authority; or to purchases under Rate Schedule No. 195 where Compressed Natural Gas is resold as a vehicular fuel.

29. TAXES

Customer is responsible for payment of all taxes or tax liabilities attributable to or due in connection with the provision of Service by PSNC to the Customer, including any excise or sales tax. Customer is also responsible for the payment of any local, state, or federal tax, charge, or fee attributable to or arising out of the utilization of Gas delivered by the Company as a motor vehicle fuel. ~~METHODOLOGY FOR DETERMINING PROPER RATE SERVICE PRIORITY CLASSIFICATION PURSUANT TO COMMISSION RULES R6-12 & R6-19.2~~

(a) Definitions:

(1) "Actual Annual Usage" means the actual quantities of Gas sold to or transported for Customer by PSNC for a given Review Period as reflected on PSNC's invoices for that Customer.

(2) "Classification Usage" means Gas quantities in an amount equal to Actual Annual Usage for a Customer for a Review Period divided by the Service Days for that same period.

(3) "Involuntary Curtailment Days" means those days or portions of days in a given Review Period when curtailment of Customer's Service was imposed by PSNC's decision to curtail.

(4) "Prospective Priority Classification" means the then current priority curtailment classification a Customer would otherwise qualify for based solely on the Classification Usage for a given Review Period.

(5) "Prospective Rate Schedule" means PSNC's then current Rate Schedule that a Customer would otherwise qualify for based solely on the Classification Usage for a given Review Period.

(6) "Review Period" means the twelve (12) months ended June 30.

(7) "Service Days" means 365 less the number of Involuntary Curtailment Days.

(b) Procedure:

(1) During July and August of each year, the Prospective Rate Schedule for each Customer for the Review Period just ended shall be determined.

(2) If the Prospective Rate Schedule is the same rate schedule on which Customer is currently billed, no further Rate Schedule review is necessary. Customer shall remain on that Rate Schedule.

~~(3) If the Prospective Rate Schedule is different from the Rate Schedule on which Customer is currently billed, the Prospective Rate Schedule for Customer for the Review Period immediately preceding the one used in Section (b)(1) shall also be determined.~~

~~(4) If the Prospective Rate Schedule determined in Section (b)(1) is the same as that determined in Section (b)(3), Customer shall be reclassified to that Prospective Rate Schedule effective the following September 1.~~

~~(5) The reclassified Customer will be given notice of such reclassification as required by Commission Rule R6-12(7).~~

~~(6) A similar procedure will be followed for determining the proper curtailment priority for each Customer by using Prospective Priority Classification.~~

30. NON-WAIVER

No delay or failure of PSNC to exercise any right or remedy provided by these Rules and Regulations, the Rate Schedules, the service agreement, or other documents controlling the terms of Service shall impair any such right or remedy, nor shall it be construed to be a waiver of any breach or default, or an acquiescence therein of any similar breach or default subsequently occurring. No waiver shall be valid unless it is in writing and signed by the party against which it is sought to be enforced. Any written waiver will be effective only to the extent specifically set forth.

TRANSPORTATION POOLING AGREEMENT

THIS AGREEMENT ("Agreement") is made this _____ day of _____, by and between PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INCORPORATED, a South Carolina corporation, doing business as, and hereinafter called, "PSNC Energy," with its main office at 800 Gaston Road, Gastonia, North Carolina 28056, and _____ (hereinafter "Pooler"), a _____ corporation, with its main office at _____.

WHEREAS, PSNC Energy is willing to permit its Customers or their agents, which obtain transportation, ~~whether firm, released, or interruptible, or any other form of transportation, on an interstate on a Pipeline,~~ to deliver Gas into PSNC Energy's system for the purpose of enabling PSNC Energy's Customers to satisfy all of their Gas requirements through the use of transportation Services provided by PSNC Energy; and

WHEREAS, Pooling will permit PSNC Energy's Customers or their agents to accumulate various privileges accorded individual transportation Customers for the benefit of a group of transportation Customers; and

WHEREAS, Pooling will benefit all of PSNC Energy's transportation Customers.

NOW, THEREFORE, for and in consideration of mutual covenants and promises contained herein, PSNC Energy agrees to permit Pooling, and Pooler agrees to pool Gas supplies hereunder, in accordance with the following terms and conditions:

ARTICLE I Definitions

For the purposes of this Agreement, the following definitions shall apply:

1. "Customer(s)" means any recipient of transportation Service provided by PSNC Energy that procures its supply of Gas from a Pooler's Pool.
2. "Gas" means undiluted natural gas, or a substitute for natural gas, or any mixture of natural gas and a substitute for natural gas, as delivered by PSNC Energy.
3. "Gas Day" means a period of twenty-four (24) consecutive hours as defined by NAESB.
4. "NAESB" means the North American Energy Standards Board, or its successor.
5. "Operational Order" means an order issued by PSNC Energy when, in its sole discretion, PSNC Energy anticipates that an imbalance between Gas quantities delivered by Pooler into a Pool and deliveries to Customers out of the Pool during a Gas Day may threaten the integrity of PSNC Energy's system or operations or may impair service to firm customers.
36. "Pipeline" means any interstate pipeline, including Transco, which establishes a physical interconnection with PSNC Energy's pipeline system.
47. "Pool" shall mean an aggregation of Gas quantities for one or more PSNC Energy transportation Customers which Pooler establishes under this Agreement.
58. "Pooling" is a service provided by PSNC Energy whereby a broker, marketer, producer, or any consumer of Gas qualifying for transportation Service under PSNC Energy's tariffs, which obtains transportation ~~(firm, released, interruptible, or any other form),~~ on a Pipeline and aggregates Gas supplies needed to satisfy the full requirements of one or more transportation Customers of PSNC Energy, and such Customer or Customers have assigned its rights to Pooler as agent, or such Customer is acting on its own behalf, for the purpose of delivering Gas to PSNC Energy.
69. "Transco" means Transcontinental Gas Pipe Line Company, LLC, or its successor Corporation.

Any capitalized terms used herein, which are not defined herein, shall have the meanings set forth in PSNC Energy's Rules and Regulations.

ARTICLE II **Applicability**

All persons and entities that obtain transportation, ~~whether firm, released, interruptible, or any other form of transportation,~~ on a Pipeline for the purpose of delivering Gas to an interconnection between Pipeline and PSNC Energy shall be required to execute a Transportation Pooling Agreement. Unless PSNC Energy agrees otherwise, only a single pooler may sell Gas to a Customer Account in one calendar month.

ARTICLE III **Term**

This Agreement shall commence on the first day of _____, 20____, and shall continue thereafter for twelve (12) calendar months; provided, however, that the term shall be extended from year to year thereafter, subject to cancellation by either party upon expiration of the primary term or any subsequent one (1) year period upon at least thirty (30) days written notice given prior to expiration of the primary term or prior to the expiration of any one year period occurring thereafter. Notwithstanding the foregoing, PSNC Energy may cancel or discontinue service under this Agreement as provided in Articles VIII, IX, and X below.

ARTICLE IV **Transportation Nomination Procedures**

For each month that this Agreement is in effect, Pooler must submit its nomination for each month's transportation to PSNC Energy using PSNC Energy's electronic bulletin board or such other means authorized by PSNC Energy no later than the NAESB deadline for the timely nomination cycle on the fourth business day prior to the beginning of each month, in writing or by facsimile on or before the deadline date indicated on the "Transportation Nomination Schedule" as published periodically by PSNC Energy. ~~Such nominations shall include the following information:~~

1. ~~Pooler's legal name, Pipeline contract number, and Pipeline transportation activity number;~~
2. ~~daily quantity (Daily MMBTU) to be delivered to PSNC Energy;~~
3. ~~list including the names of all PSNC Energy Customers to be served by Pooler and the corresponding PSNC Energy Customer Account numbers; and~~
4. ~~effective date of transportation Service.~~

~~Intra-month revisions to Gas quantities being delivered Changes to nominations within the month must be submitted to PSNC Energy using PSNC Energy's electronic bulletin board or such other means authorized must be received by PSNC Energy in writing or by facsimile no later than 5 p.m. Eastern Time two days no later than the NAESB deadline for the timely nomination cycle on the day prior to the day of Gas flow. Nominations should reflect anticipated demand of the Customers to be served by Pooler. PSNC Energy will have no obligation to accommodate intraday nomination changes.~~

ARTICLE V **Pooling Procedures**

For each month that this Agreement is in effect, PSNC Energy will allow Pooler to create a Pool in which Pooler shall aggregate all Gas quantities delivered to PSNC Energy by Pooler for delivery to PSNC Energy's Customer(s) or Pooler pursuant to Article IV above. Pooler agrees to make deliveries into its Pool at daily rates that are reasonably even and constant. Pooler may increase or decrease daily Gas deliveries to PSNC Energy provided that any such change does not impair PSNC Energy's operating ability, as determined by PSNC Energy, in its sole discretion.

Notwithstanding the foregoing, PSNC Energy may from time to time issue an Operational Order notifying Pooler to comply with any restrictions specified by PSNC Energy in the Operational Order. PSNC Energy will provide Pooler at least four (4) hours' advance notice of the effective time of any restrictions in an Operational Order. Pooler shall provide PSNC Energy with the names, titles, telephone numbers, and email addresses of at least two representatives authorized by Pooler to receive such notices and shall promptly notify PSNC Energy of any changes to such information.

When an Operational Order specifies that a Pooler take appropriate actions for any Gas Day to prevent deliveries to Customers out of its Pool from exceeding quantities delivered by Pooler into the Pool ("Under-Delivery"), upon Pooler's failure to comply with the Operational Order, Pooler shall pay PSNC Energy a penalty of \$25 for each Dekatherm that Pooler's Under-Delivery is greater than two percent (2%) of Pooler's approved nomination and less

than or equal to ten percent (10%) of Pooler's approved nomination and \$50 for each Dekatherm that Pooler's Under-Delivery is greater than ten percent (10%) of Pooler's approved nomination, plus the absolute high price for the day of Under-Delivery as published in Gas Daily in the "Daily price survey," "Citygates," "Transco, zone 5 delivered," "Absolute," high end of the range. For days of consumption when Gas Daily is not published, the daily price published by Gas Daily on the nearest subsequent day shall be used.

When an Operational Order specifies that a Pooler take appropriate actions for any Gas Day to prevent Gas quantities delivered by Pooler into its Pool from exceeding deliveries to Customers out of the Pool ("Over-Delivery"), upon Pooler's failure to comply with the Operational Order, Pooler shall pay PSNC Energy a penalty of \$25 for each Dekatherm that Pooler's Over-Delivery is greater than two percent (2%) of Pooler's approved nomination and less than or equal to ten percent (10%) of Pooler's approved nomination and \$50 for each Dekatherm that Pooler's Over-Delivery is greater than ten percent (10%) of Pooler's nomination.

ARTICLE VI
Gas Measurement

The quantity and heating value of the Gas delivered by Pooler to PSNC Energy shall be determined by the transporting Pipeline(s) in the manner provided in its (their) tariff(s).

ARTICLE VII
Full Requirements Service

For each month that this Agreement is in effect, Pooler agrees to satisfy the full requirements for Gas for each PSNC Energy Customer Account on Pooler's designated list provided pursuant to Article IV for each such month. Pooler's ability to satisfy all such requirements for Gas in any month shall be determined by subtracting the Customers' actual consumption for the listed Customer Accounts in that month from the total actual deliveries received in that month on the Pooler's account. Any imbalance resulting from an adjustment to actual consumption or deliveries due to meter inaccuracy, billing error, or otherwise, after the month in which such Gas requirements were determined, shall be cashed out under the procedure provided in Article VIII with all adjusted quantities cashed out under either paragraph 1 for shortage quantities or paragraph 1 for excess quantities, as applicable.

ARTICLE VIII
Pool Balancing Procedures

In the event that Pooler's Pool has insufficient Gas available to satisfy the actual needs of the Customer Account(s) to be served from the Pool in any month, the cashout procedure shall be as follows:

1. If such shortage is less than or equal to ~~five percent (5%)~~ two percent (2%) of the Customers' actual usage, for each Dekatherm of such shortage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the first of the month price for the month in which such shortage occurred for Transco Station 65 as published in Natural Gas Week, plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.
2. ~~If such shortage is greater than five percent (5%) but less than or equal to ten percent (10%) of the Customers' actual usage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the higher of the first of the month price or the highest weekly price for any subsequent week for the month in which such shortage occurred for Transco Station 65 as published in Natural Gas Week, multiplied by a factor of one hundred and fifteen percent (115%), plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.~~
3. ~~If such shortage is greater than ten percent (10%)~~ two percent (2%) of the Customers' actual usage, for each Dekatherm of such shortage, PSNC Energy shall sell to Pooler Gas required to cover such shortage quantities at a rate equal to the higher of the first of the month price or the highest weekly price for any subsequent week for the month in which such shortage occurred for Transco Station 65 as published in Natural Gas Week, multiplied by a factor of ~~one hundred and twenty-five percent (125%)~~ the premium percentage shown below corresponding to the percentage of the shortage, plus the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, for each Dekatherm of such shortage.

Shortage Percentage

Premium Percentage

<u>Over 2% & equal to or less than 5%</u>	<u>110%</u>
<u>Over 5% & equal to or less than 10%</u>	<u>120%</u>
<u>Over 10% & equal to or less than 15%</u>	<u>130%</u>
<u>Over 15%</u>	<u>150%</u>

In the event that Pooler's Pool has Gas in excess of the actual needs of the Customer Account(s) in any month, the cashout procedure shall be as follows

- 1 If such excess is less than or equal to ~~five percent (5%)~~ two percent (2%) of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the first of the month price for the month in which the excess accumulated for Transco Station 65 as published in Natural Gas Week, plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$ 05
- ~~2 If such excess is greater than five percent (5%) but less than or equal to ten percent (10%) of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the lower of the first of the month price or lowest weekly price for the month in which the excess accumulated for any subsequent week for Transco Station 65 as published in Natural Gas Week, multiplied by a factor of eighty-five percent (85%) plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$ 05.~~
- ~~32 If such excess is greater than ten percent (10%)~~ two percent of the Customers' actual usage, for each Dekatherm of such overage, PSNC Energy shall purchase from Pooler such excess quantities of Gas at a rate equal to the lower of the first of the month price or lowest weekly price for any subsequent week for the month in which the excess accumulated for Transco Station 65 as published in Natural Gas Week, multiplied by ~~a factor of seventy-five percent (75%)~~ the discount percentage shown below corresponding to the percentage of the excess, plus (a) for the months of November through March, the one hundred percent (100%) load factor rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, plus applicable fuel retention and all applicable surcharges, or (b) for the months of April through October, the commodity rate under Transco's currently effective Rate Schedule FT for deliveries from Transco's Zone 3 to Zone 5, including applicable fuel retention and surcharges, plus \$ 05

<u>Excess Percentage</u>	<u>Discount Percentage</u>
<u>Over 2% & equal to or less than 5%</u>	<u>90%</u>
<u>Over 5% & equal to or less than 10%</u>	<u>80%</u>
<u>Over 10% & equal to or less than 15%</u>	<u>70%</u>
<u>Over 15%</u>	<u>50%</u>

If, for any month, the imbalance in Pooler's Pool exceeds twenty-five percent (25%), either positive or negative, PSNC Energy shall have the right, in its sole discretion, to cancel this ~~Agreement~~ agreement and to suspend the Pooler's right to establish a Pool for delivery to Customers that transport on PSNC Energy's system for twelve (12) months

ARTICLE IX
Creditworthiness

PSNC Energy shall not commence service to Pooler, and has the right to discontinue service upon five (5) days' written notice to Pooler, if Pooler fails to meet PSNC Energy's creditworthiness criteria. PSNC Energy shall apply consistent evaluative practices to determine the acceptability of Pooler's overall financial condition, working capital, and profitability trends. Acceptable creditworthiness is demonstrated by meeting the following criteria

- 1 At PSNC Energy's request, Pooler shall provide current financial statements, annual reports, 10-K reports or other filings with regulatory agencies which discuss the Pooler's financial status, a list of all corporate affiliates, parent companies and subsidiaries, and any reports from credit reporting and bond rating agencies which are available

2. At PSNC Energy's request, Pooler shall provide a bank reference and at least two trade references. Pooler authorizes PSNC Energy to obtain a current credit report on Pooler to determine whether to extend credit and releases generally all creditors to disclose otherwise confidential information. The results of reference checks and any credit reports submitted must show that Pooler's obligations are being paid on a prompt basis.
3. At PSNC Energy's request, Pooler shall provide a guarantee by a person or another entity acceptable to PSNC Energy that satisfies the credit appraisal, or a standby irrevocable letter of credit drawn upon a bank acceptable to PSNC Energy.
4. Pooler must not be operating under any chapter of the bankruptcy laws and must not be subject to liquidation or debt reduction procedures under state laws such as an assignment for the benefit of creditors, or any informal creditors' committee agreement.
5. Pooler shall not be subject to the uncertainty of pending liquidation or regulatory proceedings in state or federal courts or before other governmental or regulatory bodies having jurisdiction, which could cause a substantial deterioration in its financial condition, a condition of insolvency, or an impairment of Pooler's ability to exist as an ongoing business entity.
6. Pooler shall have no significant collection lawsuits or judgments outstanding that might affect Pooler's ability to remain solvent.
7. If any of the events or actions described in paragraphs 4, 5, and 6 above shall be initiated or imposed during the terms of service under this Agreement, Pooler shall provide notification thereof to PSNC Energy within two (2) working days of any such initiated or imposed event or action.
8. If Pooler has an ongoing business relationship with PSNC Energy, no delinquent balances shall be consistently outstanding for undisputed billings made previously by PSNC Energy, and Pooler must have paid its account in the past according to the established terms and not made deductions or withheld payment for claims other than for disputed billings.

ARTICLE X **Billing and Payment**

No later than three (3) business days following PSNC Energy's end-of-the-month meter reading date for the month of delivery, PSNC Energy will provide Pooler with a statement detailing the total quantities delivered by Pooler into its Pool for the preceding month as well as the total metered consumption in ~~Dekatherms~~MMBTU for each individual PSNC Energy Customer Account served by Pooler. Pooler is responsible for billing each of PSNC Energy's Customer(s) served from Pooler's Pool for all Gas consumed by such Customer(s) determined pursuant to Article VII above with the exception of unauthorized quantities or other penalties assessed directly to a Customer by PSNC Energy. PSNC Energy shall continue to bill its applicable transportation and Facilities Charges directly to the Customer.

If the total quantities present in Pooler's Pool fail to cover the total accumulated usage for PSNC Energy's Customer(s) served by Pooler's Pool in any month, PSNC Energy shall bill Pooler for any shortage quantities pursuant to the procedures described in Article VIII above. Such statement shall be furnished to Pooler by PSNC Energy no later than the fifth (5th) business day following PSNC Energy's end-of-the-month meter reading date for the month of delivery and is due and payable within ten (10) days after the statement date. A bill shall be deemed delinquent when it remains unpaid after the due date set forth on the bill. If Pooler fails to remit the full amount when due, interest on the unpaid portion shall accrue at a rate of one percent (1%) per month. If a Pooler withholds any portion of any amount billed by PSNC Energy as a disputed amount and any portion or all of the amount so withheld is determined to have been properly billed, then interest (as set forth above) shall accrue on the withheld amount that was properly billed from the ~~date due~~ due until the date that PSNC Energy receives it. PSNC Energy may terminate this Agreement when any bill becomes delinquent.

If the total quantities present in Pooler's Pool exceed the total accumulated usage for the Customer(s) served from Pooler's Pool in any month, PSNC Energy shall purchase such Gas pursuant to the procedures described in Article VIII above. PSNC Energy shall furnish Pooler with a statement identifying the quantities purchased from Pooler no later than the fifth (5th) business day following PSNC Energy's end-of-the-month meter reading date for the month of delivery and shall pay Pooler no later than ten (10) days after the statement date.

ARTICLE XI **Force Majeure**

The term "Force Majeure," as used herein, and as applied to PSNC Energy or Pooler, shall mean acts of law including governmental bodies acting pursuant to law, acts of God, strikes, lockouts or other disturbances, acts of a public enemy, war, blockades, insurrections, riots, epidemics, lightning, fires, floods, washouts, arrests, civil disturbances, explosions, breakage or accidents to machinery or lines of pipe, freezing of wells or pipelines, or any other cause, whether of the kind enumerated or otherwise, not reasonably within the control of the affected party. It is understood and agreed that the settlement of strikes or lockouts shall be entirely within the discretion of the party affected.

Such causes or contingencies affecting the performance of this Agreement by PSNC Energy or the Pooler shall not relieve the affected party of liability unless such party shall give notice and full particulars of such cause or contingency in writing or by facsimile to the other party as soon as reasonably practical after the occurrence of the cause relied upon, nor shall such causes or contingencies affecting this Agreement by either party relieve it of liability in the event of its concurring negligence, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from its obligations to make payments of amounts due under the Agreement for Gas already allocated to the Customers served by Pooler.

ARTICLE XII
Miscellaneous

1. No modification of the terms and provisions of this Agreement shall be or become effective except by the execution of a written agreement or by modification of PSNC Energy's Tariff.
2. No waiver by any party of any one or more defaults by any other party in the performance of any provisions of this Agreement shall operate or be construed as a waiver or any other default or defaults, whether of a like or of a different character.
3. Any company, which shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of PSNC Energy or of Pooler, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Agreement. Without relieving itself of its obligations under this Agreement, any party may assign any of its rights hereunder to a company with which it is affiliated, but otherwise no assignment of this Agreement or any of the rights or obligations hereunder shall be made unless there first shall have been obtained the consent thereto in writing of the other party, provided that such consent will not be unreasonably withheld.
4. Except as otherwise provided, any notice, request, demand, statement, or bill provided for in this Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when delivered to the United States Postal Service to be sent by registered or certified mail to the Post Office address of the parties hereto, as the case may be, or at such address as either party shall designate by formal written notice, as follows:

Notices to PSNC Energy

PSNC Energy
Attention: Transportation & Administration
P O Box 1398
Gastonia, North Carolina 28053-1398
Telephone (704) 834-6338
Facsimile (704) 834-6555

Payments to PSNC Energy

PSNC ~~Treasurer's Account~~Energy
Wells Fargo Bank NAWachovia, Charlotte, North
Carolina
Minneapolis, MN 55702
ABA No. 121000240530-0021-9
Account No. 20706-59001624

Notices to Pooler (Enter Applicable Information)

Pooler Name

Address

City / State/ Zip Code

Telephone Number

Payments to Pooler (Enter Applicable Information)

Pooler Name

Pooler Bank Name

ABA Number

Account Number

Fax Number _____

- 6. The subject headings of the articles of this Agreement are inserted for the purpose of convenient reference and are not intended to be a part of the Agreement nor considered in any interpretation of the same.
- 7. The construction, interpretation, and performance of this Agreement shall be in accordance with the laws of the State of North Carolina, excluding any conflicts-of-law rule or principle which might refer the construction, interpretation, or performance of this Agreement to the law of another jurisdiction.
- 8. In the event of a conflict between the provisions of this Agreement and PSNC Energy's Tariff, PSNC Energy's Tariff shall control.
- 9. This Agreement supersedes all preexisting agreements for Pooling between PSNC Energy and Pooler.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as indicated below signed and witnessed, ~~or their respective corporate seals to be hereto affixed and attested, the day and year first above written.~~

ATTEST: PSNC Energy

ATTEST: POOLER

By: _____
(Signature)

By: _____
(Signature)

Name: _____
(Type or Print)

Name: _____
(Type or Print)

Title: _____

Title: _____

By: _____
(Signature)

By: _____
(Signature)

Name: _____
(Type or Print)

Name: _____
(Type or Print)

Title: _____

Title: _____

Per Books

Public Service Company of North Carolina, Inc.
 Cost of Service Study
 12 Months Ending 12/31/15

DESCRIPTION	TOTAL	RES	GS	LGS_FIRM	LGS_INT
OPERATING REVENUES					
RATE SCHEDULE REVENUES	407,425,751	283,118,102	106,607,497	14,852,056	2,848,096
RATE 135 & SPECIAL CONTRACT REVENUE	1,093,642	759,966	286,164	39,867	7,645
RATE SCHEDULE REVENUES	408,519,393	283,878,068	106,893,661	14,891,923	2,855,741
TRANSPORTATION REVENUES	27,099,162	0	0	17,646,338	9,452,824
RATE SCHEDULE REVENUES	435,618,555	283,878,068	106,893,661	32,538,261	12,308,565
OTHER GAS REVENUES	3,413,176	2,815,478	487,650	77,564	32,485
TOTAL REVENUES	439,031,731	286,693,546	107,381,311	32,615,825	12,341,050
OPERATING EXPENSES					
COG & OTHER GAS SUPPLY EXP	191,239,573	112,260,803	60,784,835	13,481,945	4,711,990
O&M TOTAL EXPENSES EXCL COG	92,766,695	67,772,511	16,081,538	6,342,687	2,569,958
DEPRECIATION EXPENSE	49,622,105	35,834,085	7,619,561	4,346,376	1,822,083
TAXES OTHER THAN INCOME	12,433,365	8,821,354	1,995,450	1,139,519	477,043
MANUAL ENTRY STATE TAX CURRENT	967,644	639,138	235,961	67,432	25,112
MANUAL ENTRY STATE TAX DEFERRED	1,373,439	907,170	334,915	95,711	35,644
MANUAL ENTRY FEDERAL TAX CURRENT	860,242	568,198	209,771	59,948	22,325
MANUAL ENTRY FEDERAL TAX DEFERRED	23,670,197	15,634,396	5,772,005	1,649,505	614,291
TOTAL EXPENSES	372,933,259	242,437,655	93,034,036	27,183,122	10,278,446
OPERATING RETURN AFTER TAXES	66,098,472	44,255,891	14,347,274	5,432,702	2,062,604
RATE BASE					
GROSS PLANT	1,713,468,229	1,206,599,419	270,941,586	166,519,941	69,407,283
RESERVES FOR DEPRECIATION	(646,571,745)	(468,247,743)	(99,449,084)	(56,112,913)	(22,762,005)
NET PLT IN SERVICE	1,066,896,484	738,351,676	171,492,502	110,407,028	46,645,278
RATE BASE OTHER	(233,850,955)	(161,837,861)	(37,589,106)	(24,199,901)	(10,224,087)
TRANSMISSION RESERVE	9,589,070	4,232,946	(122,948)	5,975,009	(495,937)
RATE BASE	842,634,599	580,746,761	133,780,448	92,182,137	35,925,253
RATE OF RETURN	7.84%	7.62%	10.72%	5.89%	5.74%

