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filed electronically in docket office on 11/30/17

November 30, 2017

Via Hand-Delivery

The Honorable Earl Taylor
c/o Sharla Dillon
Tennessee Public Utilities Commission
502 Deaderick Street, Fourth Floor
Nashville, Tennessee 37243

***Re: Petition of Piedmont Natural Gas Company for Approval of an Integrity
Management Rider to its Approved Rate Schedules and Service Regulations
Docket No. 17- 00138***

Dear Mr. Taylor:

Enclosed please find an original and five (5) copies of Piedmont Natural Gas Company Inc.'s ("Piedmont" or "Company") Integrity Management Rider ("IMR" or "Rider") mechanism annual filing and proposed annual rate adjustment for January 1, 2018 pursuant to this Rider.

Under Piedmont's IMR mechanism, Service Schedule No. 317 as approved by the Tennessee Regulatory Authority Order on May 13, 2014, Piedmont will adjust its rates effective January 1st of each year in order to recover the costs associated with the Company's prior year's integrity management capital investment not yet reflected in Piedmont's base rates.

Piedmont's IMR requires that Piedmont submit an annual filing no later than November 30th of each year.

Piedmont hereby submits its 2017 annual filing which includes the following information in accordance with Service Schedule No. 317: (a) the monthly IMR filing for October 2017, (b) a schedule of all journal entries made related to this Rider for the previous 12 months, (c) billing determinants for the prior 12 months as used in the computation of the Deferred Account Adjustment, (d) capitalization policy effective for the prior 12 months, (e) the computation calculating the IMRR and all supporting schedules, (f) a schedule of any proposed prior period adjustments, and (g) a statement of whether the Company is aware of any changing conditions that may affect whether the rider is still in the public interest, including the identification of those factors. This filing also includes the proposed Fifty-sixth Revised Sheet No. 1 reflecting the proposed billing rates for January 1, 2018.

November 30, 2017

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This material is also being filed today by way of email to the Tennessee Public Utility Commission docket manager, Sharla Dillon. Please file the original and four copies and stamp the additional copies as "filed." Then please return the stamped copy to me by way of our courier.

With kindest regards, I remain

Very truly yours,

A handwritten signature in black ink, appearing to read "R. Dale Grimes". The signature is fluid and cursive, with the first name "R." and last name "Grimes" clearly distinguishable.

R. Dale Grimes

Enclosures

cc: Pia Powers (Piedmont)
Bruce Barkley (Piedmont)
David Foster (TPUC)
Wayne Irvin (TN CPAD)

**Before the
Tennessee Public Utility Commission**

Docket No. 17-_____

**Petition of Piedmont Natural Gas Company, Inc.
for Approval of an Integrity Management Rider to its
Approved Rate Schedules and Service Regulations**

Integrity Management Rider

2017 Annual Filing



November 30, 2017

Docket No. 17- _____
Integrity Management Rider
October 2017 Monthly Report

**Cumulative Integrity Management Investment Amount
Actual Integrity Management Investment, by Integrity Project Type**

Line No.		Current Vintage Year: Vintage Year 5				All Vintage Years
		October 2017 Capital Expenditure ¹	Prior Cumulative Capital Expenditure ²	Cumulative Capital Expenditure as of October 2017 ³	Cumulative Capital Expenditure as of October 2017 ⁶	
	<i>TN Direct</i>					
1	Corrosion Control	\$ 21,609.89	\$ 555,076.03	\$ 576,685.92	\$ 5,773,649.81	
2	Casing Remediation	\$ -	\$ 69,401.80	\$ 69,401.80	\$ 812,204.93	
3	Distribution Integrity	\$ 1,708,284.53	\$ 23,382,449.09	\$ 25,090,733.62	\$ 54,068,467.79	
4	Transmission Integrity	\$ 759,094.10	\$ 8,571,756.83	\$ 9,330,850.93	\$ 180,170,010.00	
5	Total	\$ 2,488,988.52	\$ 32,578,683.75	\$ 35,067,672.27	\$ 240,824,332.53	
	<i>Joint Property: CO3-State</i>					
6	OASIS Project (Work & Asset Management System)	\$ 1,887,843.11	\$ 17,502,634.81	\$ 19,390,477.92	\$ 131,330,403.45	
7	TN % of CO-3 for Current Month ⁴	16.30%				
8	Total Allocated to TN	\$ 307,718.43	\$ 2,868,862.48	\$ 3,176,580.91	\$ 23,119,493.42	
9	Total Capital Expenditures [Line 5 + Line 8]	\$ 2,796,706.95	\$ 35,447,546.23	\$ 38,244,253.18	\$ 263,943,825.95	
10	Less: Amount Included in the Attrition Period ⁵	\$ -	\$ -	\$ -	\$ 32,900,000.00	
11	Total Integrity Management Investment	\$ 2,796,706.95	\$ 35,447,546.23	\$ 38,244,253.18	\$ 231,043,825.95	