2/10

Pro Forma

Public Service Company of North Carolina, Inc.
 Cost of Service Study
 12 Months Ending 12/31/15

DESCRIPTION	TOTAL	RES	GS	LGS_FIRM	LGS_INT
OPERATING REVENUES					
RATE SCHEDULE REVENUES	398,780,708	277,110,705	104,345,425	14,536,915	2,787,663
RATE 135 & SPECIAL CONTRACT REVENUE	975,031	677,544	255,128	35,543	6,816
RATE SCHEDULE REVENUES	399,755,739	277,788,249	104,600,553	14,572,458	2,794,479
TRANSPORTATION REVENUES	27,099,162	0	0	17,646,338	9,452,824
RATE SCHEDULE REVENUES	426,854,901	277,788,249	104,600,553	32,218,796	12,247,303
OTHER GAS REVENUES	3,413,176	2,814,693	487,832	77,985	32,666
TOTAL REVENUES	430,268,077	280,602,943	105,088,385	32,296,781	12,279,969
OPERATING EXPENSES					
COG & OTHER GAS SUPPLY EXP	177,117,744	103,971,055	56,296,261	12,486,388	4,364,039
O&M TOTAL EXPENSES EXCL COG	112,901,064	80,483,685	20,036,588	8,903,233	3,477,557
DEPRECIATION EXPENSE	56,496,731	39,566,674	8,971,002	5,601,883	2,357,172
TAXES OTHER THAN INCOME	15,460,055	10,910,110	2,481,679	1,461,246	607,020
MANUAL ENTRY STATE TAX CURRENT	(590,574)	(394,944)	(177,157)	(13,702)	(4,771)
MANUAL ENTRY STATE TAX DEFERRED	2,384,967	1,594,937	715,429	55,335	19,266
MANUAL ENTRY FEDERAL TAX CURRENT	(19,851,491)	(13,275,603)	(5,954,942)	(460,584)	(160,362)
MANUAL ENTRY FEDERAL TAX DEFERRED	34,924,390	23,355,542	10,476,429	810,297	282,123
TOTAL EXPENSES	378,842,885	246,211,456	92,845,288	28,844,096	10,942,045
OPERATING RETURN AFTER TAXES	51,425,192	34,391,486	12,243,096	3,452,685	1,337,924
RATE BASE					
GROSS PLANT	1,854,943,637	1,284,456,172	298,337,328	191,923,732	80,226,405
RESERVES FOR DEPRECIATION	(671,500,106)	(485,628,762)	(103,425,557)	(58,627,611)	(23,818,176)
NET PLT IN SERVICE	1,183,443,531	798,827,410	194,911,771	133,296,122	56,408,228
RATE BASE OTHER	(245,221,650)	(169,444,036)	(39,477,884)	(25,517,690)	(10,782,041)
TOTAL WORKING CAPITAL	8,126,399	3,527,731	(426,066)	5,657,798	(633,064)
RATE BASE	946,348,280	632,911,106	155,007,821	113,436,229	44,993,123
RATE OF RETURN	5.43%	5.43%	7.90%	3.04%	2.97%

I/A

Paton Exhibit 7

After Proposed Increase

Public Service Company of North Carolina, Inc.
 Cost of Service Study
 12 Months Ending 12/31/15

DESCRIPTION	TOTAL	RES	GS	LGS_FIRM	LGS_INT
OPERATING REVENUES					
RATE SCHEDULE REVENUES	440,087,149	305,861,129	105,101,609	22,796,943	6,327,469
RATE 135 & SPECIAL CONTRACT REVENUE	975,031	677,544	255,128	35,543	6,816
RATE SCHEDULE REVENUES	441,062,180	306,538,673	105,356,737	22,832,486	6,334,285
TRANSPORTATION REVENUES	27,099,162	-	-	17,646,338	9,452,824
RATE SCHEDULE REVENUES	468,161,342	306,538,673	105,356,737	40,478,824	15,787,109
OTHER GAS REVENUES	3,689,752	3,015,613	563,488	77,985	32,666
TOTAL OPERATING REVENUES	471,851,094	309,554,286	105,920,225	40,556,809	15,819,775
OPERATING EXPENSES					
COST OF GAS & OTHER GAS SUPPLY EXP	177,117,744	103,971,055	56,296,261	12,486,388	4,364,039
TOTAL O&M EXPENSES EXCLUDING COST OF GAS	113,066,406	80,598,581	20,079,852	8,909,260	3,478,713
DEPRECIATION EXPENSE	56,496,731	39,566,674	8,971,002	5,601,883	2,357,172
TAXES OTHER THAN INCOME	15,460,055	10,910,110	2,481,679	1,461,246	607,020
STATE TAX - CURRENT	1,066,133	727,038	176,127	114,791	48,176
STATE TAX - DEFERRED	2,384,967	1,626,403	394,001	256,791	107,772
FEDERAL TAX - CURRENT	(5,935,154)	(4,047,415)	(980,499)	(639,042)	(268,197)
FEDERAL TAX - DEFERRED	34,924,390	23,816,315	5,769,580	3,760,334	1,578,161
TOTAL OPERATING EXPENSES	394,581,271	257,168,761	93,188,003	31,951,651	12,272,857
OPERATING RETURN AFTER TAXES	77,269,823	52,385,525	12,732,222	8,605,157	3,546,918
RATE BASE					
GROSS PLANT IN SERVICE	1,854,943,637	1,284,456,172	298,337,328	191,923,732	80,226,405
RESERVES FOR DEPRECIATION	(671,500,106)	(485,628,762)	(103,425,557)	(58,627,611)	(23,818,176)
NET PLANT IN SERVICE	1,183,443,531	798,827,410	194,911,771	133,296,122	56,408,228
RATE BASE - OTHER	(245,221,650)	(169,444,036)	(39,477,884)	(25,517,690)	(10,782,041)
TOTAL LEAD LAG	11,119,541	5,548,110	66,901	5,994,928	(490,398)
TOTAL RATE BASE	949,341,422	634,931,484	155,500,788	113,773,359	45,135,790
RATE OF RETURN	8.14%	8.25%	8.19%	7.56%	7.86%

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
SUMMARY OF ADJUSTED TEST YEAR REVENUE
FOR THE TEST YEAR ENDED DECEMBER 31, 2015
DOCKET NO. G-5, SUB 565

Paton Exhibit 8

RATE SCHEDULE	PER BOOK			ANNUALIZED RATES			NORMALIZED USAGE		GROWTH ADJUSTED USAGE			CUT ADJUSTMENT	PROFORMA REVENUE
	BILLS	THERMS	AMOUNT	BILLS	THERMS	AMOUNT	THERMS	AMOUNT	BILLS	THERMS	AMOUNT		
101 - Summer	2,829,442	37,829,541	\$57,915,519	2,829,442	37,829,541	\$53,633,025	38,471,818	\$54,063,228	2,902,725	39,468,249	\$55,463,478	\$2,717,885	\$58,181,363
101 - Winter	2,859,086	246,857,091	\$238,581,572	2,859,086	246,857,091	\$210,633,153	245,104,986	\$209,341,081	2,933,135	251,453,093	\$214,762,919	\$8,495,914	\$223,258,833
102 - Summer	43,326	582,810	\$859,072	43,326	582,810	\$794,491	594,204	\$801,554	49,613	680,425	\$917,864	\$39,155	\$957,019
102 - Winter	42,679	3,174,556	\$2,961,926	42,679	3,174,556	\$2,609,107	3,266,363	\$2,672,219	48,872	3,740,335	\$3,059,976	\$258,318	\$3,318,294
115 - Summer	257	32,898	\$26,322	257	32,898	\$24,605	32,898	\$24,605	257	32,898	\$24,605		\$24,605
115 - Winter	258	32,799	\$28,251	258	32,799	\$26,767	32,799	\$26,767	258	32,799	\$26,767		\$26,767
125	513,930	148,718,345	\$111,890,822	503,286	148,718,345	\$79,264,051	116,691,370	\$79,521,735	511,491	118,593,903	\$80,818,245	(\$117,068)	\$80,701,177
126	50	61,972	\$40,722	50	61,972	\$34,072	61,972	\$34,072	50	61,972	\$34,072		\$34,072
127	1,103	945,346	\$618,233	1,103	945,346	\$525,180	997,609	\$556,547	1,104	999,732	\$557,688	(\$987)	\$556,701
135	24	250,145	\$302,157	24	250,145	\$175,427	250,145	\$175,427	24	250,145	\$175,427		\$175,427
140	0	0	\$0	10,644	0	\$18,882,142	30,837,156	\$17,884,319	10,644	30,837,156	\$17,884,319	(\$30,440)	\$17,853,879
145	2,488	27,482,092	\$14,852,056	2,488	27,482,092	\$11,942,579	27,482,092	\$11,942,579	2,488	27,482,092	\$11,942,579		\$11,942,579
150	93	6,704,243	\$2,848,096	93	6,704,243	\$2,148,942	6,704,243	\$2,148,942	93	6,704,243	\$2,148,942		\$2,148,942
175	3,764	174,902,640	\$17,646,338	3,764	174,902,640	\$17,614,097	174,902,640	\$17,614,097	3,764	174,902,640	\$17,614,097		\$17,614,097
180	1,598	141,762,340	\$9,452,824	1,598	141,762,340	\$9,268,892	141,762,340	\$9,268,892	1,598	141,762,340	\$9,268,892		\$9,268,892
200	12	12,778,728	\$290,918	12	12,778,728	\$290,918	12,778,728	\$290,918	12	12,778,728	\$290,918		\$290,918
201	12	10,278,984	\$185,022	12	10,278,984	\$185,022	10,278,984	\$185,022	12	10,278,984	\$185,022		\$185,022
202	12	105,438,138	\$316,314	12	105,438,138	\$316,314	105,438,138	\$316,314	12	105,438,138	\$316,314		\$316,314
Total	6,298,134	917,832,668	\$458,815,395	6,298,134	917,832,668	\$408,168,783	915,688,485	\$406,868,317	6,466,152	925,497,872	\$415,492,123	\$11,362,777	\$426,854,901
Other Revenue			\$3,413,176								\$3,413,176		\$3,413,176
Change in Unbilled			(\$23,196,840)										
Total		892,041,538	\$439,031,731								\$418,905,299		\$430,268,077
Total Adjustment to Revenue													<u><u>(\$8,763,654)</u></u>

WJ

I/A

Paton Exhibit 9

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
 DOCKET NO. G-5, SUB 565
 CUSTOMER USAGE TRACKER ADJUSTMENT MECHANISM
 BASE LOAD, HSF AND R FACTORS

DESCRIPTION	RATE SCHEDULE	RATE SCHEDULE	RATE SCHEDULE	RATE SCHEDULE	RATE SCHEDULE
	NO. 101 Residential	NO. 102 Residential	NO. 125 SGS	NO. 127 SGS	NO. 140 MGS
R _i Value (\$/Therm)	\$0.42180	\$0.37180	\$0.26915	\$0.21915	\$0.21255
Heat Sensitive Factor (Therms/HDD)	0.15726	0.13714	0.51516	2.56345	4.88742
Base Load Factor (Therms/Mo.)	7.23169	7.96191	91.48694	211.05024	1573.13935

Month	NDD
January	745.7430
February	613.4970
March	418.6840
April	173.9540
May	48.3910
June	0.7860
July	0.0270
August	0.0880
September	15.7650
October	180.2180
November	422.3200
December	631.4200
Total	<u>3,250.8930</u>

2/A

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
 PRO FORMA COST OF GAS
 FOR THE TEST YEAR ENDED DECEMBER 31, 2015
 DOCKET NO. G-5, SUB 565

PIPELINE	CONTRACT NUMBER	RATE SCHEDULE	MDTQ	DEMAND RATE	MONTHS/DAYS	AMOUNT	PIPELINE TOTAL
DTI	100035	FTNN	18,331	\$4.16190	12	915,501	
DTI	100103	FTNN	12,000	\$4.16190	12	599,314	
DTI	100051	FTNN	10,000	\$4.16190	12	499,428	
DTI	200085	FT	5,035	\$6.18990	12	373,994	
DTI	700013	FTNN-GSS	11,669	\$4.16190	5	242,826	
DTI	700036	FTNN-GSS	18,000	\$4.16190	5	374,571	3,005,634
TGT	8260	FT 1-4	5,272	\$0.26000	365	500,313	500,313
TRANSCO	1006505	FT, Zn 3-6	30	\$0.46266	365	5,066	
TRANSCO	1006505	FT, Zn 2-6	1,371	\$0.49216	365	246,284	
			1,401			251,350	251,350
TRANSCO	1002264	FT, Zn 1-5	385	\$0.43909	365	61,703	
TRANSCO	1002264	FT, Zn 2-5	566	\$0.42346	365	87,483	
TRANSCO	1002264	FT, Zn 3-5	1,313	\$0.39396	365	188,803	
			2,264			337,989	337,989
TRANSCO	1012381	FT, Zn 6-6	5,175	\$0.13090	365	247,254	247,254
TRANSCO	1012028	FT, Zn 4-5	44,627	\$0.34834	365	5,674,060	5,674,060
TRANSCO	9178381	FT, Zn 6-4	100,000	\$0.55549	365	20,275,385	20,275,385
						5,921,313	
TRANSCO	9103562	FT, Zn 3-5	20,000	\$0.35519	365	2,592,887	2,592,887
TRANSCO	9130053	FT, Zn 3-6	208	\$0.46266	365	35,125	
TRANSCO	9130053	FT, Zn 2-6	9,425	\$0.49216	365	1,693,092	
			9,633			1,728,217	1,728,217
TRANSCO	1003703	FT, Zn 1-5	27,906	\$0.43909	365	4,472,435	
TRANSCO	1003703	FT, Zn 2-5	41,037	\$0.42346	365	6,342,798	
TRANSCO	1003703	FT, Zn 3-5	95,208	\$0.39396	365	13,690,472	
			164,151			24,505,705	24,505,705
TRANSCO	1004190	FT, Zn 4-5	5,159	\$0.34834	90	161,738	
TRANSCO	1004190	FT, Zn 4-5	34,171	\$0.34834	90	1,071,281	
			39,330			1,233,019	1,233,019
TRANSCO	1004190	FT, Zn 4-5	4,643	\$0.34834	61	98,658	
TRANSCO	1004190	FT, Zn 4-5	30,754	\$0.34834	61	653,484	
			35,397			752,142	752,142
TRANSCO	1004996	FT, Zn 1-5	739	\$0.84669	90	56,313	
TRANSCO	1004996	FT, Zn 2-5	1,087	\$0.81701	90	79,910	
TRANSCO	1004996	FT, Zn 3-5	2,521	\$0.76099	90	172,679	
			4,347			308,901	308,901
COVE POINT		FTS	25,000	\$0.43880	12	131,640	131,640
CARDINAL	Expansion	Zone 2	50,000	\$0.11478	365	2,094,735	
CARDINAL	1031995	Zone 2	103,500	\$0.11478	365	4,336,101	
CARDINAL	1031994	Zone 1B	72,450	\$0.05316	365	1,405,776	7,836,613
COLUMBIA	49526	SST	35,335	\$5.96100	6	1,263,792	
COLUMBIA	49528	SST	17,667	\$5.96100	6	631,878	1,895,670
EAST TN PATRIOT	410097	FT-A	30,000	\$7.45200	12	2,682,720	2,682,720
EAST TN PATRIOT	410333	FT-A	20,000	\$9.67400	12	2,321,760	2,321,760
TEXAS EASTERN TRANSMISSION							
Compressor lease agreement				\$46,944	12	563,328	563,328
PIEDMONT Faith redelivery				\$760	12	9,120	9,120
TOTAL TRANSPORTATION							<u>\$76,853,706</u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
PRO FORMA COST OF GAS
FOR THE TEST YEAR ENDED DECEMBER 31, 2015
DOCKET NO. G-5, SUB 565

Paton Exhibit 10
Page 2 of 2

<u>FACILITY</u>	<u>RATE</u> <u>[\$/DT]</u>	<u>STORAGE</u> <u>QUANTITY</u>	<u>DAILY</u> <u>DEMAND</u>	<u>MONTHS/</u> <u>DAYS</u>	<u>AMOUNT</u>	<u>SERVICE</u> <u>TOTAL</u>
TRANSCO						
GSS						
DEMAND	\$0.10082		33,218	365	1,222,399	
CAPACITY	\$0.00053	1,835,944		365	355,163	1,577,563
WSS						
DEMAND	\$0.02198		29,416	365	235,996	
CAPACITY	\$0.00023	2,794,500		365	234,598	470,594
LNG						
DEMAND	\$0.03479		5,175	365	65,714	
CAPACITY	\$0.00670	25,875		365	63,277	128,991
ESS						
DEMAND	\$0.03510		37,717	365	483,211	
CAPACITY	\$0.00392	318,271		365	455,382	938,593
Emminence						
DEMAND	\$0.03510		38,545	365	493,819	
CAPACITY	\$0.00392	321,950		365	460,646	954,465
COLUMBIA FSS						
DEMAND	\$1.50100		35,335	12	636,454	
CAPACITY	\$0.02880	3,180,150		12	1,099,060	1,735,514
COVE POINT LNG						
RESV CHG - FPS-1	\$2.42300		25,000	12	726,900	726,900
DTI GSS						
DEMAND	\$1.86180		62,669	12	1,400,126	
CAPACITY	\$0.01450	3,856,000		12	670,944	2,071,070
PINE NEEDLE LNG						
RESV CHG	\$0.11690		103,500	365	4,416,190	4,416,190
SALTVILLE						
DEMAND	\$0.075083	600,000		12	540,600	
INJ RESERV	\$1.495000		13,333	12	239,194	
WD RESERV	\$0.751000		30,000	12	270,360	1,050,154
SALTVILLE - FSS						
DEMAND	\$0.138250	200,000		12	331,800	
INJ RESERV	\$3.322000		10,000	12	398,640	
WD RESERV	\$1.657000		20,000	12	397,680	1,128,120
TOTAL STORAGE						<u>\$15,198,154</u>
TOTAL DEMAND CHARGES						<u>\$92,051,860</u>
SALES VOLUMES		480,337,042	\$0.225			108,075,834
UNACCOUNTED FOR GAS		6,926,930	\$0.225			1,558,559
COMPANY USE GAS		870,521	\$0.225			195,867
PRO FORMA GAS COST						<u>201,882,120</u>
DEFERRED FIXED GAS COST, CO. USE & LAUF						<u>(24,764,376)</u>
TOTAL PRO FORMA GAS COST						<u>177,117,745</u>
PER BOOKS GAS COST						<u>191,239,574</u>
ADJUSTMENT TO GAS COST						<u>(\$14,121,829)</u>

I/A

Paton Exhibit 11

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED COMPANY USE AND LOST AND UNACCOUNTED FOR RATES

	Therms	\$/Therm	Amount	Throughput	\$/Therm
Unaccounted For Gas	6,926,930	\$0.2250	1,558,559	797,002,022	\$0.00196
Company Use Gas	870,521	\$0.2250	195,867	797,002,022	\$0.00025
			<u>\$1,754,426</u>		<u>\$0.00220</u>

Paton Exhibit 12

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 565
PROPOSED FIXED GAS COST APPORTIONMENT PERCENTAGES

RATE SCHEDULE	FIXED GAS COST APPORTIONMENT	PROFORMA FIXED GAS COST
Total	100.0000%	\$67,431,969 1/
101 & 102 & 115 - Summer	5.232%	\$3,527,941
101 & 102 & 115 - Winter	58.829%	\$39,669,812
125 & 127 -Step 1	16.490%	\$11,119,761
125 & 127 -Step 2	6.206%	\$4,184,913
125 & 127 -Step 3 & 126	0.096%	\$64,603
140	4.416%	\$2,977,625
145	2.497%	\$1,683,828
150 & 135	0.394%	\$265,866
175	3.258%	\$2,196,777
180	2.582%	\$1,740,842

1/ Proforma Fixed Gas Cost to be collected at current rates

I/A

PATON EXHIBIT 13

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 495
PROPOSED DECREMENTS TO REFUND EXCESS ADIT

	<u>TOTAL</u>	<u>RES</u>	<u>GS</u>	<u>LGS_FIRM</u>	<u>LGS_INT</u>
Operating Income	\$77,269,823	\$52,385,525	\$12,732,222	\$8,605,157	\$3,546,918
Percent	100.00%	67.80%	16.48%	11.14%	4.59%
Excess ADIT	\$7,305,529	\$4,952,826	\$1,203,777	\$813,581	\$335,346
Sales Volumes	797,002,022	295,407,799	150,492,763	202,384,732	148,716,728
Per Therm Decrement		(\$0.01677)	(\$0.00800)	(\$0.00402)	(\$0.00225)

L/M

Public Service Company of North Carolina
Docket No. G-5, Sub 565

RECONCILIATION OF GROSS REVENUE INCREASE REQUESTED BY THE COMPANY TO THE
SETTLEMENT AMOUNT
For The Test Year Ended December 31, 2015

Line No	Item	Amount
1	Increase in revenue requirement requested by the Company	<u>\$41,583,020</u>
	Settlement Adjustments	
2	Change in equity ratio from 53.75% to 52.00%	(1,614,203)
3	Change in cost of long-term debt from 5.66% to 5.52%	(593,475)
4	Change in cost of short-term debt from 0.82% to 0.77%	(16,056)
5	Change in return on equity from 10.60% to 9.70%	(7,125,357)
6	Plant in Service Updates and Related Items at June 30, 2016	51,324
7	Working Capital Updates at June 30, 2016	(158,131)
8	Update gas in storage through June 2016	(563,311)
9	Update materials and supplies through June 2016	91,901
10	ADIT - updated to June 30, 2016	174,724
11	Adjust working capital for lead lag to reflect Settlement adjustments	196,137
12	Adjustment to end of period revenue - weather, growth, and commodity costs	(1,457,266)
13	Adjustment to other operating revenues	(114,232)
14	Special Contract - remove PIS associated with facilities	(517,243)
15	Payroll and Related Expenses	(288,568)
16	Bonus accruals updated to actuals 6/30/16	(1,183,067)
17	Payroll Benefits Percentage - updated through June 30, 2016	(21,854)
18	Modify the allocation of incentive pay for certain executives to PSNC	(872,982)
19	Executive Compensation Adjustment	(280,405)
20	Remove retired executive compensation	(139,795)
21	Nonutility Adjustment - O&M expense	(262,228)
22	Nonutility Adjustment - effect of change in plant additions	(24,508)
23	Inflation Adjustment - removed certain expenses and updated rate to 2.2%	450,911
24	Rate Case Expenses - updated through June 30, 2016 w/ 5 yr amortization	(77,327)
25	Postage Adjustment - excluded growth since adjusted elsewhere & removed adv	(145,282)
26	Uncollectibles - changes in revenue	(22,533)
27	Regulatory Fee - change for 0.148% to 0.14% per Commission Order	(34,439)
28	MGP Costs - update actual expenses @ 6/30/16	(887,970) [1]
29	PIM Costs - update actual expenses @ 6/30/16	(1,651,192) [1]
30	DIMP Costs - deferral	(1,706,430) [1]
31	SalesForce Adjustment - ongoing level	(37,532)
32	Advertising - remove promotional, image, competitive, & non-recurring	(678,559)
33	Update Interest on Customer Deposits through June 2016	(11,382)
34	Service Company Charges - removed unsupported budgeted charges	(3,228,865)
35	Update GTI to June 2016 actual meters	(6,394)
36	Fuel Costs - adjust to test year fuel costs	(117,471)
37	Adjustment to remove lobbying expenses	(168,417)
38	Change in retention factor - regulatory fee changes	(3,332)
39	Adjust cash working capital for revenue impact of Settlement adjustments	(150,481)
40	Rounding	43
41	Settlement Adjustments	<u>(23,195,245)</u>
42	Recommended Change in Margin	\$18,387,775
43	Fixed Gas Cost Adjustment	643,643
44	LAUF Rate Change	<u>22,742</u>
45	Recommended Change in Revenue Requirement per Settlement	<u>\$19,054,160</u>

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Aug 29 2016

J/11

Paton Supplemental Exhibit 2

Public Service Company of North Carolina, Inc.
Docket No. G-5, Sub 565
Revised MGP, PIM & DIMP Amortizations

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Aug 29 2016

	<u>MGP</u>		<u>PIM</u>		<u>DIMP</u>		<u>Total</u>
1 Balance @ 6/30/16	\$6,848,729	[1]	\$20,309,785	[2]	\$1,501,093	[3]	\$28,659,607
2 Years	5		5		5		5
3 Annual amortization	<u>1,369,746</u>		<u>4,061,957</u>		<u>300,219</u>		<u>5,731,921</u>
4 MGP as filed	2,254,255	[4]					2,254,255
5 PIM as filed			5,706,715	[5]			5,706,715
6 DIMP as filed					2,000,000	[6]	2,000,000
7 Total	<u>2,254,255</u>		<u>5,706,715</u>		<u>2,000,000</u>		<u>9,960,970</u>
8 Adjustment	<u>(\$884,509)</u>		<u>(\$1,644,758)</u>		<u>(\$1,699,781)</u>		<u>(\$4,229,049)</u>
9 Revenue requirement	<u>(\$887,970)</u>		<u>(\$1,651,192)</u>		<u>(\$1,706,430)</u>		<u>(\$4,245,592)</u> [7]

- [1] Boswell Exhibit 1, Schedule 3-13, Line 2 plus Line 3
- [2] Boswell Exhibit 1, Schedule 3-12, Line 2 plus Line 3
- [3] Boswell Exhibit 1, Schedule 3-14, Line 3
- [4] Docket No. G-5, Sub 565, N.C.U.C. Form G-1, Item 4, Workpaper 3-I, Line 7
- [5] Docket No. G-5, Sub 565, N.C.U.C. Form G-1, Item 4, Workpaper 3-K, Line 7
- [6] Docket No. G-5, Sub 565, N.C.U.C. Form G-1, Item 4, Workpaper 3-P
- [7] Line 8 ÷ .9961035

Revenue for the Proposed Weighted Rate of Return in the Stipulation

	<u>Rate of Return</u>	<u>Cap Structure</u>	<u>Weighted Rate of Return</u>	<u>Rate Base</u>	<u>Net Operating Income</u>
LT Debt	5.52%	44.62%	2.46%		\$ 23,317,996
ST Debt	0.77%	3.38%	0.03%		\$ 246,394
Equity	9.70%	52.00%	5.04%		\$ 47,752,670
Overall ROR	7.53%	100.00%	7.53%	\$ 946,722,235	\$ 71,317,059

See Amended Stipulation Exhibit A p 1 for settlement ratebase after increase; Boswell Exhibit 1 Sch 5(a)
for settlement capital structure, cost rates, retention factor

RATE OF RETURN INCLUDING TAXES AND OTHER GROSS UP

	<u>Rate of Return</u>	<u>Gross up</u>	<u>Rate of Return With Gross Up</u>
LT Debt	5.52%	0.9961035	5.54%
ST Debt	0.77%	0.9961035	0.77%
Equity	9.70%	0.6215686	15.61%
Overall ROR	7.53%		

See Paton Rebuttal Exhibit 1 Schedules 3 and 4

COMPARISON OF INCREASE TO REVENUE REQUIREMENT - 9.7% ROE and 45% Equity

Dkt G-5, Sub 565

PSNC 2016 general rate case

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	99.61035%	5.54%	44.62%	2.46%	2.47%		\$ 23,317,996	\$ 23,409,210
Paton Sch 3-4	ST Debt	99.61035%	0.77%	3.38%	0.03%	0.03%		\$ 246,394	\$ 247,358
	Equity	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

45% Equity cap structure	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%	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)
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Notes

See Amended Stipulation Exhibit A p 1 for settlement ratebase after increase; Boswell Exhibit 1 Sch 5(a) for settlement capital structure, cost rates, retention factor

I/A

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 495
END OF PERIOD NET INVESTMENT
December 31, 2015

Plant and properties (Page 3)	\$1,713,468,230
Accumulated depreciation (Boone Exhibit No. 2)	(646,571,744)
Working capital (Boone Exhibit No. 4)	9,589,070
Deferred income taxes (G-1, Item 17c)	<u>(233,850,955)</u>
Total end of period net investment	<u><u>\$842,634,601</u></u>

PSNC Energy
Plants and Properties at Original Cost
For Test Year Ended December 31, 2015

Utility Plant Account	Utility Plant in Service (1180210+1180260)
Gas Intangible Plant: 1180210 + 1180260	
4020 - Gas Franchises and Consents	\$3,512.44
4021 - Franchises FPC - Non-Depr	\$196,307.55
4030 - Miscellaneous Intangible Gas	\$137,003.40
4032 - Misc Intangible Midland Stat	\$166,316.74
Total Intangible Plant	\$503,140.13
Liquified Natural Gas Storage Plant: 1180210 + 1180260	
4600 - LNG Land and Land Rights-Gas	\$819,328.67
4610 - LNG Structures&Improvements	\$4,585,696.64
4620 - LNG Gas holders - Gas	\$6,783,413.08
4630 - LNG Purification Equipment Gas	\$3,154,850.33
4631 - LNG Liquefaction Equipment-Gas	\$2,400,999.75
4632 - LNG Vaporizing Equipment - Gas	\$4,021,139.87
4633 - LNG Compressor Equipment-Gas	\$2,044,318.69
4634 - LNG Measuring/Reg Equip - Gas	\$107,998.85
4635 - LNG Other Equipment - Gas	\$421,723.42
Total Storage Plant	\$24,339,469.30
Gas Transmission Plant: 1180210 + 1180260	
4652 - Gas Transmission Land Rights	\$11,985,683.90
4653 - Gas Land-Compressor Stations	\$369,331.32
4654 - Gas Land-Take-Off Station	\$631,593.87
4655 - Gas Land-M & R Station	\$412,686.28
4656 - Gas Land-Regulating Station	\$626,017.47
4657 - Gas Land-Main Line Station	\$0.00
4658 - Gas Land - Farm Tap	\$7,457.16
4659 - Gas Land - Transmission Main	\$0.00
4663 - Stru & Imp Gas-Compress Stat	\$6,119,943.59
4664 - Stru & Impr Gas- Take-Off St	\$1,689,900.08
4665 - Stru & Impr Gas- M & R Stat	\$105,619.57
4666 - Stru & Impr Gas- Reg Station	\$129,346.39
4667 - Stru & Impr Gas- Main Line	\$0.00
4668 - Stru & Impr Gas- Farm Taps	\$7,053.35
4670 - Transmission Mains Gas	\$173,492,122.27
4680 - Compressor Station Equip Gas	\$35,107,195.62
4694 - Take-Off Station Equip Gas	\$10,879,992.22
4695 - M & R Station Equip Gas	\$5,093,197.98
4696 - Regulating Station Equip Gas	\$5,668,954.75
4697 - Main Line Industrial Equip Gas	\$72,342.10
4698 - Farm Tap Equipment Gas	\$4,792,296.76
4700 - Communication Eq Gas Trans	\$1,422,710.19
Total Transmission Plant	\$258,613,444.87
Gas Distribution Plant: 1180210 + 1180260	
4741 - Gas Distribution Land Owned	\$8,690,975.11
4742 - Gas Distribution Land Rights	\$847,371.99
4750 - Gas Distrib Str & Impr MAJOR	\$38,324,036.25

PSNC Energy
Plants and Properties at Original Cost
For Test Year Ended December 31, 2015

<u>Utility Plant Account</u>	<u>Utility Plant in Service (1180210+1180260)</u>
4751 - PSNC OTHER Str & Imp Nov 1 06	\$1,002,499.79
4761 - Gas Plastic Distrib Main	\$448,317,025.19
4762 - Gas Cast Iron Distrib Main	\$0.00
4763 - Gas Steel Distribution Main	\$321,161,853.40
4781 - District Regulating Equip Gas	\$15,801,387.76
4801 - Gas Services - PlasticPSNC	\$324,185,024.46
4802 - Gas Services - Steel PSNC	\$28,706,676.00
4810 - Gas Meters Distribution	\$67,108,070.71
4811 - ERTforPSNC	\$34,718,598.19
4820 - Gas Meter InstallationsPSNC	\$36,184,685.87
4850 - Industrial M&R Equip-GasPSNC	\$16,608,324.70
4860 - Other Propty-Cust Prem - Gas	\$0.00
4870 - Other Equipment	\$4,078,959.01
Total Distribution Plant	\$1,345,735,488.43
<hr/>	
Gas General Plant: 1180210 + 1180260	
4891 - Gas General Land Owned	233,440.27
4900 - Structures & Improvmis - Gas	6,574,541.46
4903 - Gas Energy Equipment	0.00
4911 - Office Furn & Equip, Gas	5,769,060.35
4912 - Info Sys (EDP) Equip, Gas	0.00
4914 - Not Valid-PSNC Software	0.00
4915 - Vintage Computer Equipment	2,967,511.07
4916 - Vintage Remote Meter Reading	5,527,053.65
4917 - PSNC Software Balance 10 31 06	0.00
4918 - PSNC Software - Eff Nov 1 06	5,229,388.08
4921 - Automobiles, Gas	122,479.12
4924 - Trucks	29,789,710.33
4927 - Trailers, Gas	1,682,156.79
4930 - Stores Equipment, Gas	286,788.02
4940 - Tools, Shop&Garage Eq - Gas	957,142.14
4945 - CNG Refuel Stat Bal 10 31 2006	123,478.20
4946 - NonSpec Tools/Shop/Gar - Gas	3,187,426.79
4947 - CNG Refuel Eff Nov 1 2006	6,505,768.56
4950 - Laboratory Equipment - Gas	0.00
4960 - Power Operated Equipmnt, Gas	8,858,861.33
4961 - NonSpecific Vintage POE-Gas	525,621.64
4970 - Communication Equipment, Gas	5,805,987.08
4971 - Radio Towers - Gas	288,019.91
4980 - Miscellaneous Equipment, Gas	(184,252 52)
4981 - Energy Audit Equipment	26,504.86
Total General Plant	\$84,276,687.13
<hr/>	
Total Utility Plant in Service: 1180210 + 1180260	\$1,713,468,229.86

I/A

PSNC ENERGY
Docket G-5, Sub 565
DEPRECIATION AND AMORTIZATION
Schedule Showing Accumulated Depreciation and Amortization Balances
Annual Rates and Methods of Computing Amounts

A	B	C
Account Title	Accumulated Depreciation or Amortization (12/31/2015)	Straight- Line Annual Rate %
1 PSNC INTANGIBLE PLANT 1190001		
PSNC 4020 Franchise & Consents	\$2,679 36	non-depr
PSNC 4021 Franchises FPC Non-Depr	\$0 00	non-depr
PSNC 4030 Misc Intangible	\$84,939 87	2.50%
PSNC 4032 Midland Station	\$51,795 39	3 20%
Total Intangible Plant	\$139,414.62	
2 PSNC STORAGE PLANT 1190270		
PSNC 4610 Structures & Improvements	\$2,487,255 84	0.87%
PSNC 4620 Gas Holders	\$6,069,047 58	1 55%
PSNC 4621 Nat Gas Holders Non-Depr	\$0 00	non-depr
PSNC 4630 Purifaction Equipment	\$877,343.61	4 75%
PSNC 4631 Liquefaction Equipment	\$1,266,523.90	1 34%
PSNC 4632 Vaporizing Eq Non-Depr	\$3,558,832.59	0 77%
PSNC 4633 Compressor Equipment	\$1,811,692 97	6 33%
PSNC 4634 M & R Equipment	\$101,879 82	0 48%
PSNC 4635 Other Equipment	\$327,784 86	0.98%
Total Storage Plant	\$16,500,361.17	
3 PSNC TRANSMISSION PLANT 1190270		
PSNC 4652 Rights-of-Way	\$1,663,491.68	0 98%
PSNC 4663 Str & Imp Compressor Stat	\$135,775.96	1 02%
PSNC 4664 Str & Impr City Gate	\$111,235 11	1 67%
PSNC 4665 Str & Impr M & R Station	(\$232,803.86)	0.10%
PSNC 4666 Str & Impr Reg Station	\$8,014 83	1 03%
PSNC 4667 Str & Impr Main Line	(\$408 07)	0 25%
PSNC 4668 Str & Impr Farm Taps	\$20.03	2.64%
PSNC 4670 Transmission Mains	\$36,934,154 58	1.35%
PSNC 4680 Compressor Equipment	\$4,964,510 52	1.75%
PSNC 4694 City Gate Station Equip	\$2,015,848 58	4 32%
PSNC 4695 M & R Station Equip	\$1,629,248 24	2 29%
PSNC 4696 Regulating Station Equip	\$1,130,492 09	3.28%
PSNC 4697 Main Line Industrial Stat	(\$222,216 01)	3 06%
PSNC 4698 Farm Tap Equip	\$1,741,035 41	6.47%
PSNC 4700 Telemetering Equipment	\$350,965 73	5.17%
Total Transmission Plant	\$50,229,364.82	
4 PSNC DISTRIBUTION PLANT 1190270		
PSNC 4742 Land Rights	\$106,378.32	1 53%
PSNC 4750 Structures & Equipment Major	\$9,472,460.35	2 43%
PSNC 4751 Structures & Equipment Other	\$169,650.55	0 88%
PSNC 4761 Plastic Distribution Main	\$148,756,532 95	2.68%

PSNC ENERGY
Docket G-5, Sub 565
DEPRECIATION AND AMORTIZATION
Schedule Showing Accumulated Depreciation and Amortization Balances
Annual Rates and Methods of Computing Amounts

A	B	C
Account Title	Accumulated Depreciation or Amortization (12/31/2015)	Straight- Line Annual Rate %
PSNC 4762 Cast Iron Distrn Main	\$0 00	3 59%
PSNC 4763 Steel Distribution Main	\$141,482,757 89	2 75%
PSNC 4781 District Regulator	\$8,436,740 20	8 92%
PSNC 4801 Plastic Services	\$162,169,268.24	3.97%
PSNC 4802 Steel Services	\$29,200,882.86	2 73%
PSNC 4810 Meters & Regulators	\$22,589,076 26	1.93%
PSNC 4811 ERT	\$18,521,506.26	6 72%
PSNC 4820 Meter Installations	\$13,886,753 40	1 65%
PSNC 4850 Industrial M & R Install	\$6,421,665 79	2.14%
PSNC 4870 Other Distribution Equip	\$942,177 72	3 98%
Total Distribution Plant	\$562,155,850.79	
 5 PSNC GENERAL PLANT 1190270		
PSNC 4900 Structures & Improvements	\$1,744,524 23	2 18%
PSNC 4911 Office Furniture & Equip	\$3,030,787 76	4 74%
PSNC 4915 Non-Spec Computer Eq	(\$258,106 31)	13 84%
PSNC 4916 Remote Meter Read-Metretk	\$877,822 95	6 73%
PSNC 4917 Software Balance 10/31/2006	\$0 00	37.45%
PSNC 4918 Software Effective 11/1/2006	\$2,286,115.63	20 00%
PSNC 4921 Automobile Amortization	\$146,563.33	16.00%
PSNC 4924 - Trucks Amortization	\$995,580.82	0 39%
PSNC 4927 - Trailer Amortization	\$523,930.78	0 39%
PSNC 4930 Stores Equipment	\$231,109.55	4 09%
PSNC 4940 Tools/ Shop/Garage Eq	\$105,026 73	7 81%
PSNC 4945 CNG Refueling Stations	\$210,216 70	16 41%
PSNC 4946 Vintage Tools/Shop/Gar	\$1,308,635 34	3 35%
PSNC 4947 CNG Refuel Sta Eff Nov 06	\$764,399.42	6 67%
PSNC 4950 Laboratory Equipment	(\$535 77)	5 40%
PSNC 4960 Specific POE	\$3,323,735 88	5 07%
PSNC 4961 Non-Specific POE	(\$26,699 34)	4 05%
PSNC 4970 Communication Equipment	\$2,328,760 77	8 18%
PSNC 4971 Radio Towers	\$201,011 21	7.36%
PSNC 4980 Miscellaneous Equipment	(\$246,602 50)	0.32%
PSNC 4981 Energy Audit Equipment	\$475.50	0 32%
Total General Plant	\$17,546,752.68	
 Total Accumulated Depreciation	 \$646,571,744.08	

PSNC ENERGY
Docket G-5, Sub 565
DEPRECIATION AND AMORTIZATION
Schedule Showing Accumulated Depreciation and Amortization Balances
Annual Rates and Methods of Computing Amounts

	A	B		C
Account Title		Accumulated Depreciation or Amortization (12/31/2015)		Straight- Line Annual Rate %

Method Used: The Company Provides for depreciation on a straight-line remaining life basis by the application of specific rates to the various depreciable property accounts. The current rates have been approved by the North Carolina Utilities Commission. Depreciation amounts for transportation, stores and power operated equipment are charged to clearing accounts and allocated to operating expenses, construction and other accounts on the basis of the use of such equipment. Franchises and consents are amortized over their life.

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 495
MATERIALS AND SUPPLIES

<u>Line No.</u>		<u>Balance 12/31/2015</u>	<u>Thirteen Month Average for the Period Ended 12/31/2015</u>
1	Materials and supplies	<u>\$9,436,890</u>	<u>\$9,465,900</u>
2	Natural gas in storage	<u>41,562,854</u>	<u>38,067,356</u>
3	Total	<u><u>\$50,999,744</u></u>	<u><u>\$47,533,255</u></u>

Boone Exhibit 4

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
FOR THE TEST YEAR ENDED DECEMBER 31, 2015

WORKING CAPITAL

Per lead-lag study	\$	12,042,294
Average materials and supplies (Boone Exhibit 3)		\$9,465,900
Average gas inventories (Boone Exhibit 3)		38,067,356
Average interest on deposits		(185,385)
Average customer deposits		(8,295,675)
Average prepayments		968,023
Average accrued vacation liability - PTO		(582,236)
Average accrued state sales taxes		(712,278)
Average deferred credit Treasury A account		(324,842)
Average deferred Salesforce Cloud License Fees		18,358
Cost-free capital - Transco refunds		(258,000)
Cost-free capital - postretirement benefits other than pensions (FASB 106)		(24,423,034)
Cost-free capital - Pension Accrual		(15,925,419)
Cost-free capital - LT Disability SFAS112		(265,991)
Total working capital		<u>\$9,589,070</u>

F/A

Boone Exhibit 5

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.
DOCKET NO. G-5, SUB 495
STATEMENT OF NET OPERATING INCOME FOR RETURN

	Twelve Months Ended <u>December 31, 2015</u>
Operating Revenues	
Gas Sales	\$ 407,727,910
Transportation	27,890,647
Other operating revenues	<u>3,413,176</u>
Total operating revenues	439,031,733
Operating Expenses	
Purchased gas	191,239,574
Operating and maintenance	92,766,693
Depreciation	49,622,105
Taxes other than income	12,433,363
State income taxes	2,341,083
Federal income taxes	<u>24,530,439</u>
Total operating expenses	<u>372,933,257</u>
Net operating income for return	<u><u>\$ 66,098,476</u></u>

I/A

Public Service Company of North Carolina Incorporated
Net Operating Income for Return and Rates of Return
For the Test Year Ended December 31 2015

Line No		Twelve	Adjustments	After Adjustments	Interest Synchronization	After	Adjustments For Proposed Revenues	After Adjustments For Proposed Changes
		Months Ended 12/31/2015				Interest Synchronization		
		(1)	(2)	(3)		(4)	(5)	
Operating Revenues								
1	Gas Sales and Transportation	435 618 557	(8 763 654)	(1)	426 854 903		41 306 445 (12)	468 161 348
2	Other Operating Revenues	3 413 176	0		3 413 176		276 576 (12 1)	3 689 752
3	Total Operating Revenues	439 031 733	(8 763 654)		430 268 079	430 268 079	41 583 021	471 851 100
Operating Expenses								
4	Purchased Gas	191 239 574	(14 121 829)	(2)	177 117 745	177 117 745	0	177 117 744 72
5	Operating and Maintenance	92 766 693	20 134 370	(3)	112 901 063	112 901 063	165 347 (13)	113 066 409 51
6	Depreciation	49 622 105	6 874 626	(4)	56 496 731	56 496 731	0	56 496 730 61
7	General Taxes	12 433 363	3 026 690	(5)	15 460 053	15 460 053	0	15 460 052 89
8	State Income Taxes Current	967 644	(1 555 260)	(6)	(587 616)	(2 958) (590 574)	1 656 707 (14)	1 066 133 12
9	State Income Taxes Deferred	1 373 439	1 011 528	(6 1)	2 384 967	2 384 967	0	2 384 967 00
10	Federal Income Taxes Current	860 242	(20 686 887)	(7)	(19 826 645)	(24 846) (19 851 491)	13 916 338 (15)	(5 935 153 19)
11	Federal Income Taxes Deferred	23 670 197	11 254 193	(7 1)	34 924 390	34 924 390	0	34 924 390 00
12	Total Operating Expenses	372 933 257	5 937 430		378 870 687	(27 804) 378 842 883	15 738 392	394 581 275
13	Net Operating Income	66 098 476	(14 701 084)		51 397 392	27 804	25 844 629	77 269 825
14	Other Adjustments	0	0		0		0	0
15	Net Operating Income for Return	66 098 476	(14 701 084)		51 397 392	27 804	25 844 629	77 269 825
End of Period Net Investment								
16	Utility Plant	1 713 468 230	141 475 409	(8)	1 854 943 639		0	1 854 943 639
17	Accumulated Depreciation	(646 571 744)	(24 928 361)	(9)	(671 500 105)		0	(671 500 105)
18	Construction Work in Progress	0	0		0		0	0
19	Working Capital Other	(2 453 224)	567 312	(10)	(1 885 912)		0	(1 885 912)
20	Working Capital Lead lag	12 042 294	2 032 677	(10 1)	10 009 617		2 995 871 (16)	13 005 488
21	Deferred Income Taxes	(233 850 955)	(11 370 696)	(11)	(245 221 651)		0	(245 221 651)
22	End of Period Net Investment	842 634,601	107 776 342		946 345 589		2 995 871	949 341 460
23	Rates of Return	7 84%			5 43%			8 14%

STATEMENT SHOWING RATES OF RETURN
FOR THE TEST YEAR ENDED DECEMBER 31, 2015
AFTER ACCOUNTING AND PRO FORMA ADJUSTMENTS

Line No		Per Books Capital Structure (1)	Accounting and Proforma Adjustments (2)	Adjusted Capitalization (3)	Ratio (4)	Cost of Net Investment (5)	Embedded Cost/Return (6)	Overall Cost Rate (7)	Net Operating Income (8)
1	Long-term Debt	350,000,000	100,000,000	450,000,000	43.12%	408,065,377	5.66%	2.44%	23,096,500
2	Short-term Debt	22,632,000	12,677,004	35,309,004	3.38%	31,986,572	0.82%	0.03%	262,290
3	Common Equity	538,019,000	20,162,000	558,181,000	53.50%	506,296,328	5.54%	2.96%	28,068,407
4	Total Capitalization	910,651,000	132,839,004	1,043,490,004	100.00%	946,348,277		5.43%	51,425,197

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC
STATEMENT SHOWING RATES OF RETURN
FOR THE TEST YEAR ENDED DECEMBER 31, 2015
AFTER ADJUSTMENTS FOR PROPOSED RATES

Line No		Cost of Net Investment	Embedded Cost/Return	Overall Cost Rate	Net Operating Income
1	Long-term Debt	409,356,037	5.66%	2.44%	23,169,552
2	Short-term Debt	32,087,741	0.82%	0.03%	263,119
3	Common Equity	507,897,882	10.60%	5.67%	53,837,154
4	Total Capitalization	949,341,460		8.14%	77,269,825

Line No		Retention Factor	Pre-tax ROR Gross Rev Factor	Tax Factor	Net of Tax Weighted Cost
5	Long-term Debt	0.996023700	2.45%	0.624	1.53%
6	Short-term Debt	0.996023700	0.03%	0.624	0.02%
7	Common Equity	0.621518790	9.09%	0.624	5.67%
8	Total Capitalization		11.57%		7.22%

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC
DETAIL OF ACCOUNTING AND PRO FORMA ADJUSTMENTS

Workpaper
Reference

<u>1 Gas Sales and Transportation Revenues</u>		
Increase gas sales and transportation revenues based on sales quantities and amounts as shown on Paton Exhibit 3	(1) <u>(8,763,654)</u>	1
<u>2 Purchased Gas</u>		
Increase to annualize on end-of-period rates	(2) <u>(14,121,829)</u>	2
<u>3 Operating and Maintenance</u>		
Adjustments to reflect		
A Increased wages (SCANA Services \$294,185)	2,551,385	3-A
B Interest on customer deposits as an operating expense	581,096	3-B
C Regulatory fees decreased for revenue adjustments	(25,482)	3-C
D Increased pension cost	380,477	3-D
E Postretirement costs other than pension decrease	(136,967)	3-E
F Increased 401K expenses and other misc employee benefits	186,594	3-F
G Uncollectibles cost adjustment	196,602	3-G
H Customer accounts expense increase for customer growth	22,304	3-H
I Manufactured gas plant amortization	2,254,255	3-I
J Rate case expense amortization	139,433	3-J
K Transmission pipeline integrity management amortization	5,706,715	3-K
L Inflation adjustment to non-adjusted O&M expenses	155,349	3-L
M Increase SCANA Services chargebacks to the going level	3,216,283	3-M
N Decrease O&M for non-utility allocation	(40,019)	3-N
O Remove CNG excise tax credit	261,017	3-O
P DIMP (Distribution Integrity Management)	1,519,116	3-P
Q Increase in postage	(32,366)	3-Q
R Salesforce amortization	(128,685)	3-R
S Increase expenses for incentive plans	2,437,300	3-S
T Increase in fuel cost of company fleet	378,218	3-T
U Decrease in Employee Mileage Expense	(30,751)	3-U
V Remove LTD medical credit	197,495	3-V
W Gas Technology Institute (GTI) dues	275,000	3-W
X Groundwater monitoring (MGP)	70,000	3-X
	(3) <u>20,134,370</u>	
<u>4 Depreciation Expense</u>		
Increase to reflect depreciation on end of period plant	1,876,942	4-A
Allocation to nonutility on projected June 2016 balance	(325,350)	4-B
Increase to give effect to estimated net plant additions - current rates	3,144,124	4-C
Increase for proposed depreciation rates on 6/16 plant	2,050,689	4-D
Increase to reflect depreciation on end of period Scana Services plant allocated to PSNC	29,457	4-E
Increase to give effect to estimated Scana Services net plant additions	98,764	4-F
	(4) <u>6,874,626</u>	