1/ Represents, for the current month, the actual Integrity Management Investment that is subject to this Rider

2/ Represents, as of the prior month, the cumulative Integrity Management Investment for the current Vintage Year that is subject to this Rider; this amount is shown in the prior month's report

3/ Represents, for the current Vintage Year through the current month, the cumulative Integrity Management Investment that is subject to this Rider

4/ Represents the TN% of Total Company Gas Plant Excluding Joint Property, which is updated annually

5/ Amount being recovered in existing base rates, per the Relevant Rate Order in Docket 11-00144

6/ Represents, for all Vintage Years through the current month, the cumulative Integrity Management Investment that is subject to this Rider. The cumulative Integrity Management Investment for Vintage Years 1, 2, 3 and 4, which captures amounts through 10/31/16, is \$192,799,572.77 (\$100,306,282.52 for Vintage Year 1, \$53,974,676.19 for Vintage Year 2, \$18,441,896.09 for Vintage Year 3 and \$20,076,717.97 for Vintage Year 4).

Detail of Current Month's Integrity Management Investment Amount
Actual Capital Investment for Current Month, by Capital Funding Project

Line No.	Capital Project Type	Funding Project Number	District	Funding Project Description	October 2017
1	CORR-Corrosion Control	FP1734186	17	Nashville New Rectifier & Ground Be	191.35
2	CORR-Corrosion Control	FP1734388	17	Nashville MAG Anode 2017	21,418.54
3	DIMP-Distribution Integrity	FP1733603	17	Hogan Road - Main Replacement	(4,415.40)
4	DIMP-Distribution Integrity	FP1733763	17	Harding Place	41,754.39
5	DIMP-Distribution Integrity	FP1733764	17	Sunnyside Drive	84,317.65
6	DIMP-Distribution Integrity	FP1733767	17	Fesslers LN	87,500.63
7	DIMP-Distribution Integrity	FP1733931	17	Shelby Park RR Bridge Project	585,834.68
8	DIMP-Distribution Integrity	FP1734408	17	3rd and Hart Station Valves	55.11
9	DIMP-Distribution Integrity	FP1734411	17	Knapp Blvd	23,979.54
10	DIMP-Distribution Integrity	FP1734412	17	Vine Ridge Drive	137.29
11	DIMP-Distribution Integrity	FP1734414	17	Dreanland Drive Greenbrier Th	355.00
12	DIMP-Distribution Integrity	FP1734415	17	Foster Ave	101,659.15
13	DIMP-Distribution Integrity	FP1734416	17	Sadler Ave and Fox Ave	32,192.30
14	DIMP-Distribution Integrity	FP1734417	17	Rayon Drive Renewal	803,117.94
15	DIMP-Distribution Integrity	FP1734418	17	Turner St Renewal	(766,269.40)
16	DIMP-Distribution Integrity	FP1734421	17	4th Ave South Insertion	123,078.36
17	DIMP-Distribution Integrity	FP1734422	17	Lynwood Blvd / Tyne Blvd _ DIM	76,630.37
18	DIMP-Distribution Integrity	FP1734431	17	Murfreesboro Road at ForestVie	58,081.47
19	DIMP-Distribution Integrity	FP1734478	17	3rd Ave North Steel Replacement	410,988.51
20	DIMP-Distribution Integrity	FP1734592	17	Elm Hill Pk Ext	342.04
21	DIMP-Distribution Integrity	FP1734647	17	Grassmere Park Road	5,718.01
22	DIMP-Distribution Integrity	FP1734672	17	12th Ave N at Grundy St.	30,289.56
23	DIMP-Distribution Integrity	FP1734726	17	Cowan St HP Distribution Pipeline	96.38
24	DIMP-Distribution Integrity	FP1734770	17	Ash Street and 2nd Ave S DIMP	12,448.10
25	DIMP-Distribution Integrity	FP1734808	17	Regulator Install for Shelby S	392.85
26	TIMP-Transmission Integrity	FP1734119	17	Line 307 Replacement	705,289.18
27	TIMP-Transmission Integrity	FP1734120	17	Line 311 Replacement	53,804.92
28	ISENP-Information Serv Enterprise	FP0026658	17	Work & Asset Management (OASIS)	1,887,843.11

Total (unallocated)

\$ 4,376,831.63

29 subtotal: TN Direct (unallocated)

\$ 2,488,988.52

30 subtotal: CO-3 (unallocated)

\$ 1,887,843.11

\$ 4,376,831.63

Schedule Detailing the Integrity Management Deferred Account Adjustment Recorded for the Month
Calculation of the IM Deferred Account Balance
Amount Due From (To) Customers per GL Account No. 25351

<u>Line No.</u>		<u>Oct-17</u>
1	Beginning Balance	\$ 6,250,278.53
2	IMR Revenue Recognition	1,104,271.75
3	(Collections from IM Adjustment)	(803,142.90)
4	Ending Balance Before Interest	6,551,407.38
5	Average Balance	6,400,842.96
6	Accrued Interest	22,454.16
7	Ending Balance After Interest	\$ 6,573,861.54
8	Applicable Annual Interest Rate	0.042100
9	Monthly Interest Rate	0.003508
10	Actual GL #25351 EOM Balance	\$ 6,573,861.54
11	Variance	\$ -

Journal Entry: To Record Revenue

01 01 25351 3 17 6250 489	1,104,271.75
01 01 48010 3 17 6220 489	(658,631.84)
01 01 48110 3 17 6220 489	(344,532.78)
01 01 48120 3 17 6220 489	(14,896.63)
01 01 48300 3 17 6220 489	(309.20)
01 01 48900 3 17 6220 489	(85,901.30)

Journal Entry: To Record Interest

01 01 25351 3 17 6250 626	22,454.16
01 01 43101 3 17 6220 626	(22,454.16)

General Ledger Support
Integrity Management Deferred Account Adjustment Recorded for the Month

Calculation of the IM Adjustment Collections:

October - 2017				
Line No.	IM Adjustment (\$ per therm)	x	Usage (therms)	= Collections (\$)
1	Residential (301)	0.13124	2,232,784	293,030.57
2	Small General Service (302)	0.11465	2,061,359	236,334.81
3	Medium General Service (352)	0.11465	721,127	82,677.21
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	3,239	371.35
5	Firm Lg General Sales (303)	0.05092	422,456	21,511.46
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	30,162	1,535.85
7	Firm Lg General Transportation (313)	0.05092	1,527,253	77,767.72
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	136,905	6,971.20
9	Firm Resale (310)	0.05092	551	28.06
10	Interruptible Lg General Sales (304)	0.01273	30,936	393.82
11	Interruptible Lg General Transportation (314)	0.01273	6,482,392	82,520.85
12	Total			\$ 803,142.90

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	293,030.57
01 01 48110 3 17 6220 489	236,334.81
01 01 48110 3 17 6220 489	83,048.56
01 01 48120 3 17 6220 489	23,047.31
01 01 48900 3 17 6220 489	84,738.92
01 01 48300 3 17 6220 489	28.06
01 01 48120 3 17 6220 489	393.82
01 01 48900 3 17 6220 489	82,520.85
01 01 25351 3 17 6250 489	(803,142.90)

Docket No. 17- _____
Integrity Management Rider
Proposed Billing Rates for January 2018

PIEDMONT NATURAL GAS COMPANY, INC.
Tennessee Service Territory
Billing Rates Effective: January 1, 2018