<u>5 General Taxes</u>			
Property taxes increased for increase in plant		1,221,955	5-A
Franchise tax not in test year		1,609,044	5-B
FICA increase due to wage increase		195,691	3-A
	(5)	<u>3,026,690</u>	
<u>6 State Income Taxes - Current</u>			
State income taxes normalized for proforma adjustments	(6)	<u>(1,558,218)</u>	
<u>6.1 State Income Taxes - Deferred</u>			
Deferred income tax provision between 1/1/16 and 6/30/16	(6 1)	<u>1,011,528</u>	
<u>7 Federal Income Taxes</u>			
Federal income taxes normalized for proforma adjustments	(7)	<u>(20,711,734)</u>	
<u>7 1 Federal Income Taxes - Deferred</u>			
Deferred income tax provision between 1/1/16 and 6/30/16	(7 1)	<u>11,254,193</u>	
<u>8 Utility Plant</u>			
Estimated net plant additions thru June 30, 2016		147,369,966	4-C
Allocation to nonutility		(5,894,558)	4-B
	(8)	<u>141,475,409</u>	
<u>9 Accumulated Depreciation</u>			
Estimated increase to the reserve between test year and June 30, 2016		(26,182,778)	10
Decrease for nonutility		1,254,417	4-B
	(9)	<u>(24,928,361)</u>	
<u>10 Working Capital</u>			
Increase for a reduction in expenses related to the postretirement liability		136,967	3-E
Increase to prepayments for 2016 franchise tax not in test year		430,345	5-B
	(10)	<u>567,312</u>	
<u>10 Working Capital - Lead Lag</u>			
Increase in lead lag for proforma adjustments	(10 1)	<u>(2,029,989)</u>	
<u>11 Deferred Income Taxes</u>			
Estimated increase between test year and June 30, 2016		(12,265,721)	11
Allocated to nonutility		895,026	4-B
	(11)	<u>(11,370,696)</u>	
<u>12 Gas Sales and Transportation Revenues</u>			
Increase in revenues following adjustments	(12)	<u>41,306,444</u>	
<u>12 1 Other Operating Revenues</u>			
Increase reconnect fees	(12 1)	<u>276,576</u>	12 1
<u>13 Operating and Maintenance</u>			
Increase in regulatory fees following increase in revenues	(13)	<u>165,347</u>	
<u>14 State Income Taxes</u>			
Increase for effect of previous adjustments	(14)	<u>1,656,707</u>	
<u>15 Federal Income Taxes</u>			
Increase for effect of previous adjustments	(15)	<u>13,916,338</u>	

16 <u>Working Capital - Lead Lag</u>	
Increase in lead lag following increases in revenues	(16) <u><u>2,993,183</u></u>

Public Service Company of North Carolina, Inc
Unconsolidated Balance Sheet
December 31, 2015

Assets and Other Debits	
Gas Utility Plant	1,729,729,703
Less Accum Deprec & Amortization	<u>(649,748,076)</u>
Total	1,079,981,627
Construction Work In Progress	54,000,837
Acquisition Adj, Net	<u>209,823,656</u>
Utility Plant, Net	1,343,806,120
Other Property and Investments	
Investments and Advances to Subsidiaries	12,235,802
Other Investments	<u>6,875</u>
Total Other Prop & Investments	12,242,677
Current Assets	
Cash, Temp Inv & Special Deposits	1,182,032
Accounts Receivable-Customers	60,548,940
Accounts Receivable-Other	3,409,576
Allow for Uncoll Accounts	(631,745)
Accounts Receivable-Associated Co	1,343,000
Inventories-Fuel	41,562,854
Inventories-Material & Supplies	10,820,619
Prepayments	1,559,417
Interest & Dividends Receivable	-
Miscellaneous Current Assets	<u>698,330</u>
Total Current Assets	120,493,023
Deferred Debits	
Environmental	6,904,622
Unamortized Debt Expense	623,429
Other Regulatory Assets	105,771,575
Clearing Accounts	-
Misc Deferred Debits	1,480,224
Due from Affiliates - Employee Benefits	59,371
Accum Deferred Income Taxes	<u>28,922,800</u>
Total Deferred Debits	143,762,021
Total Assets and Other Debits	<u><u>1,620,303,841</u></u>
Liabilities and Other Credits	
Stockholders' Investment	
Common Stock	1,000
Other Paid in Capital	634,680,696
Retained Earnings	119,165,074
Accumulated Other Comprehensive Income	<u>(1,333,357)</u>
Total Common Equity	752,513,413
Long-Term Debt	
Other Long-Term Debt	350,575,062
Contra-Current Portion Other LTD	<u>(575,062)</u>
Long-Term Debt, Net	350,000,000
Total Capitalization	1,102,513,413
Current Liabilities	
Notes Payable	73,819,000
Accounts Payable	23,198,452
Accounts Payable-Associated Co	7,147,421
Customer Deposits	8,282,424
Total Current Portion of LTD	575,062
Taxes Accrued-Federal Income	(15,101,798)
Taxes Accrued-State Income	(113,005)
Taxes Accrued-Other	278,766
Interest Accrued-LTD	5,973,001
Interest Accrued-Other	230,119
Dividends Declared	7,400,000
Tax Collections Payable	484,184
Miscellaneous Current Liabilities	<u>15,409,893</u>
Total Current Liabilities	127,581,519
Deferred Credits	
Accum Deferred Income Taxes	261,992,700
Other Regulatory Liabilities	17,073,626
Due to Affiliates - Employee Benefits	73,548,052
Other Asset Retirement Obligations	31,832,832
Other Deferred Credits	<u>5,761,700</u>
Total Deferred Credits	390,208,909
Total Liabilities and Other Credits	<u><u>1,620,303,841</u></u>

Public Service Company of North Carolina, Inc.
Income Statement
Twelve Months Ended December 31, 2015

	<u>2015</u>
Operating Revenues	
Gas-Regulated	439,031,733
Total Operating Revenues	<u>439,031,733</u>
Operating Expenses	
Gas for Resale-Regulated	191,239,574
Operating Expense Other	85,311,549
Maintenance Expense	7,455,144
Deprec and Amort Exp	49,622,105
Taxes Other than Income Tax	12,433,363
State Income Taxes	2,341,083
Federal Income Taxes	24,530,439
Total Operating Expenses	<u>372,933,257</u>
Net Operating Income	66,098,476
Other Income	
Subsidiary Equity Earnings, net	2,398,599
Allowance for Equity Funds	2,077,196
Gain/Loss on Sale of Assets	127,337
Other Revenues	22,870,461
Other Expenses	(12,688,277)
Income Tax on Other Income	(4,111,868)
Total Other Income	<u>10,673,448</u>
Income Before Interest Charges	76,771,924
Interest Charges	
Interest on Long-Term Debt	20,679,571
Amort of Debt Disc and Expense	72,158
Interest on Debt to Assoc Co	1,020,359
Other Interest Expense	1,542,624
Allowance for Borrowed Funds	(632,108)
Total Interest Charges	<u>22,682,604</u>
Net Income	<u><u>54,089,320</u></u>

1/A

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)
of North Carolina, Inc. for a General) APPLICATION
Increase in its Rates and Charges)

Pursuant to Sections 62-133, 62-133.7A, 62-134, and 62-135 of the North Carolina General Statutes (“N.C. Gen. Stat.”) and Rule R1-17 of the North Carolina Utilities Commission’s (“Commission”) rules and regulations, Public Service Company of North Carolina, Inc., d/b/a PSNC Energy (“PSNC” or the “Company”), respectfully makes this Application for authority to adjust and increase its retail natural gas rates and charges and for other relief as set forth below. In support of this Application, PSNC respectfully shows the Commission the following:

1. The Company’s principal office and place of business is located at 800 Gaston Road, Gastonia, North Carolina 28056. The post office address for the Company is P.O. Box 1398, Gastonia, North Carolina, 28053-1398.

2. The attorneys for the Company are:

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3. Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

4. PSNC is a corporation duly organized and existing under the laws of the State of South Carolina, having its principal office and place of business in Gastonia, North Carolina. PSNC is a wholly owned subsidiary of SCANA Corporation (“SCANA”), a South Carolina holding company. PSNC is a public utility under the laws of North Carolina and its operations in this State are subject to the jurisdiction of this Commission pursuant to N.C. Gen. Stat. § 62-2. PSNC is engaged in the purchase, sale, transportation, and distribution of natural gas to residential, commercial, and industrial customers within a service territory consisting of all or parts of twenty-eight (28) counties in central and western North Carolina as designated in PSNC’s certificates of public convenience and necessity issued by the Commission.

5. PSNC’s last general rate case was eight years ago. The increase in rates and charges approved in that case (Docket No. G-5, Sub 495), which took effect

November 1, 2008, was based on operations during the test year ending December 31, 2007.

6. Since 2008, PSNC's business has been impacted by, among other factors: a heightened awareness of and focus on pipeline safety; low and stable natural gas prices; the opportunity to acquire additional pipeline capacity; the need for PSNC to invest in pipeline enhancement projects on its system; and the expanded use of technology and investments in facilities to more efficiently serve its customers. During this eight-year period, PSNC has greatly expanded natural gas service in its rapidly growing service area. Since January 1, 2008, the Company added 77,025 customers (net of attrition). Between the end of the updated test period in that case (June 30, 2008) and December 31, 2015, the Company installed over 1,424 miles of transmission and distribution mains and 83,866 service lines, and invested approximately \$609 million of capital in its utility property. In addition to the \$609 million in utility plant since the Company's last rate case, the Company estimates that it will add an additional \$149 million in plant by June 30, 2016. The Company also has incurred, as of December 31, 2015, more than \$19 million in deferred environmental and pipeline integrity expenses. These investments have extended service to new customers and strengthened and enhanced the safety and reliability of PSNC's system, to the benefit of its customers and the State of North Carolina.

7. As a result of the significant investments in its system that PSNC has made during the last eight years and the substantial environmental, integrity management, and other expenses incurred during that time, the rates currently approved by the Commission are now insufficient to provide PSNC with a fair and reasonable rate of

return on its investment. In the Company's 2008 rate case, the Commission determined that a reasonable overall rate of return for PSNC was 8.54%; the Company's rate of return at the end of the test year was 7.84%. A general increase in PSNC's rates is therefore necessary and justified in order to allow the Company to continue investing in the growth, safety, and reliability of its system.

8. By this Application, PSNC requests approval of an increase in revenue of \$41,583,020 to permit the Company to earn a fair return on its investment. The revenue increase requested with this Application will allow PSNC to recover the costs associated with the significant investments that the Company has made to improve its system and its service, and will not unduly burden PSNC's customers.

9. The Company seeks approval of a return on equity of 10.60%. Commission approval of this request will permit the Company to access capital markets and maintain its credit quality, is consistent with the returns of businesses with comparable business risk, and will, in light of these considerations as well as the impacts of changing economic conditions on customers, result in fair and reasonable rates.

10. In addition, the Company requests approval of a rider to its rates to track and provide for ongoing recovery of capital expenses related to PSNC's transmission and distribution pipeline integrity management programs. The Company established these programs to ensure the safety of its natural gas transmission and distribution systems in response to pipeline safety requirements of the United States Department of Transportation.

11. PSNC is also seeking authority to include in the Company's cost of service \$2,000,000 related to distribution integrity management program operations and maintenance ("O&M") expenses. In addition, the Company seeks the authority to defer those O&M expenses associated with its distribution integrity management program in excess of \$2,000,000 and the continued deferred accounting treatment for O&M expenses associated with its transmission integrity management program. PSNC proposes to amortize and collect certain deferred pipeline safety O&M expenses, and PSNC also proposes to amortize and collect certain deferred environmental expenses – costs for which the Commission has previously approved deferred accounting.

12. PSNC proposes to include an annual contribution of \$275,000 to the Gas Technology Institute's Operations Technology Development program in the Company's cost of service. In the early 1990s, the Company began remediating its manufactured gas plant sites, which ceased production after the extension of natural gas service through North Carolina. The last remaining site will be fully remediated by May of this year. With the completion of the remediation process, PSNC will no longer need authority to defer expenses associated with the remediation, so the Company proposes to terminate the deferral mechanism related to these costs.

13. Company Witness Spanos conducted a depreciation study pursuant to Commission Rule R6-80, which results in his recommendation of new annual depreciation accrual rates that, when applied to the Company's cost of service, result in an increase of \$3.4 million in depreciation expense. The Company requests that the Commission find the Company in compliance with Rule R6-80 and allow PSNC to implement the new depreciation rates.

14. In addition, PSNC proposes to implement a rate decrement to refund to its customers over a one-year period the Company's excess accumulated deferred income taxes ("ADIT") balance as of December 31, 2015 of \$7,305,529. PSNC has deferred this ADIT balance as a regulatory liability under the Commission's order in Docket No. M-100, Sub 138, dated May 13, 2014.

15. Finally, PSNC seeks through this Application to update and revise certain tariff provisions, including changes to its industrial tariff and pooling agreement, and to implement a new Medium General Service rate. PSNC proposes to place the new rates requested for approval herein into effect on May 1, 2016. On the assumption that the Commission will suspend the proposed rates and set this Application for hearing, PSNC requests that the Commission establish a procedural schedule that permits the proposed rates to become effective November 1, 2016, as permitted by N.C. Gen. Stat. § 62-135.

16. Pursuant to the provisions of Rule R1-17(b), PSNC attaches hereto and makes a part of this Application the following schedules, which are contained in Company Witnesses Paton's and Boone's exhibits:

- (a) Present charges (Paton Exhibit 1);
- (b) Proposed charges (Paton Exhibit 2);
- (c) Statement of end of period net investment at December 31, 2015 (Boone Exhibit 1);
- (d) Statement showing accumulated depreciation balances at December 31, 2015 (Boone Exhibit 2);
- (e) Statement of materials and supplies necessary for operation of PSNC's business (Boone Exhibit 3);

- (f) Statement of cash working capital (Boone Exhibit 4);
- (g) Statement of net operating income for return for the twelve months ended December 31, 2015 (Boone Exhibit 5);
- (h) Statements showing effect of proposed increase, additional revenues and expenses anticipated, and the rates of return on utility property. Statement showing capital structure and rates of return on equity before and after the proposed increase (Boone Exhibit 6);
- (i) Balance sheet at December 31, 2015, and income statement for the twelve months ended December 31, 2015 (Boone Exhibit 7).

17. Pursuant to Rule R1-17(b)(12), the Application contains the Company's NCUC Form G-1.

18. Pursuant to Rule R1-17 (b)(13), the Company's Application is supported by the direct testimony and related exhibits of Company Witnesses D. Russell Harris, Jimmy E. Addison, Robert B. Hevert, John J. Spanos, George B. Ratchford, Sharon D. Boone, James A. Spaulding, Candace A. Paton, and Rose M. Jackson.

19. As required by Commission Rule R1-17(b)(9)(f), Appendix 1 to this Application contains a one-page summary of all proposed increases and changes affecting customers.

20. PSNC will provide additional relevant, material, and competent evidence as may be permitted by N.C. Gen. Stat. § 62-133(c) or other North Carolina law and consistent with Rule R1-17(b)(11) concerning the Company's costs, revenues, volumes, rate base return, or any other matter relevant to the Commission's determination of the matters raised herein.

WHEREFORE, the Company respectfully requests that the Commission grant the general increase in rates and charges for natural gas services and other requests as set forth herein, and approve the changes in rate designs, costs, revenue and rate base, cost allocations, rate schedules, classifications and practices proposed with this Application, effective not later than November 1, 2016.

Respectfully submitted, this the 31st day of March, 2016.

PUBLIC SERVICE COMPANY OF NORTH
CAROLINA, INC.

/s/Mary Lynne Grigg

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STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

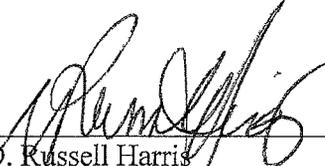
DOCKET NO. G-5, SUB 565

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the matter of:)
Application of Public Service Company) **VERIFICATION**
Of North Carolina, Inc. for a General)
Increase in its Rates and Charges)

STATE OF NORTH CAROLINA)
WAKE COUNTY)

D. RUSSELL HARRIS, being first duly sworn, deposes and says that (i) he is an officer, to wit: President, and Chief Operating Officer of Public Service Company of North Carolina, Inc., the Applicant in the above-captioned matter, (ii) he has read the foregoing Application and knows the contents thereof, and (iii) the same are true of his own knowledge except for those matters and things therein alleged on information and belief and as to those matters and things he believes them to be true.



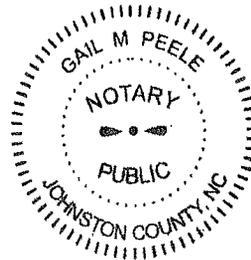
D. Russell Harris
President and Chief Operating Officer

Sworn to and subscribed before me, this 30th day of March, 2016.

Gail M. Peele

Notary Public

My Commission expires April 1, 2018



APPENDIX 1

Public Service Company of North Carolina, Inc.
Docket No. G-5, Sub 565
Summary of Proposed Increases and Changes

PSNC seeks an increase in revenue of \$41,583,020.

Proposed changes by customer group are as follows:

<u>Customer Group</u>	<u>Change in Revenue</u>	<u>% Change</u>
Residential	\$20,094,643	7.03%
General Service	\$5,956,344	6.01%
Large General Service – Firm	\$10,885,999	36.83%
Large General Service – Interruptible	\$4,369,295	37.69%
Other Miscellaneous Revenues	\$276,576	8.10%

CERTIFICATE OF SERVICE

I hereby certify that on this 31st day of March, 2016, copies of the foregoing were hand delivered, mailed first class or sent via overnight delivery to:

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/s/Mary Lynne Grigg
*Attorney for Public Service Company of North
Carolina, Inc.*

I/

OFFICIAL COPY

Aug 29 2016

Revised Boswell Exhibit I
Schedule 1

Public Service Company of North Carolina
Docket No. G-5, Sub 565

RECONCILIATION OF GROSS REVENUE INCREASE REQUESTED BY THE COMPANY TO THE
SETTLEMENT AMOUNT
For The Test Year Ended December 31, 2015

Line No.	Item	Amount
1	Increase in revenue requirement requested by the Company	\$41,583,020
	Settlement Adjustments:	
2	Change in equity ratio from 53.75% to 52.00%	(1,614,203)
3	Change in cost of long-term debt from 5.66% to 5.52%	(593,475)
4	Change in cost of short-term debt from 0.82% to 0.77%	(16,056)
5	Change in return on equity from 10.60% to 9.70%	(7,125,357)
6	Plant in Service Updates and Related Items at June 30, 2016	51,324
7	Working Capital Updates at June 30, 2016	(158,131)
8	Update gas in storage through June 2016	(563,311)
9	Update materials and supplies through June 2016	91,901
10	ADIT - updated to June 30, 2016	174,724
11	Adjust working capital for lead lag to reflect Settlement adjustments	196,137
12	Adjustment to end of period revenue - weather, growth, and commodity costs	(1,457,266)
13	Adjustment to other operating revenues	(114,232)
14	Special Contract - remove PIS associated with facilities	(517,243)
15	Payroll and Related Expenses	(288,568)
16	Bonus accruals updated to actuals 6/30/16	(1,183,067)
17	Payroll Benefits Percentage - updated through June 30, 2016	(21,854)
18	Modify the allocation of incentive pay for certain executives to PSNC	(872,982)
19	Executive Compensation Adjustment	(280,405)
20	Remove retired executive compensation	(139,795)
21	Nonutility Adjustment - O&M expense	(262,228)
22	Nonutility Adjustment - effect of change in plant additions	(24,508)
23	Inflation Adjustment - removed certain expenses and updated rate to 2.2%	450,911
24	Rate Case Expenses - updated through June 30, 2016 w/ 5 yr amortization	(77,327)
25	Postage Adjustment - excluded growth since adjusted elsewhere & removed adv.	(145,282)
26	Uncollectibles - changes in revenue	(22,533)
27	Regulatory Fee - change for 0.148% to 0.14% per Commission Order	(34,439)
28	MGP Costs - update actual expenses @ 6/30/16	(887,970)
29	PIM Costs - update actual expenses @ 6/30/16	(1,651,192)
30	DIMP Costs - deferral	(1,706,430)
31	SalesForce Adjustment - ongoing level	(37,532)
32	Advertising - remove promotional, image, competitive, & non-recurring	(678,559)
33	Update Interest on Customer Deposits through June 2016	(11,382)
34	Service Company Charges - removed unsupported budgeted charges	(3,228,865)
35	Update GTI to June 2016 actual meters	(6,394)
36	Fuel Costs - adjust to test year fuel costs	(117,471)
37	Adjustment to remove lobbying expenses	(168,417)
38	Change in retention factor - regulatory fee changes	(3,332)
39	Adjust cash working capital for revenue impact of Settlement adjustments	(150,481)
40	Rounding	43
41	Settlement Adjustments	(23,195,245)
42	Recommended Change in Margin	\$18,387,775
43	Fixed Gas Cost Adjustment	643,643
44	LAUF Rate Change	22,742
45	Recommended Change in Revenue Requirement per Settlement	\$19,054,160

Public Service Company of North Carolina
Docket No. G-5, Sub 565
SUPPORT FOR RECONCILIATION SCHEDULE
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 1-1

Line No.	Item	Amount
<u>Plant in Service Updates and Related Items at June 30, 2016</u>		
1	Rate base	\$482,365 [1]
2	Income statement	(431,041) [2]
3	Total (L1 + L2)	\$51,324
 <u>Nonutility Adjustment</u>		
4	Rate base	(\$21,147) [1]
5	Income statement	(265,589) [2]
6	Total (L4 + L5)	(\$286,736)
 <u>Special Contract Adjustment</u>		
4	Rate base	(\$359,653) [1]
5	Income statement	(157,590) [2]
6	Total (L4 + L5)	(\$517,243)

[1] Boswell Exhibit I, Schedule 2.

[2] Boswell Exhibit I, Schedule 3.

Public Service Company of North Carolina
Docket No G-5, Sub 565
ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2015

Line No	Item	Under Present Rates			After Public Staff Recommended Increase	
		Company Adjusted Per Company	Public Staff Adjustments	After Public Staff Adjustments	Public Staff Adjustments	After Public Staff Adjustments
		[1] (a)	[2] (b)	[3] (c)	[4] (d)	[5] (e)
1	Plant in service	\$1,854,943,639	(15,300,074)	\$1,839,643,565		\$1,839,643,565
2	Accumulated depreciation	(671,500,105)	14,359,017	(657,141,088)		(657,141,088)
3	Net plant in service (Sum of L1 thru L3)	1,183,443,534	(941,057)	1,182,502,477	0	1,182,502,477
4	Working Capital - Other	(1,885,912)	(5,931,372)	(7,817,284)		(7,817,284)
5	Working Capital - Lead Lag	10,009,617	1,903,594	11,913,211	\$1,809,033	\$13,722,244
6	Deferred Regulatory Assets		15,218,886	15,218,886		15,218,886
7	Deferred Income Taxes	(245,221,651)	3,544,195	(241,677,456)		(241,677,456)
8	Original cost rate base (Sum of L4 thru L7)	<u>\$946,345,589</u>	<u>\$13,794,246</u>	<u>\$960,139,834</u>	<u>\$1,809,033</u>	<u>\$961,948,867</u>

[1] Boone Exhibit 6, Column (5), as adjusted

[2] Boswell Exhibit I, Schedule 2(a)

[3] Column (a) plus Column (b)

[4] Boswell Exhibit I, Schedule 2-4, Column (k), Line 50

[5] Column (c) plus Column (d)

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENTS TO RATE BASE
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 2(a)

Line No	Item	Update PIS & Acc Dep June 30, 2016 [1]	Update Gas in Storage June 30, 2016 [2]	Update Material & Supplies June 30, 2016 [3]	Update Nonutility June 30, 2016 [4]	Special Contracts [5]	ADIT Update [7]	Adjust Cash Working Capital [8]	Deferred PIM Asset (h)	Deferred DIMP Asset (i)	Deferred MGP Asset (j)	Adjust WC for Lead Lag [9]	Total Rate Base Adjustments [10]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	Plant in service	(\$7,575,199)			(\$183,894)	(\$7,540,981)							(15,300,074)
2	Accumulated depreciation	12,119,925			(15,345)	2,254,438							14,358,017
3	Net plant in service (Sum of L1 thru L2)	4,544,726			(199,240)	(5,286,543)							(941,057)
4	Working Capital - Other		(\$5,307,372)										(5,931,372)
5	Working Capital - Lead Lag			\$865,868				(\$1,489,868)					1,903,594
6	Deferred Regulatory Asset								13,198,443	1,200,875	819,568		15,218,886
7	Deferred Income Taxes					1,897,985	1,646,210						3,544,195
8	Original cost rate base (Sum of L3 thru L6)	4,544,726	(5,307,372)	865,868	(199,240)	(3,386,558)	1,646,210	(1,489,868)	13,198,443	1,200,875	819,568	1,903,594	13,794,246
9	Revenue requirement impact	\$462,365	(\$563,311)	\$91,901	(\$21,147)	(\$359,653)	\$174,724	(\$158,131)	\$1,400,848	\$127,458	\$86,987	\$202,043	\$1,464,085

[1] Boswell Exhibit I, Schedule 2-1

[2] Boswell Exhibit I, Schedule 2-2, Column (d), Line 3

[3] Boswell Exhibit I, Schedule 2-2, Column (d), Line 2

[4] Boswell Exhibit I, Schedule 2-1(d), Line 31

[5] Per Company response to accounting DR3-3.