Rate Schedule	Description	Tariff Rate Approved In Docket No. 11-00144	Cumulative PGA Demand	PGA Commodity	Current Refund	Current ACA Demand	Commodity	Current IPA	Current IM Adjustment	Adj. Factor (Sum Col.2 thru Col.7)	Proposed Billing Rate (Col.1+Col.6)
		<1>	<2>	<3>	<4>	<5a>	<5b>	<6>	<7>	<8>	<9>
Residential 301	Monthly Charge-Nov.-Mar.	\$17.45									\$17.45
	Monthly Charge-Apr.-Oct.	\$13.45									\$13.45
	Nov.- Mar. per TH	0.32000	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.17617	0.58994	0.90894
Small General 302	Apr.- Oct. per TH	0.27000	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.17617	0.58994	0.85894
	Monthly Charge	\$44.00									\$44.00
	Nov.- Mar. per TH	0.35400	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.15390	0.56667	0.92067
Medium General 352	Apr.- Oct. per TH	0.30000	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.15390	0.56667	0.86667
	Monthly Charge	\$225.00									\$225.00
	Nov.- Mar. per TH	0.35400	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.15390	0.56667	0.92067
Experimental Motor Vehicle Fuel 343	Apr.- Oct. per TH	0.30000	0.07577	0.30997	0.00000	(0.00398)	0.02593	0.00508	0.15390	0.56667	0.86667
	Monthly Charge		varies by customer per their corresponding rate schedule								
	Nov.- Mar. per TH		varies by customer per their corresponding rate schedule								
303 Firm General Sales	Monthly Charge	\$800.00	0.82829		0.00000	(0.05401)	0.02593	0.00508		0.77428	\$800.00
	Demand Charge per TH	0.80000									1.57428
	First 15,000 TH/TH	0.09682		0.30997	0.00000		0.02593	0.00508	0.06836	0.40934	0.50616
	Next 25,000 TH/TH	0.09653		0.30997	0.00000		0.02593	0.00508	0.06836	0.40934	0.49887
	Next 50,000 TH/TH	0.06450		0.30997	0.00000		0.02593	0.00508	0.06836	0.40934	0.47384
304 Interruptible General Sales	Over 90,000 TH/TH	0.02764		0.30997	0.00000		0.02593	0.00508	0.06836	0.40934	0.43698
	Monthly Charge	\$800.00									\$800.00
	First 15,000 TH/TH	0.09682		0.30997	0.00000		0.02593	0.00508	0.01709	0.35807	0.45489
	Next 25,000 TH/TH	0.09653		0.30997	0.00000		0.02593	0.00508	0.01709	0.35807	0.44760
	Next 50,000 TH/TH	0.06450		0.30997	0.00000		0.02593	0.00508	0.01709	0.35807	0.42257
313 Firm Transportation	Over 90,000 TH/TH	0.02764		0.30997	0.00000		0.02593	0.00508	0.01709	0.35807	0.38571
	Monthly Charge	\$800.00	0.82829			(0.05401)				0.77428	\$800.00
	Demand Charge per TH	0.80000									1.57428
	First 15,000 TH/TH	0.09682			0.00000		0.06836	0.06836	0.06836	0.06836	0.16518
	Next 25,000 TH/TH	0.09653			0.00000		0.06836	0.06836	0.06836	0.06836	0.15789
314 Interruptible Transportation	Next 50,000 TH/TH	0.06450			0.00000		0.06836	0.06836	0.06836	0.06836	0.13286
	Over 90,000 TH/TH	0.02764			0.00000		0.06836	0.06836	0.06836	0.06836	0.09600
	Monthly Charge	\$800.00									\$800.00
	First 15,000 TH/TH	0.09682			0.00000		0.01709	0.01709	0.01709	0.01709	0.11391
	Next 25,000 TH/TH	0.09653			0.00000		0.01709	0.01709	0.01709	0.01709	0.10662
310 Resale Service	Next 50,000 TH/TH	0.06450			0.00000		0.01709	0.01709	0.01709	0.01709	0.08159
	Over 90,000 TH/TH	0.02764			0.00000		0.01709	0.01709	0.01709	0.01709	0.04473
	Demand Charge per TH	0.80000	0.82829		0.00000	(0.05401)				0.77428	1.57428
	Commodity Charge	0.09000		0.30997	0.00000		0.02593	0.00508	0.06836	0.40934	0.49934

NOTES:

1/ In accordance with the Tennessee Public Service Commission order in Docket U-7074 customers metered inside Davidson County are required to pay an additional 6.61% for collection of the Metro Franchise Fee. Customers served by the Ashland City, Fairview, Greenbrier, Hartsville, Mt. Juliet and White House systems are required to pay 5.0%. Customers served by the Franklin and Nolensville systems are required to pay 3%.

Docket No. 17- _____
Integrity Management Rider
2017 Annual Report

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)

General Ledger Support: Integrity Management Deferred Account Adjustment
Calculation of the IM Deferred Account Balance By Month
Amount Due From (To) Customers per GL Account No. 25351.

Line No.		Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17
1	Beginning Balance	\$ 1,443,288.57	\$ 2,412,578.11	\$ 2,852,263.29	\$ 3,406,967.94	\$ 4,546,793.18	\$ 5,342,560.25	\$ 5,758,040.03	\$ 5,940,861.38	\$ 5,968,422.37	\$ 6,059,263.95	\$ 6,179,593.07	\$ 6,250,278.53
2	IMR Revenue Recognition	1,851,810.38	2,948,053.87	3,868,987.70	3,776,922.54	2,851,853.96	1,842,516.11	1,166,798.45	826,224.16	769,291.10	775,305.08	776,117.09	1,104,271.75
3	(Collections from IM Adjustment)	(888,136.43)	(2,516,042.28)	(3,423,398.84)	(2,648,680.97)	(2,070,489.51)	(1,444,571.37)	(1,007,035.68)	(817,046.50)	(698,282.51)	(675,136.81)	(725,907.13)	(803,142.90)
4	Ending Balance Before Interest	2,406,962.52	2,844,595.70	3,397,852.15	4,535,209.51	5,328,157.63	5,740,904.99	5,924,802.80	5,950,039.04	6,039,450.96	6,159,432.22	6,229,803.08	6,551,407.38
5	Average Balance	1,925,125.55	2,628,586.91	3,125,057.72	3,971,088.73	4,937,475.41	5,541,732.04	5,840,421.42	5,945,450.21	6,003,696.67	6,109,348.09	6,204,698.05	6,400,842.96
6	Accrued Interest	5,615.59	7,667.59	9,115.79	11,583.67	14,402.62	17,135.04	18,058.58	18,383.33	19,812.99	20,160.85	20,475.50	22,454.16
7	Ending Balance After Interest	\$ 2,412,578.11	\$ 2,852,263.29	\$ 3,406,967.94	\$ 4,546,793.18	\$ 5,342,560.25	\$ 5,758,040.03	\$ 5,940,861.38	\$ 5,968,422.37	\$ 6,059,263.95	\$ 6,179,593.07	\$ 6,250,278.53	\$ 6,573,861.54
8	Applicable Annual Interest Rate	0.035000	0.035000	0.035000	0.035000	0.035000	0.037100	0.037100	0.037100	0.039600	0.039600	0.039600	0.042100
9	Monthly Interest Rate	0.002917	0.002917	0.002917	0.002917	0.002917	0.003092	0.003092	0.003092	0.003300	0.003300	0.003300	0.003508
10	Actual GL #25351 EOM Balance	\$ 2,412,578.11	\$ 2,852,263.29	\$ 3,108,704.45	\$ 3,963,829.57	\$ 5,342,560.25	\$ 5,758,040.03	\$ 5,940,861.38	\$ 5,968,422.37	\$ 6,059,263.95	\$ 6,179,593.07	\$ 6,250,278.53	\$ 6,573,861.54
11	Variance	\$ -	\$ -	\$ 298,263.48	\$ 582,963.61	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Journal Entry: To Record Revenue													
01.01.25351.3.17.6250.489		1,851,810.38	2,948,053.87	3,868,987.70	3,776,922.54	2,851,853.96	1,842,516.11	1,166,798.45	826,224.16	769,291.10	775,305.08	776,117.09	1,104,271.75
01.01.48300.3.17.6220.489		(1,004,493.78)	(1,758,340.83)	(2,367,263.02)	(2,252,707.68)	(1,700,953.78)	(1,099,188.88)	(695,925.27)	(492,793.14)	(458,895.98)	(462,422.96)	(462,807.28)	(658,631.84)
01.01.48110.3.17.6220.489		(578,005.57)	(920,177.93)	(1,238,324.16)	(1,178,399.83)	(889,778.43)	(574,989.83)	(364,041.12)	(257,781.94)	(240,018.82)	(241,895.18)	(242,148.54)	(344,532.78)
01.01.48120.3.17.6220.489		(24,740.19)	(39,386.08)	(53,541.65)	(50,950.69)	(38,471.51)	(24,860.94)	(15,740.11)	(11,145.76)	(10,377.74)	(10,458.87)	(10,468.82)	(14,896.63)
01.01.48300.3.17.6220.489		(518.51)	(825.46)	(1,111.32)	(1,057.54)	(798.52)	(516.02)	(326.70)	(231.34)	(215.40)	(217.09)	(217.31)	(309.20)
01.01.48900.3.17.6220.489		(144,052.33)	(229,329.57)	(308,747.55)	(293,806.80)	(221,845.72)	(143,360.44)	(90,765.25)	(64,271.98)	(59,843.16)	(60,310.98)	(60,374.14)	(85,901.30)
Journal Entry: To Record Interest													
01.01.25351.3.17.6250.626		5,615.59	7,667.59	9,115.79	11,583.67	14,402.62	17,135.04	18,058.58	18,383.33	19,812.99	20,160.85	20,475.50	22,454.16
01.01.43101.3.17.6220.626		(5,615.59)	(7,667.59)	(9,115.79)	(11,583.67)	(14,402.62)	(17,135.04)	(18,058.58)	(18,383.33)	(19,812.99)	(20,160.85)	(20,475.50)	(22,454.16)