[6] Boswell Exhibit I, Schedule 2-2, Column (e), Line 17

[7] Per Company Response to DR46-3, updated to June 2016

[8] Boswell Exhibit I, Schedule 2-2, Column (d), Line 17

[9] Boswell Exhibit I, Schedule 2-3, Column (a), Line 22

[10] Sum of Columns a through l

Public Service Company of North Carolina
Docket No G-5, Sub 565
SUPPORT FOR UPDATED PLANT IN SERVICE
For The Test Year Ended December 31, 2015

Line No	Item	Amount
Plant in Service.		
1	North Carolina plant in service at June 30, 2016	\$1,847,368,440 [1]
2	Less adjusted plant in service per Company	1,854,943,639 [2]
3	Public Staff's adjustment to plant in service (L1 - L2)	<u>(\$7,575,199)</u>
Accumulated Depreciation:		
4	North Carolina accumulated depreciation at June 30, 2016	(\$659,847,202) [3]
	End of period depreciation adjustment on June 30, 2008	
5	plant at Company proposed rates	<u>467,022</u>
6	Total accumulated depreciation at June 30, 2016 (L4 + L5)	(659,380,180)
7	Less accumulated depreciation per Company	<u>(671,500,105) [2]</u>
8	Public Staff's adjustment to accumulated depreciation (L6 - L7)	<u>12,119,925</u>
Depreciation Expense:		
<i>PSNC Direct Depreciation - Annualized as of June 30, 2016</i>		
9	Per Public Staff	54,277,172 [4]
10	Per Company	<u>\$54,744,194 [5]</u>
11	End of period depreciation adjustment - PSNC direct plant	<u>(\$467,022)</u>
<i>SCANA Services Allocated Depreciation - Annualized as of June 30, 2016</i>		
12	Per Public Staff	\$1,913,690 [6]
13	Per Company	<u>\$1,752,537 [7]</u>
14	End of period depreciation adjustment - SCANA allocated plant	<u>\$161,153</u>
<i>Total Depreciation Expense - Annualized as of June 30, 2016</i>		
15	Per Public Staff	\$56,190,862
16	Per Company	<u>\$56,496,731 [8]</u>
17	Public Staff's adjustment to depreciation expense (L12 - L13)	<u>(\$305,869)</u>
Property Taxes		
18	Plant in Service at June 30, 2016	\$1,847,368,440 [1]
19	North Carolina tax rate	<u>\$0.00512 [9]</u>
20	Adjustment to property taxes for additions (L18 x L19 x L20)	\$9,450,952
21	Property Tax for additions per Company Application	<u>9,574,446 [10]</u>
22	Public Staff's adjustment to property taxes (L21 - L22)	<u>(\$123,494)</u>

- [1] Boswell Exhibit I, Schedule 2-1(a), Column (c), Line 84
[2] Boone Exhibit 6, Page 1, "After Adjustments" column
[3] Boswell Exhibit I, Schedule 2-1(b), Line 83
[4] Boswell Exhibit I, Schedule 2-1(a), Column (e), Line 84
[5] Boone Exhibit 6, Page 1, "After Adjustments" column minus end of period depreciation for Scana Services, Workpaper 4D, p 1
[6] Boswell Exhibit I, Schedule 2-1(e), Column (e), Line 16
[7] Item 4, Workpaper 4E, p 1
[8] Boone Exhibit 6, P 1, "After Adjustments" column
[9] MFR, Item 4, Workpaper 5-A, Line 3
[10] MFR, Item 4, Workpaper 5-A, Line 8

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Amount Per Company [1] (a)	Company Ratemaking Adjustments (b)	After Company Adjustments (c)	Public Staff Working Capital Adjustments (d)	Amount Per Public Staff [13] (f)
1	Lead Lag Study					
	Lead Lag Study	\$10,012,305	2,993,183	\$13,005,488		
	Average materials and supplies:					
2	Operating and construction supplies	9,465,900		9,465,900	\$865,868 [2]	\$10,331,768
3	Natural gas stored	<u>38,067,356</u>		<u>38,067,356</u>	<u>(5,307,372)</u> [3]	<u>\$32,759,984</u>
4	Totals (L2 + L3)	<u>47,533,256</u>	<u>0</u>	<u>47,533,256</u>	<u>(4,441,504)</u>	<u>43,091,752</u>
	Cash working capital:					
5	Average Customer deposits	(8,295,675)		(8,295,675)	258,805 [5]	(8,036,870)
6	Average Accrued Interest on Customer Deposits	(185,385)		(185,385)	(64,354) [4]	(249,739)
7	Average Accrued Vacation Liability - PTO	(582,236)		(582,236)	(13,301) [10]	(595,537)
8	Average State Sales Tax	(712,278)		(712,278)	421,078 [11]	(291,200)
9	Average of Deferred Credit Treasury A Account	(324,842)		(324,842)	(40,943) [12]	(365,785)
10	Average prepayments	968,023	430,345	1,398,368	(266,648) [6]	1,131,720
11	Average deferred Salesforce Cloud License Fees	18,358		18,358	(18,358) [7]	0
12	Cost-Free Capital - Transco refunds	(258,000)		(258,000)		(258,000)
13	Cost-Free Capital - Postretirement Benefits	(24,423,034)	136,967	(24,286,067)	(486,195) [8]	(24,772,262)
14	Cost-Free Capital - Pension Accrual	(15,925,419)		(15,925,419)	(1,427,237) [9]	(17,352,656)
15	Cost-Free Capital - LT Disability	<u>(265,991)</u>		<u>(265,991)</u>	<u>147,285</u>	<u>(118,706)</u>
16	Totals cash working capital (Sum of L5 thru L15)	<u>(49,986,479)</u>	<u>567,312</u>	<u>(49,419,167)</u>	<u>(1,489,868)</u>	<u>(50,909,035)</u>
17	Total working capital (L1 + L4 + L16)	<u>\$7,559,082</u>	<u>\$3,560,495</u>	<u>\$11,119,577</u>	<u>(\$5,931,372)</u>	<u>(\$7,817,283)</u>

- [1] Per Boone Exhibit 4
- [2] Boswell Exhibit I, Schedule 2-2(a)
- [3] Boswell Exhibit I, Schedule 2-2(b)
- [4] Boswell Exhibit I, Schedule 2-2(d)
- [5] Boswell Exhibit I, Schedule 2-2(c)
- [6] Boswell Exhibit I, Schedule 2-2(i)
- [7] Boswell Exhibit I, Schedule 2-2(h)
- [8] Boswell Exhibit I, Schedule 2-2(k)
- [9] Boswell Exhibit I, Schedule 2-2(l)
- [10] Boswell Exhibit I, Schedule 2-2(e)
- [11] Boswell Exhibit I, Schedule 2-2(f)
- [12] Boswell Exhibit I, Schedule 2-2(g)
- [13] Sum of Column (a) through Column (c)

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Per Books Amounts [1]	Company Ratemaking Adjustments [2]	After Company Adjustments [3]	Public Staff Adjustments [4]	After Public Staff Adjustments [5]	(Lead) / Lag Days [6]	Working Capital From Lead/ Lag Study [7]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
INVESTOR SUPPLIED CASH WORKING CAPITAL (ITEM 26 SCHEDULE A)								
	Operating Revenues							
1	Gas Sales and Transportation	\$435 616 557	(\$ 763 654)	\$426 854 903	\$4 063 800	\$430 918 703		\$47 271 191
2	Other Operating Revenues	3,413 176		3 413 176	113 788	3,526 964		366 903
3	Total Operating Revenues	\$439 031 733	(\$ 763 654)	\$430 268 079	\$4 177 588	\$434 445 667	40 04	\$47 638 094
Operating Expenses								
4	Purchased gas	\$191 239 574	(14 121 829)	\$177 117 745	3 270 310	\$190 388 055	(35 65)	(\$17 616 724)
5	Operating and maintenance	92 759 853	20 134 369	112 894 222	(12 585 355)	100 308 867	(37 33)	(9 232 891)
6	Depreciation	49 622 105	6 874 526	56 496 631	(441 452)	56 055 179	0 00	0
7	General Taxes	12 433 363	3 026 890	15 460 253	(171 956)	15 288 297	(107 41)	(4 469 888)
8	Income taxes - current	1 827 866	(22 242 173)	(20 414 307)	5 545 243	(14 869 064)	(35 50)	1 446 167
9	State income taxes - deferred - net	1 373 439	1 011 528	2 384 967	0	2 384 967	0 00	0
10	Federal income taxes - deferred - net	23 670 197	11 254 193	34 924 390	0	34 924 390	0 00	0
11	Amortization of ITC	0	0	0	0	0	0 00	0
12	Total Operating Expenses	\$372 933 257	\$5 937 404	\$378 870 661	(\$4 383 210)	\$374 487 451		(\$29 904 337)
Net Operating Income for Return								
13	Interest on long-term debt	\$20 879 571	\$2 416 929	\$23 296 500	\$243 303	\$23 539 803	(91 25)	(\$5 634 951)
14	Interest on short-term debt	220 858	41 432	262 290	(15 666)	246 624	(8 28)	(5 585)
15	Income available for common equity	45 198 047	(17 159 419)	28 038 628	8 333 160	36 371 788	0 00	0
16	Total Operating Income for Return	\$65,098 476	(\$14,701,058)	\$51 397 418	\$5 560 798	\$56 958 216		(\$5 840 548)
17	Total Cost of Service	\$439 031 733	(\$ 763 654)	\$430 268 079	\$4 177 588	\$434 445 667		(\$35 744 883)
18	Investor Supplied Funds							\$11 913,211
19	Working capital from lead / lag study per Public Staff							\$11 913,211
20	Amount per Company application							\$10,009 617
21	Adjustment to working capital from lead / lag study							\$1,903 594
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)								
22	Payroll (PSNG)	\$28 660 819	\$2 257 200	\$30 917 819	(\$347 368)	\$30 570 451	(1 1 77)	(\$895 792)
23	Payroll (Services Co)	9 974 419	294 185	10 268 604	(3 216 283)	7 052 321	(8 89)	(171 767)
24	Other O&M (AP invoices)	22 759 620	13 740 596	36 500 216	(6 452 263)	30 047 953	(31 53)	(2 598 802)
25	Transportation Clearing (O&M)	3 873 074	639 235	4 512 309	0	4 512 309	0 00	197 435
26	Uncollectible Accounts	460 987	196 602	657 589	(22 446)	635 144	(197 73)	(344 074)
27	Insurance	6 473 500	197 495	6 670 995	0	6 670 995	22 58	412 688
28	Pension	1 743 607	380 477	2 124 084	0	2 124 084	0 00	0
29	Post Retirement	1 863 205	(138 967)	1 724 238	0	1 724 238	(14 74)	(14 331)
30	401k Plan	2 695 299	196 594	2 891 893	(21 770)	2 870 123	(14 33)	(137 501)
31	Regulatory Fees	650 691	(25 482)	625 209	0	625 209	(76 01)	(6 467)
32	Rent	2 033 434	0	2 033 434	0	2 033 434	5 08	28 301
33	Materials & Supplies	1 706 045	0	1 706 045	0	1 706 045	(18 05)	(84 367)
34	Postage	2 104 270	(32 366)	2 071 904	(144 717)	1 927 187	14 57	76 829
35	Incentive Pay	7 748 923	2 437 300	10 186 223	(2 385 199)	7 801 024	(253 67)	(5 421 805)
36	Totals	\$92 766 653	\$20 134 369	\$112 894 222	(\$12 585 355)	\$100 308 867		(\$9 232 891)
INSURANCE (ITEM 26 SCHEDULE D-6)								
37	Life AD&D & Cobra	\$314 751		\$314 751	\$0	\$314 751	(7 88)	(\$6 795)
Self-insured Items								
38	Health/Dental Insurance*	4 001 570		4 001 570	0	4 001 570	(5 50)	(60 296)
39	Long Term Disability Insurance	518 749	197 495	716 244	0	716 244	14 71	28 856
40	Short-Term Disability Insurance							
41	Salary	149 272		149 272	0	149 272	(6 46)	(2 642)
42	Hourly	202 785		202 785	0	202 785	(13 49)	(7 478)
43	Property & Liability Insurance	1 110 071		1 110 071	0	1 110 071	172 37	524 227
44	Small Claims	183 233		183 233	0	183 233	(136 81)	(69 684)
45	Worker's Compensation	(6 931)		(6 931)	0	(6 931)	(340 56)	6 467
46	Totals	\$5 473 900	\$197 495	\$5 671 395	\$0	\$5 671 395		\$412 863
OTHER TAXES (ITEM 26 SCHEDULE E)								
47	City Occupation	\$43 188		\$43 188	\$0	\$43 188	189 97	\$22 478
48	AD Valorem (City & County taxes)	8 973 838	1 221 955	10 195 793	(151 480)	10 044 313	(145 00)	(3 980 207)
49	Utility Sales Tax	21 319		21 319	0	21 319	(4 79)	(280)
50	Employer FICA & Medicare	3 265 656	195 891	3 461 547	(20 476)	3 441 071	(3 22)	(30 620)
51	Unemployment Tax	89 362		89 362	0	89 362	(62 24)	(16 943)
52	Subtotal	\$12 433 363	\$1 417 846	\$13 851 209	(\$171 956)	\$13 679 253		(\$4 015 572)
53	Francis Tax	0	1 809 044	1 809 044	0	1 809 044	0 00	0
54	Total Cost of Service Other Taxes	\$12 433 363	\$3 026 890	\$15 460 253	(\$171 956)	\$15 288 297		(\$4 015 572)

[1] G 1 Item 26 Schedule A page 3 and Schedule A page 4 12 months ended 12/31/15 column
 [2] G 1 Item 26 Schedule A page 4 Adjustments column
 [3] G 1 Item 26 Schedule A page 2 and Schedule A page 4 After Adjustments column
 [4] Boswell Exhibit I Schedule 2-3(a) Column a
 [5] Column c plus Column d
 [6] G 1 Item 26 Schedule A page 2
 [7] Column e divided by 365 times column f

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Update Plant in Service (a)	Gas Costs (b) [1]	End of period Revenue Adjustment (c)	LAUF Adjustment (d)	Adjust Uncollectibles [1] (e)
Operating Revenues						
1	Gas Sales and Transportation		\$0	\$4,063,800		
2	Other Operating Revenues					
3	Total Operating Revenues	<u>0</u>	<u>0</u>	<u>4,063,800</u>	<u>0</u>	<u>0</u>
Operating Expenses						
4	Purchased gas		641,134	2,606,522	22,654	
5	Operating and maintenance			5,889		(22,445)
6	Depreciation	(305,869)				
7	General Taxes	(123,494)				
8	Income taxes - current	161,441	(241,066)	545,798	(8,518)	8,439
9	State income taxes - deferred - net					
10	Federal income taxes - deferred - net					
11	Amortization of ITC					
12	Total Operating Expenses	<u>(267,922)</u>	<u>400,068</u>	<u>3,158,609</u>	<u>14,136</u>	<u>(14,006)</u>
Net Operating Income for Return						
13	Interest on long-term debt					
14	Interest on short-term debt					
15	Income available for common equity	267,922	(400,068)	905,791	(14,136)	14,006
16	Total Operating Income for Return	<u>267,922</u>	<u>(400,068)</u>	<u>905,791</u>	<u>(14,136)</u>	<u>14,006</u>
18	Total Cost of Service	<u>0</u>	<u>0</u>	<u>4,063,800</u>	<u>0</u>	<u>0</u>

OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)

19	Payroll (PSNC)					
20	Payroll (Services Co.)					
21	Other O&M (A/P Invoices)					
22	Transportation Clearing (O&M)					
23	Uncollectible Accounts					(22,445)
24	Insurance					
25	Pension					
26	Post Retirement					
27	401K Plan					
28	Regulatory Fees					
29	Rents					
30	Materials & Supplies					
31	Postage					
32	Incentive Pay					
33	Totals	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(22,445)</u>

INSURANCE (ITEM 26 SCHEDULE D-5)

34	Life AD&D & Cobra					
Self insured Items						
35	Health/Dental insurance*					
36	Long-Term Disability insurance					
	Short-Term Disability insurance					
37	Salary					
38	Hourly					
39	Property & Liability Insurance					
40	Small Claims					
41	Worker's Compensation					
42	Totals	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

OTHER TAXES (ITEM 26 SCHEDULE E)

43	City Occupation					
44	AD Valorem (City & County taxes)	(123,494)				
45	Utility Sales Tax					
46	Employer FICA & Medicare					
47	Unemployment Tax					
48	Subtotal	<u>(123,494)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
49	Franchise Tax					
50	Total Cost of Service Other Taxes	<u>(123,494)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

[1] Corresponding column on Schedule 3
[2] Sum of Columns a through cc

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Adjust MGP (f)	Adjust Executive Comp (g)	Adjust Regulatory Fee (h)	Adjust SalesForce (i)	Adjust Postage (j)
Operating Revenues						
1	Gas Sales and Transportation					
2	Other Operating Revenues					
3	Total Operating Revenues	0	0	0	0	0
Operating Expenses						
4	Purchased gas					
5	Operating and maintenance	(2,049,363)	(279,312)	(34,304)	(37,385)	(144,717)
6	Depreciation					
7	General Taxes					
8	Income taxes - current	770,561	431,983	12,898	14,056	54,414
9	State income taxes - deferred - net					
10	Federal income taxes - deferred - net					
11	Amortization of ITC					
12	Total Operating Expenses	(1,278,802)	152,671	(21,406)	(23,329)	(90,303)
Net Operating Income for Return						
13	Interest on long-term debt					
14	Interest on short-term debt					
15	Income available for common equity	1,278,802	(152,671)	21,406	23,329	90,303
16	Total Operating Income for Return	1,278,802	(152,671)	\$21,406	23,329	90,303
18	Total Cost of Service	0	0	0	0	0
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)						
19	Payroll (PSNC)		(70,369)			
20	Payroll (Services Co.)					
21	Other O&M (A/P Invoices)	(\$2,049,363)		(34,304)	(37,385)	
22	Transportation Cleaning (O&M)					
23	Uncollectible Accounts					
24	Insurance					
25	Pension					
26	Post Retirement					
27	401K Plan					
28	Regulatory Fees					
29	Rents					
30	Materials & Supplies					
31	Postage					(144,717)
32	Incentive Pay		(208,944)			
33	Totals	(2,049,363)	(279,312)	(34,304)	(37,385)	(144,717)
INSURANCE (ITEM 26 SCHEDULE D-5)						
34	Life AD&D & Cobra					
Self Insured Items						
35	Health/Dental Insurance*					
36	Long-Term Disability Insurance					
	Short-Term Disability Insurance					
37	Salary					
38	Hourly					
39	Property & Liability Insurance					
40	Small Claims					
41	Worker's Compensation					
42	Totals	0	0	0	0	0
OTHER TAXES (ITEM 26 SCHEDULE E)						
43	City Occupation					
44	AD Valorem (City & County taxes)					
45	Utility Sales Tax					
46	Employer FICA & Medicare					
47	Unemployment Tax					
48	Subtotal	0	0	0	0	0
49	Franchise Tax					
50	Total Cost of Service Other Taxes	0	0	0	0	0

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Adjust PIM (k) [1]	Adjust Payroll (l) [1]	Adjust Interest on Customer Deposits (m) [1]	Adjust Rate Case Expense (n) [1]	Adjust Inflation (o) [1]
Operating Revenues						
1	Gas Sales and Transportation					
2	Other Operating Revenues					
3	Total Operating Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Operating Expenses						
4	Purchased gas					
5	Operating and maintenance	(2,407,104)	(266,967)	(11,337)	(77,026)	449,153
6	Depreciation					
7	General Taxes		(20,476)			
8	Income taxes - current	905,071	108,079	4,262	28,962	(168,881)
9	State income taxes - deferred - net					
10	Federal income taxes - deferred - net					
11	Amortization of ITC					
12	Total Operating Expenses	<u>(1,502,033)</u>	<u>(179,365)</u>	<u>(7,075)</u>	<u>(48,064)</u>	<u>280,272</u>
Net Operating Income for Return						
13	Interest on long-term debt					
14	Interest on short-term debt					
15	Income available for common equity	1,502,033	179,365	7,075	48,064	(280,272)
16	Total Operating Income for Return	<u>1,502,033</u>	<u>179,365</u>	<u>7,075</u>	<u>48,064</u>	<u>(280,272)</u>
18	Total Cost of Service	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)						
19	Payroll (PSNC)		(266,967)			
20	Payroll (Services Co.)					
21	Other O&M (A/P Invoices)	(2,407,104)		(11,337)	(77,026)	449,153
22	Transportation Cleaning (O&M)					
23	Uncollectible Accounts					
24	Insurance					
25	Pension					
26	Post Retirement					
27	401K Plan					
28	Regulatory Fees					
29	Rents					
30	Materials & Supplies					
31	Postage					
32	Incentive Pay					
33	Totals	<u>(2,407,104)</u>	<u>(266,967)</u>	<u>(11,337)</u>	<u>(77,026)</u>	<u>449,153</u>
INSURANCE (ITEM 26 SCHEDULE D-5)						
34	Life, AD&D & Cobra					
Self Insured Items						
35	Health/Dental Insurance*					
36	Long-Term Disability Insurance					
	Short-Term Disability Insurance					
37	Salary					
38	Hourly					
39	Property & Liability Insurance					
40	Small Claims					
41	Worker's Compensation					
42	Totals	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
OTHER TAXES (ITEM 26 SCHEDULE E)						
43	City Occupation					
44	AD Valorem (City & County taxes)					
45	Utility Sales Tax					
46	Employer FICA & Medicare		(20,476)			
47	Unemployment Tax					
48	Subtotal	<u>0</u>	<u>(20,476)</u>	<u>0</u>	<u>0</u>	<u>0</u>
49	Franchise Tax					
50	Total Cost of Service Other Taxes	<u>0</u>	<u>(20,476)</u>	<u>0</u>	<u>0</u>	<u>0</u>

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No.	Item	Adjust Advertising (p)	Adjust Service Co Charges (q)	Adjust Other Benefit Percentage (r)	Adjust Special Contracts (s)	Adjust GTI Charges (t)
Operating Revenues						
1	Gas Sales and Transportation					
2	Other Operating Revenues					
3	Total Operating Revenues	0	0	0	0	0
Operating Expenses						
4	Purchased gas					
5	Operating and maintenance	(516,898)	(3,216,283)	(21,770)		(6,369)
6	Depreciation				(129,931)	
7	General Taxes				(27,045)	
8	Income taxes - current	194,354	1,209,322	8,186	59,023	2,395
9	State income taxes - deferred - net					
10	Federal income taxes - deferred - net					
11	Amortization of ITC					
12	Total Operating Expenses	(322,544)	(2,006,961)	(13,584)	(97,953)	(3,974)
Net Operating Income for Return						
13	Interest on long-term debt					
14	Interest on short-term debt					
15	Income available for common equity	322,544	2,006,961	13,584	97,953	3,974
16	Total Operating Income for Return	322,544	2,006,961	13,584	97,953	3,974
18	Total Cost of Service	0	0	0	0	0
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)						
19	Payroll (PSNC)					
20	Payroll (Services Co.)					
21	Other O&M (A/P Invoices)	(516,898)	(3,216,283)			(6,369)
22	Transportation Clearing (O&M)					
23	Uncollectible Accounts					
24	Insurance					
25	Pension					
26	Post Retirement					
27	401K Plan			(21,770)		
28	Regulatory Fees					
29	Rents					
30	Materials & Supplies					
31	Postage					
32	Incentive Pay					
33	Totals	(516,898)	(3,216,283)	(21,770)	0	(6,369)
INSURANCE (ITEM 26 SCHEDULE D-5)						
34	Life, AD&D & Cobra					
Self Insured items						
35	Health/Dental Insurance*					
36	Long-Term Disability Insurance					
	Short-Term Disability Insurance					
37	Salary					
38	Hourly					
39	Property & Liability Insurance					
40	Small Claims					
41	Worker's Compensation					
42	Totals	0	0	0	0	0
OTHER TAXES (ITEM 26 SCHEDULE E)						
43	City Occupation					
44	AD Valorem (City & County taxes)				(27,045)	
45	Utility Sales Tax					
46	Employer FICA & Medicare					
47	Unemployment Tax					
48	Subtotal	0	0	0	(27,045)	0
49	Franchise Tax					
50	Total Cost of Service Other Taxes	0	0	0	(27,045)	0