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17- _____

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		October - 2017		
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)
1	Residential (301)	0.13124	2,232,784	293,030.57
2	Small General (302)	0.11465	2,061,359	236,334.81
3	Medium General (352)	0.11465	721,127	82,677.21
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	3,239	371.35
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11	Interruptible Lg General Transportation (314)	0.01273	6,482,392	82,520.85
12	Total			\$ 803,142.90

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	293,030.57
01 01 48110 3 17 6220 489	236,334.81
01 01 48110 3 17 6220 489	83,048.56
01 01 48120 3 17 6220 489	23,047.31
01 01 48900 3 17 6220 489	84,738.92
01 01 48300 3 17 6220 489	28.06
01 01 48120 3 17 6220 489	393.82
01 01 48900 3 17 6220 489	82,520.85
01 01 25351 3 17 6250 489	(803,142.90)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		September - 2017		
		IM Adjustment (\$ per therm)	Usage (therms)	Collections (\$)
1	Residential (301)	0.13124	2,078,896	272,834.31
2	Small Commercial (302)	0.11465	1,924,206	220,610.22
3	Medium Commercial (352)	0.11465	641,159	73,508.88
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	3,635	416.75
5	Firm Lg General Sales (303)	0.05092	314,946	16,037.05
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	28,392	1,445.72
7	Firm Lg General Transportation (313)	0.05092	1,196,652	60,933.52
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	127,341	6,484.20
9	Firm Resale (310)	0.05092	165	8.40
10	Interruptible Lg General Sales (304)	0.01273	11,283	143.63
11	Interruptible Lg General Transportation (314)	0.01273	5,772,541	73,484.45
12	Total			\$ 725,907.13

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	272,834.31
01 01 48110 3 17 6220 489	220,610.22
01 01 48110 3 17 6220 489	73,925.63
01 01 48120 3 17 6220 489	17,482.77
01 01 48900 3 17 6220 489	67,417.72
01 01 48300 3 17 6220 489	8.40
01 01 48120 3 17 6220 489	143.63
01 01 48900 3 17 6220 489	73,484.45
01 01 25351 3 17 6250 489	(725,907.13)

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Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		August - 2017		
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)
1	Residential (301)	0.13124	1,758,705	230,812.44
2	Small Commercial (302)	0.11465	1,913,710	219,406.85
3	Medium Commercial (352)	0.11465	546,834	62,694.52
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	4,904	562.24
5	Firm Lg General Sales (303)	0.05092	313,810	15,979.21
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	33,457	1,703.63
7	Firm Lg General Transportation (313)	0.05092	1,214,798	61,857.51
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	138,574	7,056.19
9	Firm Resale (310)	0.05092	121	6.16
10	Interruptible Lg General Sales (304)	0.01273	9,408	119.76
11	Interruptible Lg General Transportation (314)	0.01273	5,886,748	74,938.30
12	Total			\$ 675,136.81