Public Service Company of North Carolina
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ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No.	Item	Adjust Other Operating Income (u)	Adjust Fuel Costs (v)	Adjust DIMP (w)	Adjust for Retirement Compensation (x)	Adjust for Lobbying Exp. (y)
Operating Revenues						
1	Gas Sales and Transportation					
2	Other Operating Revenues	113,788				
3	Total Operating Revenues	113,788	0	0	0	0
Operating Expenses						
4	Purchased gas					
5	Operating and maintenance		(117,012)	(1,218,897)	(139,250)	(167,760)
6	Depreciation					
7	General Taxes					
8	Income taxes - current	42,785	43,996	458,305	52,358	63,078
9	State income taxes - deferred - net					
10	Federal income taxes - deferred - net					
11	Amortization of ITC					
12	Total Operating Expenses	42,785	(73,016)	(780,592)	(86,892)	(104,682)
Net Operating Income for Return						
13	Interest on long-term debt					
14	Interest on short-term debt					
15	Income available for common equity	71,003	73,016	760,592	86,892	104,682
16	Total Operating Income for Return	71,003	73,016	760,592	86,892	104,682
18	Total Cost of Service	113,788	0	0	0	0
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)						
19	Payroll (PSNC)				(10,032)	
20	Payroll (Services Co.)					
21	Other O&M (A/P Invoices)		(117,012)	(1,218,897)		(167,760)
22	Transportation Cleaning (O&M)					
23	Uncollectible Accounts					
24	Insurance					
25	Pension					
26	Post Retirement					
27	401K Plan					
28	Regulatory Fees					
29	Rents					
30	Materials & Supplies					
31	Postage					
32	Incentive Pay				(129,218)	
33	Totals	0	(117,012)	(1,218,897)	(139,250)	(167,760)
INSURANCE (ITEM 26 SCHEDULE D-5)						
34	Life, AD&D & Cobra					
Self Insured Items						
35	Health/Dental Insurance*					
36	Long-Term Disability Insurance					
	Short-Term Disability Insurance					
37	Salary					
38	Hourly					
39	Property & Liability Insurance					
40	Small Claims					
41	Worker's Compensation					
42	Totals	0	0	0	0	0
OTHER TAXES (ITEM 26 SCHEDULE E)						
43	City Occupation					
44	AD Valorem (City & County taxes)					
45	Utility Sales Tax					
46	Employer FICA & Medicare					
47	Unemployment Tax					
48	Subtotal	0	0	0	0	0
49	Franchise Tax					
50	Total Cost of Service Other Taxes	0	0	0	0	0

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
For The Test Year Ended December 31, 2015

Line No	Item	Adjust Non-utility (z)	Update Bonus (aa)	Adjust Sr Staff Bonus Pay (1) (bb)	Interest Synchronization (cc)	Total Public Staff Adjustments (2) (dd)
Operating Revenues						
1	Gas Sales and Transportation					4,063,800
2	Other Operating Revenues					113,788
3	Total Operating Revenues	0	0	0	0	4,177,588
Operating Expenses						
4	Purchased gas					3,270,310
5	Operating and maintenance	(257,961)	(1,178,457)	(869,580)		(12,585,355)
6	Depreciation	(5,652)				(441,452)
7	General Taxes	(941)				(171,956)
8	Income taxes - current	99,472	443,100	326,962	(85,592)	5,545,243
9	State income taxes - deferred - net					0
10	Federal income taxes - deferred - net					0
11	Amortization of ITC					0
12	Total Operating Expenses	(165,082)	(735,357)	(542,618)	(85,592)	(4,383,210)
Net Operating Income for Return						
13	Interest on long-term debt				243,303	243,303
14	Interest on short-term debt				(15,666)	(15,666)
15	Income available for common equity	165,082	735,357	542,618	(142,046)	8,333,160
16	Total Operating Income for Return	165,082	735,357	542,618	85,592	8,560,798
18	Total Cost of Service	0	0	0	0	4,177,588
OPERATING & MAINTENANCE EXPENSES (ITEM 26 SCHEDULE D)						
19	Payroll (PSNC)					(347,368)
20	Payroll (Services Co)					(3,216,283)
21	Other O&M (A/P Invoices)	(257,961)				(6,452,263)
22	Transportation Cleaning (O&M)					0
23	Uncollectible Accounts					(22,445)
24	Insurance					0
25	Pension					0
26	Post Retirement					0
27	401K Plan					(21,770)
28	Regulatory Fees					0
29	Rents					0
30	Materials & Supplies					0
31	Postage					(144,717)
32	Incentive Pay		(1,178,457)	(869,580)		(2,386,189)
33	Totals	(257,961)	(1,178,457)	(869,580)	0	(12,591,045)
INSURANCE (ITEM 26 SCHEDULE D-5)						
34	Life, AD&D & Cobra					0
Self insured Items						
35	Health/Dental Insurance*					0
36	Long-Term Disability Insurance					0
	Short-Term Disability Insurance					0
37	Salary					0
38	Hourly					0
39	Property & Liability Insurance					0
40	Small Claims					0
41	Workers Compensation					0
42	Totals	0	0	0	0	0
OTHER TAXES (ITEM 26 SCHEDULE E)						
43	City Occupation					0
44	AD Valorem (City & County taxes)	(941)				(151,480)
45	Utility Sales Tax					0
46	Employer FICA & Medicare					(20,476)
47	Unemployment Tax					0
48	Subtotal	(941)	0	0	0	(171,956)
49	Franchise Tax					0
50	Total Cost of Service Other Taxes	(941)	0	0	0	(171,956)

Public Service Company of North Carolina
 Docket No. G-5, Sub 565
ADJUSTMENT TO WORKING CAPITAL COMPONENTS
 For The Test Year Ended December 31, 2015
 After Rate Increase

Boswell Exhibit I
 Schedule 2-4

Line No.	Item	Present Rates	After Adjustments (1)	Lag Days (2)	Iteration 1				Iteration 2				Iteration 3				After Increase	
					Increase (3)	With Increase (4)	CYIC Change (5)	Increase (6)	With Increase (7)	CYIC Change (8)	Increase (9)	With Increase (10)	CYIC Change (11)	Increase (12)	With Increase (13)	CYIC Change (14)	Cumulative Increase (15)	After Increase (16)
INVESTOR SUPPLIED CASH WORKING CAPITAL (ITEM 26 SCHEDULE A)																		
1	Operating Revenues																	
2	Gas Sales and Transportation (L1, L2)	\$426,854,903			\$18,122,191													
3	Other Operating Revenues	\$419,176			2,628,576 (1)													
3	Total Operating Revenues	\$426,296,079	40.04		\$19,398,197	\$49,696,846 (1)(1)	\$2,128,018	\$4,528,121	\$454,294,968 (1)(1)	\$307,699	\$52,500	\$454,347,558	5.789	\$24,079,479	\$454,347,558			
Operating Expenses																		
4	Purchased gas	\$180,388,055	(36.65)		\$180,388,055	0			\$180,388,055			\$180,388,055	0	\$180,388,055				
5	Operation and maintenance (Line 33)	100,315,707	(37.33)	74,896	100,390,603	(51,761)		542	100,391,144	(230)	205	100,391,349	(8.7)	75,642	100,391,349			
6	Depreciation	56,055,279	0.00		56,055,279	0			56,055,279	0		56,055,279	0	56,055,279				
7	General Taxes	15,298,097	(107.41)		15,298,097	0			15,298,097	0		15,298,097	0	15,298,097				
8	Income taxes - current	(14,869,044)	(35.50)	7,265,616 (4)	(7,803,208)	(706,646)		39,887 (4)	(7,563,641)	(3,979)	15,060 (4)	(7,549,581)	(1,485)	7,320,463	(7,549,581)			
9	State income taxes - deferred - net	2,384,967	0.00		2,384,967	0			2,384,967	0		2,384,967	0	2,384,967				
10	Federal income taxes - deferred - net	34,924,360	0.00		34,924,360	0			34,924,360	0		34,924,360	0	34,924,360				
11	Amortization of ITC	0	0.00		0	0			0	0		0	0	0				
12	Total Operating Expenses (sum lines 4 through 12)	\$374,487,451			\$7,340,412	\$381,827,863	(\$738,407)	\$40,429	\$381,868,292	(\$4,109)	\$15,264	\$381,883,556	(81,587)	\$7,399,105	\$381,883,556			
Net Operating Income for Return																		
13	Interest on long term debt	\$23,339,823	(91.25)		\$308,672 (5)	\$23,648,475 (1)(8)	(77,188)	\$33,324	\$23,680,799 (1)(1)	(88,081)	\$12,204	\$23,693,003	(1,051)	\$63,189,643	\$23,693,003			
14	Interest on short term debt	245,624	(6.28)		3,292 (6)	248,916 (1)(8)	(74)	342	250,228 (1)(1)	(8)	129	250,357	(9)	3792,630(16)	250,357			
15	Income available for common equity	\$6,371,736	0.00		12,067,656 (5)	48,429,453 (1)(8)	0	66,196	48,495,649 (1)(1)	0	74,993	48,570,642	(9)	121,668(15)	48,570,642			
16	Total Operating Income for Return (Sum Line 14 through 16)	\$9,958,216			\$12,369,508	\$72,327,814	(\$77,262)	\$66,862	\$72,426,676	(\$6,089)	\$37,676	\$72,464,302	(43,054)	\$12,565,736	\$72,464,302			
17	Total Cost of Service (L13 + L17)	\$434,445,967			\$19,710,010	\$454,155,677	(\$615,649)	\$138,261	\$454,294,968	(\$12,188)	\$52,560	\$454,347,558	(\$4,606)	\$19,901,691	\$454,347,558			
OPERATING & MAINTENANCE EXPENSES (ITEM 25 SCHEDULE D)																		
18	Payroll (FINCH)	\$30,570,451	(11.77)		\$30,570,451	0			\$30,570,451	0		\$30,570,451	0	\$30,570,451				
19	Payroll (Services Co.)	7,052,321	(8.89)		7,052,321	0			7,052,321	0		7,052,321	0	7,052,321				
20	Other O&M (AFP Invoices)	30,084,453	(31.59)		30,084,453	0			30,084,453	0		30,084,453	0	30,084,453				
21	Transportation (Greiner (O&M))	4,512,308	6.89		4,512,308	0			4,512,308	0		4,512,308	0	4,512,308				
22	Unallocated Accounts (Line 15 net uncollectibles factor)	635,144	(197.73)	47,805	682,949	(25,897)	348	683,297	(188)	131	683,429	(771)	48284,514(35)	683,429				
23	Insurance	6,670,895	22.38		6,670,895	0			6,670,895	0		6,670,895	0	6,670,895				
24	Pension	2,124,064	0.00		2,124,064	0			2,124,064	0		2,124,064	0	2,124,064				
25	Post Retirement	1,728,238	0.00		1,728,238	0			1,728,238	0		1,728,238	0	1,728,238				
26	401K Plan	2,831,123	(14.74)		2,831,123	0			2,831,123	0		2,831,123	0	2,831,123				
27	Regulatory Fees (Line 3 times regulatory fee)	636,239	(72.01)	27,030	663,269	(5,864)	184	663,453	(42)	73	663,526	(16)	27357,6724	663,526				
28	Rents	2,033,434	3.68		2,033,434	0			2,033,434	0		2,033,434	0	2,033,434				
29	Materials & Supplies	1,706,045	(19.05)		1,706,045	0			1,706,045	0		1,706,045	0	1,706,045				
30	Postage	1,927,187	14.57		1,927,187	0			1,927,187	0		1,927,187	0	1,927,187				
31	Incentive Pay	7,801,024	(253.67)		7,801,024	0			7,801,024	0		7,801,024	0	7,801,024				
32	Total sum of Line 19 through 32	\$100,310,017			\$74,896	\$100,384,913	(\$31,761)	\$542	\$100,385,455	(\$230)	\$205	\$100,385,660	(\$87)	\$75,642	\$100,385,660			
INSURANCE (ITEM 26 SCHEDULE D-4)																		
33	Life, ACG&S & Cobra	\$314,751	(7.88)		\$314,751	0			\$314,751	0		\$314,751	0	\$314,751				
Self Insured Retains																		
34	Health/Cental Insurance*	4,001,570	(5.58)		4,001,570	0			4,001,570	0		4,001,570	0	4,001,570				
35	Long-Term Disability Insurance	716,244	14.71		716,244	0			716,244	0		716,244	0	716,244				
36	Short-Term Disability Insurance					0				0			0					
37	Hourly	149,272	(6.46)		149,272	0			149,272	0		149,272	0	149,272				
38	Property & Liability Insurance	202,785	(13.46)		202,785	0			202,785	0		202,785	0	202,785				
39	Property & Liability Insurance	1,110,071	172.37		1,110,071	0			1,110,071	0		1,110,071	0	1,110,071				
40	Small Claims	183,233	(136.61)		183,233	0			183,233	0		183,233	0	183,233				
41	Worker's Compensation	(6,831)	(340.56)		(6,831)	0			(6,831)	0		(6,831)	0	(6,831)				
41	Totals	\$6,670,895			\$6,670,895	\$0	\$0	\$6,670,895	\$0	\$0	\$6,670,895	\$0	\$0	\$6,670,895				
OTHER TAXES (ITEM 26 SCHEDULE D)																		
42	City Occupation	\$43,188	189.97		\$43,188	0			\$43,188	0		\$43,188	0	\$43,188				
43	AD Valorem (City & County taxes)	10,044,313	(145.00)		10,044,313	0			10,044,313	0		10,044,313	0	10,044,313				
44	Utility Sales Tax	21,319	(6.70)		21,319	0			21,319	0		21,319	0	21,319				
45	Employer FICA & Medicare	3,470,871	(3.22)		3,470,871	0			3,470,871	0		3,470,871	0	3,470,871				
46	Unemployment Tax	99,362	(52.24)		99,362	0			99,362	0		99,362	0	99,362				
47	Subtotal	\$13,679,053			\$13,679,053	\$0	\$0	\$13,679,053	\$0	\$0	\$13,679,053	\$0	\$0	\$13,679,053				
48	Franchise Tax	1,829,044	0.00		1,829,044	0			1,829,044	0		1,829,044	0	1,829,044				
49	Total Cost of Service Other Taxes	\$15,288,097			\$15,288,097	\$0	\$0	\$15,288,097	\$0	\$0	\$15,288,097	\$0	\$0	\$15,288,097				
50	Cumulative change in working capital (Line 3 plus Line 18)					\$1,312,389			\$1,407,670			\$1,409,033						
51	Rate base under present rates					\$60,139,634 (16)			\$60,139,634			\$60,139,634						
52	Rate base after adjustments (Line 51 + Line 52)	\$380,139,634 (16)			\$381,452,203			\$381,452,203			\$381,452,203							
53	Overall rate of return	6.24%				7.52%			7.53%			7.53%						
54	Target Rate of Return	7.53%				7.53%			7.53%			7.53%						

(1) Boswell Exhibit I Schedule 2-3 Column e
 (2) Boswell Exhibit I Schedule 2-3 Column f
 (3) Per Public Staff
 (4) Line 151 composite tax rate Line 15
 (5) Column a minus Column a
 (6) Boswell Exhibit I Schedule 2-2 Column c Line 7
 (7) Column a plus Column c

(8) Column c divided by 365 times Column b
 (9) Column a minus Column d
 (10) Column d Line 52 times appropriate percentage and cost factor
 (11) Column e Line 52 times appropriate percentage and cost factor
 (12) Column d plus Column f
 (13) Line 12 plus Line 16
 (14) Column f divided by 361 times Column b

(15) Column a minus Column d

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO COMPANY FILED COST OF SERVICE
For The Test Year Ended December 31, 2015

Line No	Description	Company Before Increase [1]	Interest Synch on CWC Increase	Company Without Rate Increase [3]	Company Without Rate Increase New Tax
Operating Revenues:					
1	Sale and transportation of gas	\$426,062,649		\$426,062,649	\$426,062,649
2	Special Contract Revenues	792,254		792,254	792,254
3	Other operating revenues	3,413,176		3,413,176	3,413,176
4	Total operating revenues (Sum of L1 thru L3)	430,268,079	0	430,268,079	430,268,079
5	Cost of gas	177,117,745	0 [2]	177,117,745	177,117,745
6	Margin (L4 - L5)	253,150,334	0	253,150,334	253,150,334
7	Operation and maintenance	112,901,063	0 [2]	112,901,063	112,901,063
8	Depreciation	56,496,731		56,496,731	56,496,731
9	General taxes	15,460,053		15,460,053	15,460,053
10	State income taxes	1,794,393	2,958 [2]	1,797,351	1,348,011
11	Federal income taxes	15,072,898	24,846 [2]	15,097,744	15,254,990
12	Amortization of investment tax credits			0	0
13	Amortization of EDIT			0	0
14	Total operating expenses (Sum of L7 thru L13)	201,725,138	27,804	201,752,942	201,460,848
15	Net operating income	51,425,196	(27,804)	51,397,392	51,689,486
16	Interest on customer deposits			0	0
17	Net operating income for return (L6 less L14)	\$51,425,196	(\$27,804)	\$51,397,392	\$51,689,486

[1] Boone Exhibit 6, Page 1 of 5, "After Adjustments" column

[2] Interest synchronization effect of increase in CWC due to rate increase

[3] Column (a) plus Column (b)

Public Service Company of North Carolina
Docket No G-5, Sub 565
NET OPERATING INCOME FOR RETURN
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 3
Page 1 of 4

Line No	Item	Per Company [1] (a)	Plant Updates @ June 30, 2016 [2] (b)	Other Operating Revenue Adjustment [3] (c)	End of period Revenue Adjustment [3] (d)	LAUF [3] (e)	Gas Cost [3] (f)	Special Contacts [4] (g)
Operating Revenues:								
1	Sales and transportation of gas	\$426,062,649			\$4,063,800			
2	Special Contract Revenues	792,254						
3	Other operating revenues	3,413,176		113,788				
4	Total operating revenues (L1 - L3)	430,268,079	0	113,788	4,063,800	0	0	0
5	Cost of gas	177,117,745			2,606,522	22,654	641,134	
6	Margin (L4 - L5)	253,150,334	0	113,788	1,457,278	(22,654)	(641,134)	0
Operating Expenses:								
7	Operating and maintenance	112,901,063			5,689			
8	Depreciation	56,496,731	(305,869)					(129,931)
9	General taxes	15,460,053	(123,494)					(27,045)
10	State income tax (3%)	1,797,351	17,175	4,552	58,064	(906)	(25,645)	6,279
11	Federal income tax (35%)	15,097,744	144,266	38,233	487,734	(7,612)	(215,421)	52,744
12	Amortization of investment tax credits	0						
13	Amortization of EDIT	0						
14	Total operating expenses (Sum of L4 thru L10)	201,752,942	(267,922)	42,785	551,487	(8,518)	(241,066)	(97,953)
15	Interest on customer deposits	-						
16	Net operating income for return (L3 - L12+L11+L12)	\$51,397,392	\$267,922	\$71,003	\$905,791	(\$14,136)	(\$400,068)	\$97,953
Revenue Requirement Effect			\$431,041	\$114,232	\$1,457,266	(\$22,742)	(\$643,643)	\$157,590

- [1] Boswell Exhibit I, Schedule 3(a)
- [2] Boswell Exhibit I, Schedule 2-1
- [3] Boswell Exhibit I, Schedule 3(b)
- [4] Per Company response to accounting DR3-3,
- [5] Boswell Exhibit I, Schedule 3-1
- [6] Boswell Exhibit I, Schedule 3-2
- [7] Boswell Exhibit I, Schedule 3-3
- [8] Boswell Exhibit I, Schedule 3-4

Public Service Company of North Carolina
Docket No G-5, Sub 565
NET OPERATING INCOME FOR RETURN
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 3
Page 2 of 4

Line No	Item	Payroll and Related Costs [5] (h)	Bonus [6] (i)	Other Benefits [7] (j)	Allocation of Senior Staff Bonus Pay [8] (k)	Executive Compensation [9] (l)	Retirement Compensation [10] (m)	Rate Case Expenses [11] (n)	Postage Adjustment [12] (o)	Uncollectibles [13] (p)
Operating Revenues:										
1	Sales and transportation of gas									
2	Special Contract Revenues									
3	Other operating revenues	0								
4	Total operating revenues (L1 - L3)	0	0	0	0	0	0	0	0	0
5	Cost of gas									
6	Margin (L4 - L5)	0	0	0	0	0	0	0	0	0
Operating Expenses:										
7	Operating and maintenance	(266,967)	(1,178,457)	(21,770)	(869,580)	(279,312)	(139,250)	(77,026)	(144,717)	(22,445)
8	Depreciation									
9	General taxes	(20,476)	0		0					
10	State income tax (3%)	11,498	47,138	871	34,783	11,172	5,570	3,081	5,789	898
11	Federal income tax (35%)	96,581	395,962	7,315	292,179	93,849	46,788	25,881	48,625	7,541
12	Amortization of investment tax credits									
13	Amortization of EDIT									
14	Total operating expenses (Sum of L4 thru L10)	(179,365)	(735,357)	(13,584)	(542,618)	(174,291)	(86,892)	(48,064)	(90,303)	(14,006)
15	Interest on customer deposits									
16	Net operating income for return (L3 - L12+L11+L12)	\$179,365	\$735,357	\$13,584	\$542,618	\$174,291	\$86,892	\$48,064	\$90,303	\$14,006
	Revenue Requirement Effect	\$288,568	\$1,183,067	\$21,854	\$872,982	\$280,405	\$139,795	\$77,327	\$145,282	\$22,533

[9] Boswell Exhibit I, Schedule 3-5
[10] Boswell Exhibit I, Schedule 3-6
[11] Boswell Exhibit I, Schedule 3-7
[12] Boswell Exhibit I, Schedule 3-8
[13] Boswell Exhibit I, Schedule 3-9
[14] Boswell Exhibit I, Schedule 3-10
[15] Boswell Exhibit I, Schedule 3-11

Public Service Company of North Carolina
Docket No G 5, Sub 565
NET OPERATING INCOME FOR RETURN
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 3
Page 3 of 4

Line No	Item	Inflation [14] (q)	Nonutility Expenses [15] (r)	PIM Costs [16] (s)	Manufactured Gas Plant Costs [17] (t)	DIMP Costs [18] (u)	Regulatory Fee [19] (v)	Advertising [20] (w)	SalesForce Amortization [21] (x)
Operating Revenues:									
1	Sales and transportation of gas								
2	Special Contract Revenues								
3	Other operating revenues								
4	Total operating revenues (L1 - L3)	0	0	0	0	0	0	0	0
5	Cost of gas								
6	Margin (L4 - L5)	0	0	0	0	0	0	0	0
Operating Expenses:									
7	Operating and maintenance	449,153	(257,961)	(2,407,104)	(2,049,363)	(1,218,897)	(34,304)	(516,898)	(37,385)
8	Depreciation		(5,652)						
9	General taxes		(941)						
10	State income tax (3%)	(17,966)	10,582	96,284	81,975	48,756	1,372	20,676	1,495
11	Federal income tax (35%)	(150,915)	88,890	808,787	688,586	409,549	11,526	173,678	12,561
12	Amortization of investment tax credits								
13	Amortization of EDIT								
14	Total operating expenses (Sum of L4 thru L10)	280,272	(165,082)	(1,502,033)	(1,278,802)	(760,592)	(21,406)	(322,544)	(23,329)
15	Interest on customer deposits								
16	Net operating income for return (L3 - L12+L11+L12)	<u>(\$280,272)</u>	<u>\$165,082</u>	<u>\$1,502,033</u>	<u>\$1,278,802</u>	<u>\$760,592</u>	<u>\$21,406</u>	<u>\$322,544</u>	<u>\$23,329</u>
	Revenue Requirement Effect	(\$450,911)	\$265,589	\$2,416,520	\$2,057,379	\$1,223,666	\$34,439	\$518,919	\$37,532

[16] Boswell Exhibit I, Schedule 3-12

[17] Boswell Exhibit I, Schedule 3-13

[18] Boswell Exhibit I, Schedule 3-14

[19] Boswell Exhibit I, Schedule 3-15

[20] Boswell Exhibit I, Schedule 3-16

[21] Boswell Exhibit I, Schedule 3-17

[22] Boswell Exhibit I, Schedule 3-18

Public Service Company of North Carolina
Docket No G-5, Sub 565
NET OPERATING INCOME FOR RETURN
For The Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 3
Page 4 of 4

Line No	Item	Interest on Customer Deposits [22] (y)	Service Company Charges [23] (z)	GTI [24] (aa)	Fuel Costs [25] (bb)	Lobbying Expense [26] (cc)	Interest Synchronization [27] (dd)	After Public Staff Adjustments [28] (ee)
Operating Revenues:								
1	Sales and transportation of gas							\$430,126,449
2	Special Contract Revenues							792,254
3	Other operating revenues							3,526,964
4	Total operating revenues (L1 - L3)	0	0	0	0	0	0	434,445,667
5	Cost of gas							180,388,055
6	Margin (L4 - L5)	0					0	254,057,612
Operating Expenses:								
7	Operating and maintenance	(11,337)	(3,216,283)	(6,369)	(117,012)	(167,760)		100,315,708
8	Depreciation							56,055,279
9	General taxes							15,288,097
10	State income tax (3%)	453	128,651	255	4,680	6,710	(21,583)	2,340,010
11	Federal income tax (35%)	3,809	1,080,671	2,140	39,316	56,368	(181,296)	19,656,079
12	Amortization of investment tax credits							-
13	Amortization of EDIT							-
14	Total operating expenses (Sum of L4 thru L10)	(7,075)	(2,006,961)	(3,974)	(73,016)	(104,682)	(202,879)	193,655,173
15	Interest on customer deposits							-
16	Net operating income for return (L3 - L12+L11+L12)	<u>\$7,075</u>	<u>\$2,006,961</u>	<u>\$3,974</u>	<u>\$73,016</u>	<u>\$104,682</u>	<u>\$202,879</u>	<u>\$60,402,439</u>
	Revenue Requirement Effect	\$11,382	\$3,228,865	\$6,394	\$117,471	\$168,417	\$326,398	

[23] Boswell Exhibit I, Schedule 3-19
[24] Boswell Exhibit I, Schedule 3-20
[25] Boswell Exhibit I, Schedule 3-21
[26] Boswell Exhibit I, Schedule 3-22
[27] Boswell Exhibit I, Schedule 3-23
[28] Sum of columns (a) through (cc)

Public Service Company of North Carolina
Docket No. G-5, Sub 565
**SUMMARY OF REVENUE AND
COST OF GAS ADJUSTMENTS**
For The Test Year Ended December 31, 2015

Line No.	Item	Sales and Transportation Revenues (a)	Special Contract Revenues (b)	Other Operating Revenues (c)	Cost of Gas (d)	Regulatory Fee (g) [6]
1	Company amount per application	\$426,062,649 [1]	\$792,254 [1]	\$3,413,176 [1]	\$177,117,745 [1]	
2	Operating Revenues EOP - Public Staff Volumes	4,063,800 [2]			2,606,522 [3]	5,689
3	On-going level of cost of gas - fixed gas costs				641,134 [4]	
4	Lost & Unaccounted For change				22,654 [5]	
5	Adjustment to other operating revenues			113,788 [5]		
6	Public Staff Amount (Sum of L1 thru L5)	<u>\$430,126,449</u>	<u>\$792,254</u>	<u>\$3,526,964</u>	<u>\$180,388,055</u>	

[1] Per Item G-1, Item 4, Workpaper 1, page 1 of 5.

[2] Per Public Staff EOP Operating Revenues, Exhibit A.

[3] 11,584,540 therms multiplied by \$.225/therm.

[4] Public Staff fixed gas costs of \$67,928,619 minus Company amount of \$67,287,485.

[5] Per Public Staff.

[6] Column (a) + Column (b) multiplied by regulatory fee rate.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
CALCULATION OF PUBLIC STAFF PAYROLL ADJUSTMENTS
For The Test Year Ended December 31, 2015

Line No.	Item	Company (a)	Public Staff (b)	Public Staff Change [6] (c)
1	Union Employee Salaries as of 12/31/15	\$14,075,422 [1]	\$14,527,885 [4]	\$452,462
2	2016 Union Progression Increases	82,502 [1]	127,298 [4]	44,796
3	Union Merit Increase	353,948 [1]	366,380 [4]	12,431
4	Non-Union Salaries as of 12/31/15	21,509,399 [1]	22,034,930 [4]	525,531
5	Non-Union Merit Increase effective 2/16	645,282 [1]	- [4]	(645,282)
6	PSNC Overtime Pay	5,367,940 [1]	4,937,227 [5]	(430,713)
7	Overtime Increase	134,199 [1]	- [6]	(134,199)
8	Total Regular PSNC Payroll (sum L1 through L7)	42,168,692	41,993,719	(174,972)
9	Percent of Payroll to O&M	70.88% [2]	70.88% [2]	
10	Total O&M Portion of PSNC Payroll (L8 * L9)	29,889,169	29,765,148	(124,020)
11	SCANA Services Payroll Allocated to PSNC	9,806,157 [3]	9,858,625 [4]	52,468
12	Additional Headcount (O&M only)	294,185 [8]	98,770 [6]	(195,415)
13	Total Payroll Expense, Excluding Bonus & Incentive Pay	39,989,511	39,623,773	(266,967)
14	Payroll Tax Percent			7.67% [8]
15	Public Staff Adjustment to Payroll Taxes			(\$20,476)

- [1] MFR Item 4, Workpaper 3-A, p. 2.
- [2] MFR Item 4, Workpaper 3-A, p. 5.
- [3] MFR, Item 4, Workpaper 3-A, p.9.
- [4] Company updates to June 30, 2016.
- [5] Boswell Exhibit I, Schedule 3-1(a), Line 10.
- [6] Recommended by Public Staff based on review of documentation.
- [7] Column b minus Column a.
- [8] MFR, Item 4, Workpaper 3-A, p.1.

Public Service Company of North Carolina, Inc.
Docket No. G-5, Sub 565
Adjustment for Bonus Accruals
For the 12 Months Ended December 31, 2015

Line No.		Filed Estimate [1]		June 2016 actuals [2]		Adjustment
		PSNC	SC to PSNC	PSNC	SC to PSNC	
	Bonus Accruals					
1	PSNC 3-5-7	\$1,921,673		\$1,660,721		
2	PSNC officer's short-term	435,794		401,542		
3	PSNC officer's long-term	473,300		484,717		
4	Service Company 3-5-7		\$1,248,915		\$1,054,271	
5	Service Company officer's short term		1,414,311		1,216,275	
6	Service Company officer's long term		5,584,682		5,000,052	
7	Total Bonus accrual (Sum L1 thru L6)	<u>\$2,830,767</u>	<u>\$8,247,908</u>	<u>\$2,546,980</u>	<u>\$7,270,598</u>	
8	Test year bonus accrual	3,212,610	5,539,957	3,212,610	5,539,957	
9	O&M Expense %	<u>70.88%</u>	<u>100.00%</u>	<u>70.88%</u>	<u>100.00%</u>	
10	Total	<u>(270,651)</u>	<u>2,707,951</u>	<u>(471,799)</u>	<u>1,730,641</u>	<u>(\$1,178,457)</u>

[1] Per Company MFR, Item 4a, Workpaper 3-S.

[2] Per Company response to email 7/29/16.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
CALCULATION OF OTHER BENEFITS ADJUSTMENTS
 For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Amount</u>	<u>Per Company</u>	<u>Per Public Staff</u>	<u>Adjustment</u>
1	Proforma Payroll Adjustment	\$2,456,256	\$2,189,289	
2	Updated Other Benefits Percent	<u>7.60%</u> [1]	<u>7.53%</u> [2]	
3	Adjustment to Proforma Other Benefits (L1*L2)	<u>\$186,675</u>	<u>\$164,906</u>	<u>(\$21,770)</u>

[1] Per MFR, Item 4a, Workpaper 3F, Page 1.

[2] Per information provided by the Company.

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO REALLOCATE SCANA SENIOR STAFF COMPENSATION
For The Test Year Ended December 31, 2015

<u>Line No</u>	<u>Item</u>	<u>Amount</u>
	<u>SCANA Senior Staff Compensation Charged to PSNC O&M</u>	
1	Company Amount	\$2,229,159 [1]
2	Public Staff Amount	<u>1,359,579 [2]</u>
3	Public Staff Adjustment to Decrease O&M Expenses (L1 - L2)	<u>\$869,580</u>

[1] Company responses to Public Staff Accounting DR 48

[2] Allocation of all compensation items for each executive based on the allocation of the executive's regular pay

Public Service Company of North Carolina, Inc.
Docket No. G-5, Sub 595
For the 12 Months Ended December 31, 2015
Computation of Public Staff Adjustment to Executive Compensation

	Annual Compensation	ST Incentive	LT Incentive	Other	Total Compensation	PSNC %	Total	
KB Marsh	\$1,202,590	\$1,364,220	\$2,763,823	\$402,625	\$5,733,258	5.4904%	\$314,779	[1]
JE Addison	624,112	590,070	1,004,157	187,080	2,405,419	9.3624%	225,205	[1]
RT Lindsay	456,209	344,261	544,044	143,893	1,488,407	9.6543%	143,696	[1]
SA Byrne	624,112	531,063	1,004,157	154,706	2,314,038	0.0000%	-	[1]
WK Kissam	383,739	265,767	387,644	83,658	1,120,808	0.0000%	-	[1]
Total	\$3,290,762	\$3,095,381	\$5,703,825	\$971,962	\$13,061,930		\$683,680	

Executive Compensation Charged BTL per Public Staff	50.00%	[2]
Public Staff PSNC BTL Executive Compensation	341,840	
PSNC BTL Executive Compensation Before Executive Compensation Adjustment	(62,528)	[3]
Public Staff Adjustment to Decrease O&M Expenses	<u>\$279,312</u>	
Public Staff Adjustment to Decrease Payroll	70,369	
Public Staff Adjustment to Decrease Incentive Plan	208,944	

[1] Company Response to PSNC DR 48-2.

[2] Determined by the Public Staff

[3] Per Boswell Exhibit I, Schedule 3-5(a).

Public Service Company of North Carolina, Inc.
Docket No. G-5, Sub 495
For the 12 Months Ended December 31, 2007
Computation of Executive Compensation Charged to Below the Line and Non Utility Activities by Company

Line No.	Annual Compensation	ST Incentive	LT Incentive	Other	Total Compensation	Total PSNC Non Utility %	Total PSNC BTL & Non Utility
1 KB Marsh	\$1,202,590	\$1,364,220	\$2,763,823	\$402,625	\$5,733,258	0.69%	\$39,532
2 JE Addison	624,112	590,070	1,004,157	187,080	2,405,419	0.81%	19,565
3 RT Lindsay	456,209	344,261	544,044	143,893	1,488,407	0.23%	3,431
4 SA Byrne	624,112	531,063	1,004,157	154,706	2,314,038	0.00%	-
5 WK Kissam	383,739	265,767	387,644	83,658	1,120,808	0.00%	-
6 Total	<u>\$3,290,762</u>	<u>\$3,095,381</u>	<u>\$5,703,825</u>	<u>\$971,962</u>	<u>\$13,061,930</u>		<u>\$62,528</u>

Allocators Used to Assign Executive Compensation:

	PSNC O&M %	Non Utility % ^{1/}	PSNC O&M to Non Utility %	PSNC BTL % ^{2/}	Total PSNC Non Utility %	Total PSNC %
KB Marsh	5.4904%	1.13%	0.06%	0.63%	0.69%	6.1799%
JE Addison	9.3624%	1.13%	0.11%	0.71%	0.81%	10.1758%
RT Lindsay	9.6543%	1.13%	0.11%	0.12%	0.23%	9.8849%
SA Byrne	0.0000%	1.13%	0.00%	0.00%	0.00%	0.0000%
WK Kissam	0.0000%	1.13%	0.00%	0.00%	0.00%	0.0000%

1/ MFR Item 4a, Workpaper 3N.

2/ Company Response to Public Staff DR 48-2.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO REMOVE RETIRED EXECUTIVE'S COMPENSATION
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1.	Total Compensation for retired executive included in cost of service	\$139,250 [1]
2.	Compensation to be included per Public Staff	0
3.	Public Staff Adjustment to Decrease O&M Expenses	<u>(\$139,250)</u>
4.	Public Staff Adjustment to Decrease Payroll	(10,032)
5.	Public Staff Adjustment to Decrease Incentive Plan	(129,218)

[1] Company responses to Public Staff.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO RATE CASE EXPENSE
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Rate case expenses per Public Staff	\$312,036 [1]
2	Amortization period in years	<u>5 [2]</u>
3	Annual amortization per Public Staff (L1 / L2)	62,407
4	Less: Annual amortization per Company	<u>139,433 [3]</u>
5	Public Staff adjustment to O&M expenses (L3 - L4)	<u>(\$77,026)</u>

[1] Per Company update.

[2] Recommended by Public Staff.

[3] MFR Item 4a, Workpaper 3-J.

Public Service Company of North Carolina
 Docket No. G-5, Sub 565
ADJUSTMENT TO POSTAGE EXPENSE
 For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Test Year Postage Expenses	\$2,104,270 [1]
	Less Disallowed Advertising Postage	
2	Account 913 postage	95,223 [1]
3	Percentage Acct 913 direct mail disallowed	99.88% [2]
4		<u>\$95,109</u>
5	Test Year Postage per Public Staff (L1 - L4)	\$2,009,161
6	Percent decrease in rate effective 04/16	<u>-4.08%</u>
7	Postage per Public Staff (L5 x L6)	1,927,187
8	Postage per Company	<u>2,071,904 [1]</u>
9	Adjustment to postage expense (L7 - L8)	<u><u>(\$144,717)</u></u>

[1] G-1 Filing, Item 4a, Workpaper 3-Q.

[2] Direct mailings disallowed in advertising.

[3] The \$.02 postage decrease from \$.49 to \$.47, equates to a 4.08% decrease.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO UNCOLLECTIBLES
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Provision</u>
1	Uncollectibles percentage	0.2500% [1]
2	Revenues from sales and transportation of gas, net of gas costs	253,150,334 [2]
3	Updated revenues from sales and transportation of gas, net of gas costs	<u>\$254,057,612 [3]</u>
4	Uncollectibles per Public Staff (L1 x L3)	635,144
5	Uncollectibles per Company	<u>657,589 [3]</u>
6	Adjustment to uncollectibles (L4 - L5)	<u><u>(\$22,445)</u></u>

- [1] Based on the information provided in the G-1. Item 10.
 [2] Per Boswell Exhibit I, Schedule 3, Column a, Line 6.
 [3] Per Boswell Exhibit I, Schedule 3, Column aa, Line 6.
 [4] Per Item 4a, Workpaper 3-G.

Public Service Company of North Carolina
Docket No G-5, Sub 565
ADJUSTMENT TO INFLATION EXPENSE
For The Test Year Ended December 31, 2015

<u>Line No</u>	<u>Item</u>	<u>Amount</u>
1	Non-adjusted O&M expenses per the Company	\$92,766,693 [1]
2	Less adjusted expenses per Company filing	<u>86,266,755 [1]</u>
3	Total expenses subject to inflation per Company	6,499,938
Less: Additional Expenses adjusted elsewhere		
4	Nonutility Expense Adjustment	257,961 [2]
5	Company Nonutility Expense	40,019 [3]
6	Correct Company Salesforce	(116,776) [4]
7	Remove lobbying/political expenses	94,200 [6]
8	Remove Contributions and Donations	127,324 [7]
9	Remove Entertainment and Gifts	24,592 [7]
10	Test Year Advertising Expenses	<u>1,034,104 [5]</u>
11	Adjusted expenses not subject to inflation adjustment	<u>1,461,424</u>
Addition: Expenses not adjusted elsewhere		
12	SCANA Chargebacks	23,177,489
13	Adjustment for employee benefits	<u>(738,638)</u>
14	Adjusted expenses to be included in inflation adjustment	<u>22,438,851</u>
15	Non-adjusted O&M expenses per the Public Staff (L3 - L10+ L 14)	\$27,477,366
16	Inflation index	<u>2.20% [5]</u>
17	Inflation adjustment per Public Staff (L15 x L16)	604,502
18	Inflation adjustment per Company	<u>155,349 [1]</u>
19	Adjustment to non-adjusted O&M expenses increased for inflation (L17 - L18)	<u>\$449,153</u>

[1] G-1, Item 4a, Workpaper 3L

[2] Boswell Exhibit I, Schedule 3-11, Column c, Line 27

[3] Per Company response to DR 14-1

[4] Per Company response to DR15-1

[5] Recommended by Public Staff

[6] Boswell Exhibit I, Schedule 3-22

[7] Per query of response to DR49-1

Public Service Company of North Carolina
Docket No. G-5 Sub 565
NONUTILITY EXPENSE ADJUSTMENT
For The Test Year Ended December 31, 2015

Line No	Account No	Resource Code	Dept Code	Description	Merchandising Jobbing and CNG (a)	Nonutility Equity Investments (b)	Total (c)	(8)
Expenses subject to allocation								
1	920000			Admin & General Salaries		\$509,200		
2	920000			Incentive Bonuses		\$9,075,697	[4]	
3	Various			Other Benefits		\$186,675	[5]	
4	9210000	211		Office Supplies	\$92,992	[2]		
5	9210000	212		Copier Paper & Supplies	4,045			
6	8860000			Building Services	507,643			
7	Various	439		Other Equipment rental	288,266	[7]		
8	9210000	501		Admin & General Office- other outside services	280,158	[7]		
9	9230000	501		Outside services - tax & acctg	480,297	[2]	480,297	
10	9230000	528		Outside services-legal	0	[2]	0	
11	9230000	526		Physical Guard Services	208,131	[2]		
12	9240000			Property Insurance	0		588,441	
13	80370			Postage Expense	1,864,444	[3]		
14	93070	misc		Miscellaneous General Expenses	861,730		861,730	
15	Various		810	Investor Relations	31,008	[2]	31,008	
16	Various		811	Financial Services	0	[2]	0	
17	Various		813	Audit Services	145,331	[2]		
18	Various		814	Shareholder Services		[2]		
19	Various		816	SCANA Treasury - adlt expenses prr query	487,948	[2]		
	Various		3030	Safety	0			
20				Salesforce	123,420	[2]		
21				Subtotal (Sum of L1 thru L20)	\$5,355,425		\$11,743,440	
22				Amounts previously allocated BTL				
23				Total expenses subject to allocation	\$5,355,425		\$11,743,440	
24				Allocation factors	3.091%		1.128%	
25				Adjustment per Public Staff (L18 x L19)	165,542		132,438	\$297,980
26				Adjustment per Company	26,859		13,180	40,039
27				Adjustment to increase the nonutility expense adjustment (L20 L21)	\$138,683		\$119,279	\$257,961
							0,999,104	
							\$258,970	\$258,970
Plant-related nonutility adjustment								
28				Plant In Service	\$183,894	[6]		
29				Accumulated Depreciation	15,346	[6]		
30				Net Nonutility PIS	\$168,548		0.106137	17,889
31				Depreciation Expense	\$5,852	[6]	0.996104	5,674
Property Taxes								
32				North Carolina tax rate	\$0.00512			
33				Adjustment for non utility property taxes	\$944		0.996104	\$944
								\$24,508

<u>Allocation Ratios</u>				
	Revenues [7]	Payroll [7]	Property [7]	Average
Utility	96.61%	93.45%	97.28%	95.781%
Merchandise and Jobbing	2.60%	6.55%	0.12%	3.091%
Other Non-Utility	0.79%		2.60%	1.128%
Total	100.00%	100.00%	100.00%	100.000%

Filed
4.22%
0.00%

Combined Merchandise and Jobbing and Other Non-Utility

[1] MFR Filing Item 4a Worksheet 3N Page 1 of 10 unless otherwise footnoted
 [2] Per Data Request response 49-2 sorted by Resource Code / Dept ID and Company 7/28/16 email
 [3] Boswell Exhibit I Schedule 3-7 test year amount minus Public Staff adjustment and disallowed advertising postage
 [4] Boswell Exhibit I Schedule 3-2 O&M portion of Company filed Bonus accruals
 [5] Boswell Exhibit I Schedule 3-3
 [6] Per Boswell Exhibit I Schedule 2.1(a) Line 31
 [7] Item G-1 Item 4a Worksheet 4B
 [8] Column (a) = Column (b) + Column (c)

Public Service Company of North Carolina
Docket No G-5, Sub 565
AMORTIZATION OF PIPELINE INTEGRITY MANAGEMENT COSTS
For The Test Year Ended December 31, 2015

Line No	Item	Amount
	<u>Income Statement Effect:</u>	
1	Balance of Deferred PIM Costs @ June 30, 2008	\$2,287,037 [1]
2	Add Incremental deferred PIM expenses 7/1/2008 - 12/31/2015	15,920,144 [1]
3	Add Updated deferred PIM expenses 1/1/2016 - 6/30/2016	<u>4,389,641 [1]</u>
4	Total Deferred PIM Costs through June 30, 2016 (sum L1- L3)	22,596,822
5	Less Sub 495 Amortization expense 11/1/2008 to 11/1/2016	<u>(6,098,768) [2]</u>
6	Deferred PIM Cost Balance per Public Staff (L4 -L5)	16,498,054
7	Amortization period in years	<u>5 [3]</u>
8	Amortization of PIM Costs per Public Staff (L6 / L7)	3,299,611
9	Amortization of PIM Costs per Company	<u>5,706,715 [1]</u>
10	Public Staff Adjustment to O&M Expenses (L8 - L9)	<u>(\$2,407,104)</u>
	<u>Rate Base Effect:</u>	
11	Unamortized Pipeline Integrity Costs @ December 31, 2015	\$16,498,054
12	Less Ongoing amortization reflected in O&M expenses	<u>3,299,611</u>
13	Unamortized PIM balance per Public Staff (L11 - L12))	13,198,443
14	Deferred Pipeline Integrity Costs per Company	<u>0</u>
15	Unamortized Pipeline Integrity Costs per Public Staff	<u><u>\$13,198,443</u></u>

[1] Per Docket No G-5, Sub 565 G-1 and data request responses

[2] Per Docket No G-5, Sub 495 Annual PIM amortization approved \$762,346 times 8 years

[3] Recommended by Public Staff

Public Service Company of North Carolina
Docket No. G-5, Sub 565
AMORTIZATION OF MANUFACTURED GAS PLANT COSTS
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Balance of Deferred MGP Costs @ June 30, 2008	3,494,563 [1]
2	Add: Incremental deferred PIM expenses 7/1/2008 - 12/31/2015	3,692,766 [1]
3	Add: Incremental environmental expenses 1/1/2016 - 6/30/2016	<u>3,155,963 [1]</u>
4	Total Deferred PIM Costs through June 30, 2016 (sum L1-L3)	10,343,292
5	Less: Sub 495 Amortization expense 11/1/2008 to 11/1/2016	<u>(9,318,832) [2]</u>
6	Deferred Deferred MGP Cost per Public Staff (L4 -L5)	1,024,460
7	Amortization period in years	<u>5 [3]</u>
8	Amorization of Deferred MGP Costs per Public Staff (L6 / L7)	204,892
9	Amorization of Deferred MGP Costs per Company	<u>2,254,255</u>
10	Public Staff Adjustment to O&M Expenses (L8 - L9)	<u><u>(\$2,049,363)</u></u>
	<u>Rate Base Effect:</u>	
11	Unamortized Pipeline Integrity Costs @ December 31, 2015	\$1,024,460
12	Less: Annual amortization reflected in O&M expenses	<u>204,892</u>
13	Unamortized PIM Balance per Public Staff	819,568
14	Deferred Pipeline Integrity Costs per Company	<u>0</u>
15	Unamortized Pipeline Integrity Balance per Public Staff	<u><u>\$819,568</u></u>

[1] MFR Item 4, Workpaper 3-I and response to DR 11.

[2] Per Docket No. G-5, Sub 495. Annual PIM amortization approved \$1,164,854 times 8 years.

[3] Recommended by Public Staff.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
AMORTIZATION OF DISTRIBUTION INTEGRITY MANAGEMENT
For The Test Year Ended December 31, 2015

Line No.	<u>Item</u>	<u>Amount</u>
1	Actual test year DIMP costs	\$480,884 [1]
2	DIMP costs incurred January - June 2016 updates	1,020,209 [1]
3	Total DIMP costs at June 2016	<u>1,501,093</u>
4	Balance of DIMP costs to be deferred	1,501,093
5	Amortization period	<u>5 [2]</u>
6	Annual amortization (L4 / L5)	\$300,219
7	Adjustment per Company	<u>\$1,519,116 [1]</u>
8	Public Staff adjustment (L6 - L7)	<u><u>(1,218,897)</u></u>
 <u>Rate Base Effect:</u>		
	Unamortized Pipeline Integrity Costs @ December 31, 2015	\$1,501,093
	Less: Ongoing amortization reflected in O&M expenses	<u>300,219</u>
	Unamortized PIM balance per Public Staff	1,200,875
	Deferred Pipeline Integrity Costs per Company	<u>0</u>
	Unamortized Pipeline Integrity Costs per Public Staff	<u><u>\$1,200,875</u></u>

[1] MFR Item 4, Workpaper 3-P and Company updates.

[2] Per Public Staff.

Public Service Company of North Carolina
 Docket No. G-5, Sub 565
ADJUSTMENT TO CHANGES FOR REGULATORY FEE
 For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Adjusted Test Year Sales and Transportation Revenues	\$430,268,985 [1]
	Less:	
2	CIAC Tax Gross-up	416,022 [1]
3	Uncollectibles	<u>635,144 [2]</u>
4	Amount Subject to Fee	429,217,819
5	Fee Percentage	<u>0.140% [3]</u>
6	Adjusted Fee per Public Staff (L4 x L5)	600,905
7	Adjusted Fee per Company	<u>635,209 [1]</u>
8	Public Staff Adjustment to Regulatory Fee (L6 - L7)	<u>(\$34,304)</u>

[1] MFR, Item 4a, Workpaper 3-C.

[2] Boswell Exhibit 1, Schedule 3-9, Line 9.

[3] Per Commission Order on July 11, 2016.

Public Service Company of North Carolina
Docket No. G-3, Sub 565
SUMMARY OF PUBLIC STAFF ADVERTISING ADJUSTMENTS
For the Test Year Ended December 31, 2015

Boswell Exhibit I
Schedule 3-16

Line No.	Item	Amount Per Company				Public Staff Adjustments				After Public Staff Adjustments			
		Acct 909 (a)	Acct 913 (b)	Other-Specify (c)	Total (d)	Acct 909 (a)	Acct 913 (b)	Other-Specify (c)	Total (d)	Acct 909 (a)	Acct 913 (b)	Other-Specify (c)	Total (d)
1	Newspaper	\$0	\$682	\$3,462	\$4,145		\$0	\$0	\$0	\$0	\$682	\$3,462	\$4,145
2	Magazines & Other	135,047	135,047	3,018	273,113	(33,762)	(33,762)	(3,018)	(70,542)	\$101,286	\$101,286	\$0	202,571
3	Television	0	130,589	0	130,589		(65,295)		(65,295)	\$0	\$65,295	\$0	65,295
4	Radio	0	25,610	1,891	27,501		(12,805)	(1,891)	(14,696)	\$0	\$12,805	\$0	12,805
5	Outdoor Advertising	0	14,983	225	15,208		(14,983)	(225)	(15,208)	\$0	\$0	\$0	0
6	Bill Inserts	4,499	5,631	19,559	29,689	0	0	0	0	\$4,499	\$5,631	\$19,559	29,689
7	New Customer - Welcome Kits	3,415			3,415	0			0	\$3,415	\$0	\$0	3,415
8	Direct Mail	0	57,702	7,759	65,460		(57,631)	(7,759)	(65,390)	\$0	\$70	\$0	70
9	Sales Promotion	0	0	9,483	9,483		0	(9,483)	(9,483)	\$0	\$0	\$0	0
10	White Pages	25,790	0	0	25,790		0	0	0	\$25,790	\$0	\$0	25,790
11	Recruiting	0	0	444	444			0	0	\$0	\$0	\$444	444
12	Internet	0	248,518	124,878	373,396		(124,259)	(113,135)	(237,394)	\$0	\$124,259	\$11,743	136,002
13	Miscellaneous	893	40,032	577	41,502	(500)	(19,530)	0	(20,030)	\$393	\$20,501	\$577	21,471
14	Labor and Benefits	5,235	13,626	0	18,861	(5,235)	(13,626)		(18,861)				0
15	Public Safety	15,509			15,509	0			0	\$15,509	\$0	\$0	15,509
16	Total	\$190,388	\$672,421	\$171,295	\$1,034,103	(\$39,496)	(\$341,892)	(\$135,510)	(\$516,898)	\$150,891	\$330,529	\$35,785	\$517,205

[1] Per MFR Item 12 P 1 of 10

[2] Sum of Columns (a)+(b)+(c)

[3] Company amounts minus public staff adjustments

Public Service Company of North Carolina
Docket No. G-5, Sub 565
AMORTIZATION OF SALESFORCE LICENSE
For The Test Year Ended December 31, 2015

Line No.	Item	Amount
1	2015 Amortization - Q4	\$45,730 [1]
2	2015 - Catch-up Entry	243,759 [1]
3	Total 2015 Amortization (L1 +L2)	<u>289,489</u>
4	Adjustment of Salesforce per Company	(128,685) [1]
5	Cost of 3-year contract	\$370,260 [2]
6	Annual Cost (L5 / 3)	123,420
7	Public Staff ongoing level of O&M Expense	<u>123,420</u>
8	Public Staff Adjustment to O&M Expenses (L7 - L3 - L4)	<u>(\$37,385)</u>

[1] MFR Item 4, Workpaper 3R.

[2] Per Company response to DR 21-3.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
Customer Deposits and Interest
For The Test Year Ended December 31, 2015

Line No.	Item	Customer Deposits [1]	Interest [1]
1	June 2015	(\$7,959,233)	\$57,239
2	July 2015	(7,801,018)	43,902
3	August 2015	(7,720,266)	44,541
4	September 2015	(7,693,842)	49,863
5	October 2015	(8,026,795)	49,554
6	November 2015	(8,225,758)	47,078
7	December 2015	(8,282,424)	41,438
8	January 2016	(8,443,668)	47,493
9	February 2016	(8,465,852)	46,156
10	March 2016	(8,367,242)	55,340
11	April 2016	(8,116,095)	45,778
12	May 2016	(7,806,164)	49,977
13	June 2016	(7,570,958)	48,641
14	Total sum of Lines 1 through 13	<u>(104,479,314)</u>	<u>569,759</u>
15	Number of Months	13	13
16	13 Month Average (Line 14/ Line 15)	(8,036,870)	43,828
17	Average calculated per Company	<u>(8,295,676)</u>	<u>44,700</u>
18	Public Staff Adjustment to O&M Expenses (L16 - L17)	<u>\$258,806</u>	<u>(\$872)</u>
19	Adjustment required in Customer Deposits per PS		569,759 [2]
20	Adjustment required in Customer Deposits per Company		<u>581,096</u>
21	Difference (Line 19 - Line 20)		<u>(\$11,337)</u>

[1] MFR Item 4a, Workpaper 3-B, updated per Company.

[2] Per Line 14.

Public Service Company of North Carolina
Public Service Company of North Carolina
ADJUSTMENT TO SERVICE COMPANY CHARGES
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Company increase in Service Company charges	\$3,216,283 [1]
2	Public Staff calculated Service Company charges	0 [2]
3	Public Staff adjustment to Service Company charges (L2- L1)	<u>(\$3,216,283)</u>

[1] MFR Item 4, Workpaper 3M.

[2] Per Company response to Public Staff inquest.

Public Service Company of North Carolina
Public Service Company of North Carolina
GAS TECHNOLOGY INSTITUTE CHARGES
For The Test Year Ended December 31, 2015

Line No.	Item	Amount
1	Meters billed June 2016	537,262 [1]
2	GTI rate per meter	0.50 [2]
3	Public Staff calculated O&M Charge (L1 x L2)	268,631
4	Company requested O&M Charge	275,000 [2]
5	Adjustment to GTI O&m Charge (L3 - L4)	(\$6,369)

[1] Per Company response and monthly revenue report.

[2] MFR Item 4, Workpaper 3-W.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO FUEL COSTS
For The Test Year Ended December 31, 2015

Line No.	Item	Amount		
		Unleaded (a)	Diesel (b)	
1	2014 Average Price	3.32 [1]	3.77 [1]	
2	2015 Average Price	2.32 [1]	2.67 [1]	
3	2 year average price	2.82	3.22	
4	Gallons in test year	542,511 [1]	137,035 [1]	
5	Average calculated fuel costs (L3 * L4)	1,529,881	441,253	
6	Cost in test year	1,256,377 [1]	366,482 [1]	
7	Public Staff fuel costs (L5 - L6)	273,504	74,771	348,275 [2]
8	Increase to O&M fuel costs per Company	396,033 [1]	108,258 [1]	504,291 [2]
9	Adjustment to fuel costs (L7 - L8)	(122,529)	(33,487)	(156,016) [2]
10	O&M percentage			75.00% [1]
11	Public Staff adjustment to fuel costs (L9 * L10)			<u>(\$117,012)</u>

[1] MFR Item 4, Workpaper 3-T.

[2] Column a plus Column b.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
ADJUSTMENT TO LOBBYING EXPENSE
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
		(a)
1	Labor expenses for Economic Development & Gov't Affairs Department	\$294,242 [2]
2	Lobbying percentage	<u>25% [3]</u>
3	Adjustment to remove lobbying expenses from department (L1 x L2)	<u>73,561</u>
4	Misc expenses related to lobbying/politics	28,264 [4]
5	Lobbying Percentage	<u>100% [3]</u>
6	Adjustment to remove misc expenses related to lobbying	<u>28,264</u>
7	American Gas Association dues	263,745 [1]
8	Lobbying percentage	<u>25% [3]</u>
9	Adjustment to remove lobbying expenses from AGA dues (L7 x L8)	<u>65,936</u>
10	Total adjustment to remove lobbying expenses (L3 + L6 + L9)	<u><u>\$167,760</u></u>

- [1] MFR, Item 13.
- [2] Per Company Response.
- [3] Recommended by Public Staff
- [4] Per review of Company response to DR49.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
INTEREST SYNCHRONIZATION ADJUSTMENT
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Amount</u>
1	Interest expense assigned to rate base per Company	\$23,358,790 [1]
2	Interest expense assigned to rate base per Public Staff	<u>23,898,361 [2]</u>
3	Difference in interest expense tax deduction (L2 - L1)	<u>\$539,571</u>
4	Adjustment to state income taxes (L3 x 4%)	<u>(\$21,583)</u>
5	Adjustment to federal income taxes (L3 + L4 x 35%)	<u>(\$181,296)</u>
6	Total adjustment to income taxes	<u>(\$202,879)</u>

[1] Boone Exhibit 6, Page 2.

[2] Boswell Exhibit I, Schedule 4, Column (e), Line 1 + Line 2.

Public Service Company of North Carolina
Docket No G-5, Sub 565
RETURN ON EQUITY AND ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2015

Line No	Item	Capitalization Ratios [1] (a)	Original Cost Rate Base (b)	Before Recommended Increase			After Recommended Increase			
				Embedded Cost/Return % (c)	Weighted Cost/Return % (d)	Net Operating Income (e)	Rate Base	Embedded Cost/Return % (f)	Weighted Cost/Return % (g)	Net Operating Income (h)
1	Long term debt	44.62%	\$428,414,394 [2]	5.52% [1]	2.46% [5]	\$23,648,475 [7]	\$429,221,584	5.52%	2.46% [10]	\$23,693,031 [12]
2	Short term debt	3.38%	32,452,726 [2]	0.77% [1]	0.03% [5]	249,886 [7]	32,513,872	0.77%	0.03% [10]	\$250,357 [12]
3	Common equity	52.00%	499,272,714 [2]	7.31% [4]	3.80% [5]	36,504,078 [8]	500,213,411	9.70%	5.04% [10]	\$48,520,701 [12]
4	Totals	100.00%	\$960,139,834 [3]		6.29% [6]	\$60,402,439 [9]	\$961,948,867		7.53% [11]	\$72,464,089 [13]

[1] Per Public Staff Witness

[2] Column (a) x Column (b), Line 4

[3] Boswell Exhibit I, Schedule 2

[4] Column (e) / Column (b)

[5] Column (a) x Column (c)

[6] Column (e), Line 4 / Column (b), Line 4

[7] Column (b) x Column (c)

[8] Column (e), Line 4 - Line 1 - Line 2

[9] Boswell Exhibit I, Schedule 3

[10] Column (a) x Column (f)

[11] Column (h), Line 4 / Column (b), Line 4

[12] Column (b) x Column (f)

[13] Sum of Line 1 thru L3

Boswell Exhibit I
Schedule 5

Public Service Company of North Carolina
Docket No. G-5, Sub 565
CALCULATION OF INCREASE (DECREASE) IN
REVENUE REQUIREMENT
For The Test Year Ended December 31, 2015

Line No.	Item	Debt		Equity (c)	Total (d)
		Long Term (a)	Short Term (b)		
1	Required net operating income	\$23,693,031 [1]	\$250,357 [1]	\$48,520,701 [1]	\$72,464,089
2	Net operating income before proposed increase	<u>23,648,475 [2]</u>	<u>249,886 [2]</u>	<u>36,504,078 [2]</u>	<u>60,402,439</u>
3	Additional net operating income requirement (L1 - L2)	44,556	471	12,016,623	12,061,650
4	Retention factor	<u>0.996104 [3]</u>	<u>0.996104 [3]</u>	<u>0.6215686 [3]</u>	
5	Additional gross revenue requirement (L3 / L4)	<u>\$44,730</u>	<u>\$473</u>	<u>\$19,332,738</u>	<u>\$19,377,941</u>

[1] Boswell Exhibit I, Schedule 4, Column (h).

[2] Boswell Exhibit I, Schedule 4, Column (e).

[3] Boswell Exhibit I, Schedule 5 (a), Column (d), Line 13.

Public Service Company of North Carolina
Docket No. G-5, Sub 565
CALCULATION OF GROSS REVENUE EFFECT FACTORS
For The Test Year Ended December 31, 2015

<u>Line No.</u>	<u>Item</u>	<u>Capital Structure</u> (a)	<u>Cost Rates</u> (b)	<u>Retention Factors</u> (c)	<u>Gross Revenue Effect</u> (d)
<u>Rate Base Factor:</u>					
1	Long-term debt	44.62%	5.52%	0.9961035	0.02472659
2	Short-term debt	3.38%	0.77%	0.9961035	0.00026128
3	Common equity	52.00%	9.70%	0.6215686	0.08114953
4	Total (Sum of L1 thru L3)	<u>100.00%</u>			<u>0.1061374</u>
<u>Net Income Factor:</u>					
5	Total revenue				1.0000000
6	Uncollectibles				<u>0.0025000</u>
7	Balance (L5 - L6)				0.9975000
8	Regulatory fee (L7 x current regulatory fee rate)				<u>0.0013965</u>
9	Balance (L7 - L8)				0.9961035
10	Less: State income tax (L9 x 4%)				<u>0.0398441</u>
11	Balance (L9 - L10)				0.9562594
12	Less: Federal income tax (L11 x 35%)				<u>0.3346908</u>
13	Gross up factor (L11 - L12)				<u>0.6215686</u>

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565
SUMMARY OF VOLUME AND BILL ADJUSTMENT
FOR END OF PERIOD

RATE SCHEDULE NUMBER (1)	PER BOOKS		ANNUALIZATION AND RATE SHIFTING		WEATHER NORMALIZATION VOLUMES (THERMS) (6)	GROWTH ADJUSTED BILLS AND USAGE LEVELS			
	BILLS (2)	VOLUMES (THERMS) (3)	BILLS (4)	VOLUMES (THERMS) (5)		(SEASONAL)		(ANNUAL)	
						BILLS (7)	VOLUMES (THERMS) (8)	BILLS (9)	VOLUMES (THERMS) (10)
101 Winter	2,859,086	246,857,091	2,859,086	246,857,091	252,393,363	2,933,136	258,930,351	5,835,861	298,249,530
101 Summer	2,829,442	37,829,541	2,829,442	37,829,541	38,326,522	2,902,725	39,319,179		
102 Winter	42,679	3,174,556	42,679	3,174,556	3,248,137	48,872	3,719,441	98,484	4,394,381
102 Summer	43,326	582,810	43,326	582,810	589,415	49,613	674,939		
115 Winter	258	32,799	258	32,799	32,799	258	32,799	515	65,697
115 Summer	257	32,898	257	32,898	32,898	257	32,898		
125/225 Winter	258,634	111,059,584	253,278	86,782,275	88,946,859	257,409	90,397,640	500,851	120,753,701
125/225 Summer	255,296	37,658,761	250,008	29,674,570	29,868,881	254,086	30,356,061		
126 Winter	26	30,986	26	30,986	30,986	26	30,986	50	61,972
126 Summer	24	30,986	24	30,986	30,986	24	30,986		
127/227 Winter	551	812,286	551	812,286	830,021	572	861,254	1,145	1,000,973
127/227 Summer	552	133,060	552	133,060	134,652	573	139,719		
135 Winter	28	143,978	28	143,978	143,978	28	143,978	114	250,145
135 Summer	86	106,167	86	106,167	106,167	86	106,167		
140 Winter			5,356	24,277,309	24,917,214	5,356	24,917,214	10,644	32,958,849
140 Summer			5,288	7,984,191	8,041,634	5,288	8,041,634		
145 Winter	1,240	19,273,854	1,240	19,273,854	19,273,854	1,240	19,273,854	2,488	27,482,092
145 Summer	1,248	8,208,238	1,248	8,208,238	8,208,238	1,248	8,208,238		
150 Winter	45	3,666,387	45	3,666,387	3,666,387	45	3,666,387	93	6,704,243
150 Summer	48	3,037,856	48	3,037,856	3,037,856	48	3,037,856		
175 Winter	1,879	97,125,452	1,879	97,125,452	97,125,452	1,879	97,125,452	3,763	174,902,640
175 Summer	1,884	77,777,188	1,884	77,777,188	77,777,188	1,884	77,777,188		
180 Winter	805	72,589,490	805	72,589,490	72,589,490	805	72,589,490	1,598	141,762,340
180 Summer	793	69,172,850	793	69,172,850	69,172,850	793	69,172,850		
200 Winter	6	298,675	6	298,675	298,675	6	298,675	12	12,778,728
200 Summer	6	12,480,053	6	12,480,053	12,480,053	6	12,480,053		
201 Winter	6	3,660,285	6	3,660,285	3,660,285	6	3,660,285	12	10,278,984
201 Summer	6	6,618,699	6	6,618,699	6,618,699	6	6,618,699		
202 Winter	6	18,003,028	6	18,003,028	18,003,028	6	18,003,028	12	105,438,138
202 Summer	6	87,435,110	6	87,435,110	87,435,110	6	87,435,110		
TOTAL	6,298,223	917,832,668	6,298,223	917,832,668	927,021,677	6,466,286	937,082,412	6,455,642	937,082,412

T/A

DOCKET NO. G-5, SUB 565

END OF PERIOD OPERATING REVENUES UNDER PRESENT RATES

Rate Schedule (1)	Description (2)	Season (3)	No. Bills (4)	Monthly Facilities Charge (5)	Therms (6)	End-Of-Period Rates (\$/therm) (7)	Facilities Charge Revenue (8)	Energy Charge Revenues (9)	CUT Adjustment (10)	Total Revenues (11)	
101	RESIDENTIAL	Winter *	2 933 136	\$10 00	258 930,351	\$0 73744	\$29,331,363	\$190 945,598	\$5 609,331	\$225 886 292	
		Summer **	2 902 725	10 00	<u>39,319,179</u>	0 66981	<u>29,027,245</u>	<u>26,336 379</u>	<u>2,737,624</u>	<u>58,101 249</u>	
		Total Rate Schedule No. 101				298,249,530		\$58,358,609	\$217,281,977	\$8,346,955	\$283,987,541
102	RESIDENTIAL HIGH EFFICIENCY	Winter *	48,872	\$10 00	3 719,441	0 68744	\$488,717	\$2,556,893	\$115 963	\$3,161,573	
		Summer **	49 613	\$10 00	<u>674 939</u>	0 61981	<u>496,126</u>	<u>418 334</u>	<u>13,273</u>	<u>927,733</u>	
		Total Rate Schedule No. 102				4,394,381		\$984,843	\$2,975,227	\$129,236	\$4,089,306
115	GAS LIGHTS	Winter *	258	\$10 00	32 799	0 73744	\$2,580	\$24,187		\$26 767	
		Summer **	257	\$10 00	<u>32 898</u>	0 66981	<u>2,570</u>	<u>22,035</u>		<u>24 605</u>	
						65,697		\$5,150	\$46,223		\$51,373
125	SMALL GEN SERVICE	Annual	511 495	\$17 50			\$8,951 161			\$8,951,161	
		First	500 Th		79,564,446	0 62988		\$50,116 053	(\$348,733)	49 767 320	
		Next	4,500 Th		69,288,954	0 56952			39 461 445	(303,695)	39,157 750
		Over	5,000 Th		<u>4,859 149</u>	0 52559		<u>2,553 920</u>		<u>(21,298)</u>	<u>2,532 622</u>
		Total Rate Schedule No. 125				153,712,550		\$8,951,161	\$92,131,419	(\$673,726)	\$100,408,854
126	SMALL GEN SERVICE - COOLING	Annual	50	30 00	61,972	0 52559	\$1,500	\$32,572		\$34 072	
127	SMALL GEN SERVICE HIGH EFFICIENCY	Annual	1 145	\$17 50			\$20,029			\$20,029	
		First	500 Th		350,185	0 57988		\$203 054	(\$47,552)	155,502	
		Next	4 500 Th		602,437	0 51952			312,978	(81,810)	231,168
		Over	5,000 Th		<u>48,371</u>	0 47559		<u>23,005</u>		<u>(6,569)</u>	<u>16,436</u>
		Total Rate Schedule No. 127				1,000,973		\$20,029	\$539,037	(\$135,931)	\$423,134
135	NATURAL GAS VEHICLE FUEL	Annual	114		250,145	0 70130	\$0	\$175,427		\$175,427	
145	LARGE GEN SERVICE	Annual	2,488	\$300 00			\$746,400			\$746 400	
		First	15,000 Th		19 565 501	0 41914		\$8 200 684		8,200 684	
		Next	15,000 Th		4,140,327	0 39732		1 645 035		1,645,035	
		Next	15,000 Th		1,739,803	0 37782		657,332		657,332	
		Next	15,000 Th		883,094	0 35236		311 167		311 167	
		Over	60,000 Th		<u>1 153 367</u>	0 33117		<u>381 961</u>		<u>381 961</u>	
Total Rate Schedule No. 145				27,482,092		\$746,400	\$11,196,179		\$11,942,579		
SUBTOTAL - PAGE 1			6,450,152		485,217,339		69,067,692	324,378,060	7,666,533	\$393,445,751	

4/1

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC

Larsen Exhibit B

Page 2 of 2

DOCKET NO. G-5, SUB 565

END OF PERIOD OPERATING REVENUES UNDER PRESENT RATES

Rate Schedule (1)	Description (2)	Season (3)	No. Bills (4)	Monthly Facilities Charge (5)	Therms (6)	End-Of-Period Rates (\$/therm) (7)	Facilities Charge Revenue (8)	Energy Revenues (9)	CUT Adjustment (10)	Total Revenues (11)
150	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL (NOTE: Priced out at 180's Rates)	Annual	93	\$600 00						\$55,800
			First	15,000	Th	1,181,779	0 35261	\$416,707	416 707	
			Next	15,000	Th	808,254	0 33171	268,106	268 106	
			Next	70,000	Th	1,940,459	0 30185	585,728	585 728	
			Next	500,000	Th	2,773,751	0 29027	805,137	805 137	
			Over	600,000	Th	0	0 26941	0	0	
Total Rate Schedule No. 150					6,704,243		\$55,800	\$2,075,677		\$2,131,477
175	LARGE GEN. SERVICE TRANSPORTATION (RS 145 CUSTOMERS)	Annual	3,763	\$300 00						\$1,128,900
			First	15,000	Th	44,858,555	0 14542	\$6,523,331	6 523 331	
			Next	15,000	Th	23,405,022	0 12360	2,892,861	2 892 861	
			Next	15,000	Th	15,198,257	0 10410	1,582,139	1 582 139	
			Next	15,000	Th	11,009,531	0 07864	865,789	865 789	
			Over	60,000	Th	80,431,276	0 05745	4,620,777	4 620 777	
Total Rate Schedule No. 175					174,902,640		\$1,128,900	\$16,484,897		\$17,613,797
180	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL TRANSPORTATION (RS 150 CUSTOMERS)	Annual *	1,598	\$600 00						\$958,800
			First	15,000	Th	21,570,397	0 10166	\$2,192,847	2 192 847	
			Next	15,000	Th	18,099,962	0 08076	1,461,753	1 461 753	
			Next	70,000	Th	45,277,277	0 05990	2,712,109	2 712 109	
			Next	500,000	Th	42,885,089	0 03932	1,886,242	1 886 242	
			Over	600,000	Th	13,929,615	0 01846	257,141	257 141	
Total Rate Schedule No. 180					141,762,340		\$958,800	\$8,310,091		\$9,268,891

SUBTOTAL - PAGE 2	5,454	323,369,223	\$2,143,500	\$26,870,665	\$0	\$29,014,165
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TOTAL COMPANY - TARIFFED	6,455,606	808,586,562	\$71,211,192	\$351,248,724	\$7,666,533	\$430,126,449
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OTHER OPERATING REVENUES

3,526,964

TOTAL COMPANY - TARIFFED AND OTHER OPERATING REVENUES						\$433,653,413
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SPECIAL CONTRACTS	36	128,495,850				\$792,254
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TOTAL COMPANY - TARIFFED AND SPECIAL CONTRACTS	6,455,642	937,082,412				\$434,445,667
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SALES 491,921,582

TRANSPORTATION 316,664,980

* - WINTER PERIOD (NOV - APR)

** - SUMMER PERIOD (MAY - OCT)

808,586,562

71A

PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565

PUBLIC STAFF RECOMMENDED RATES

Rate Schedule (1)	Description (2)	Season (3)	Monthly Facilities Charge Rate Blocks (4)	Recommended Energy Charge (\$/therm) (5)
101	RESIDENTIAL	Winter	\$10.00	\$0.80749
		Summer	\$10.00	\$0.73343
102	RESIDENTIAL HIGH EFFICIENCY	Winter	\$10.00	\$0.74175
		Summer	\$10.00	\$0.66877
115	GAS LIGHTS	Winter	\$10.00	\$0.80749
		Summer	\$10.00	\$0.73343
125	SMALL GEN. SERVICE	Annual	\$17.50	
		First	500 Th	\$0.67649
		Next	4,500 Th	\$0.61166
		Over	5,000 Th	\$0.56448
126	SMALL GEN. SERVICE - COOLING	Annual	\$30.00	\$0.52559
127	SMALL GEN. SERVICE HIGH EFFICIENCY	Annual	\$17.50	
		First	500 Th	\$0.62649
		Next	4,500 Th	\$0.56166
		Over	5,000 Th	\$0.51448
135	NATURAL GAS VEHICLE FUEL	Annual		\$0.70130
140	MEDIUM GENERAL SERVICE	Annual	\$100.00	
		First	1,000 Th	\$0.55166
		Over	1,000 Th	\$0.49448

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PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET NO. G-5, SUB 565

PUBLIC STAFF RECOMMENDED RATES

Rate Schedule (1)	Description (2)	Season (3)	Monthly Facilities Charge Rate Blocks (4)	Recommended Energy Charge (\$/therm) (5)
145	LARGE GEN. SERVICE	Annual	\$300.00	
		First	15,000 Th	\$0.43276
		Next	15,000 Th	\$0.41023
		Next	15,000 Th	\$0.39010
		Next	15,000 Th	\$0.36381
		Next	1,000,000 Th	\$0.34193
		Over	1,060,000 Th	\$0.32489
150	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL	Annual	\$600.00	
		First	15,000 Th	\$0.36407
		Next	15,000 Th	\$0.34249
		Next	70,000 Th	\$0.32095
		Next	500,000 Th	\$0.29970
		Over	600,000 Th	\$0.27817
175	LARGE GEN. SERVICE TRANSPORTATION (RS 145 CUSTOMERS)	Annual	\$300.00	
		First	15,000 Th	\$0.14869
		Next	15,000 Th	\$0.12638
		Next	15,000 Th	\$0.10644
		Next	15,000 Th	\$0.08041
		Next	1,000,000 Th	\$0.05874
		Over	1,060,000 Th	\$0.05117
180	LARGE INTERRUPTIBLE COMMERCIAL & INDUSTRIAL TRANSPORTATION (RS 150 CUSTOMERS)	Annual	\$600.00	
		First	15,000 Th	\$0.10395
		Next	15,000 Th	\$0.08258
		Next	70,000 Th	\$0.06125
		Next	500,000 Th	\$0.04020
		Over	600,000 Th	\$0.01888

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