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	230,812.44
01 01 48110 3 17 6220 489	219,406.85
01 01 48110 3 17 6220 489	63,256.76
01 01 48120 3 17 6220 489	17,682.84
01 01 48900 3 17 6220 489	68,913.70
01 01 48300 3 17 6220 489	6.16
01 01 48120 3 17 6220 489	119.76
01 01 48900 3 17 6220 489	74,938.30
01 01 25351 3 17 6250 489	(675,136.81)

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Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		July - 2017		
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)
1	Residential (301)	0.13124	1,969,111	258,426.13
2	Small Commercial (302)	0.11465	1,869,594	214,348.95
3	Medium Commercial (352)	0.11465	584,172	66,975.32
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	6,287	720.80
5	Firm Lg General Sales (303)	0.05092	273,835	13,943.68
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	35,613	1,813.41
7	Firm Lg General Transportation (313)	0.05092	1,055,750	53,758.79
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	126,344	6,433.44
9	Firm Resale (310)	0.05092	121	6.16
10	Interruptible Lg General Sales (304)	0.01273	4,265	54.29
11	Interruptible Lg General Transportation (314)	0.01273	6,424,316	81,781.54
12	Total			\$ 698,262.51

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	258,426.13
01 01 48110 3 17 6220 489	214,348.95
01 01 48110 3 17 6220 489	67,696.12
01 01 48120 3 17 6220 489	15,757.09
01 01 48900 3 17 6220 489	60,192.23
01 01 48300 3 17 6220 489	6.16
01 01 48120 3 17 6220 489	54.29
01 01 48900 3 17 6220 489	81,781.54
01 01 25351 3 17 6250 489	(698,262.51)

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Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		June - 2017		
		IM Adjustment (\$ per therm)	Usage (therms)	Collections (\$)
1	Residential (301)	0.13124	2,536,235	332,855.48
2	Small Commercial (302)	0.11465	2,133,039	244,552.92
3	Medium Commercial (352)	0.11465	651,111	74,649.88
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	5,732	657.17
5	Firm Lg General Sales (303)	0.05092	297,734	15,160.62
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	33,544	1,708.06
7	Firm Lg General Transportation (313)	0.05092	1,113,928	56,721.21
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	132,954	6,770.02
9	Firm Resale (310)	0.05092	44	2.24
10	Interruptible Lg General Sales (304)	0.01273	35,179	447.83
11	Interruptible Lg General Transportation (314)	0.01273	6,560,964	83,521.07
12	Total			\$ 817,046.50

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	332,855.48
01 01 48110 3 17 6220 489	244,552.92
01 01 48110 3 17 6220 489	75,307.05
01 01 48120 3 17 6220 489	16,868.68
01 01 48900 3 17 6220 489	63,491.23
01 01 48300 3 17 6220 489	2.24
01 01 48120 3 17 6220 489	447.83
01 01 48900 3 17 6220 489	83,521.07
01 01 25351 3 17 6250 489	(817,046.50)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		May - 2017		
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)
1	Residential (301)	0.13124	3,466,722	454,972.60
2	Small Commercial (302)	0.11465	2,321,793	266,193.57
3	Medium Commercial (352)	0.11465	857,790	98,345.62
4	Experimental Motor Vehicle Fuel (343/352)	0.11465	4,184	479.70
5	Firm Lg General Sales (303)	0.05092	351,076	17,876.79
6	Experimental Motor Vehicle Fuel (343/303)	0.05092	150,061	7,641.11
7	Firm Lg General Transportation (313)	0.05092	1,229,665	62,614.54
8	Experimental Motor Vehicle Fuel (343/313)	0.05092	7,418	377.72
9	Firm Resale (310)	0.05092	11	0.56
10	Interruptible Lg General Sales (304)	0.01273	12,983	165.27
11	Interruptible Lg General Transportation (314)	0.01273	7,334,501	93,368.20
12	Total			\$ 1,002,035.68

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	454,972.60
01 01 48110 3 17 6220 489	266,193.57
01 01 48110 3 17 6220 489	98,825.32
01 01 48120 3 17 6220 489	25,517.90
01 01 48900 3 17 6220 489	62,992.26
01 01 48300 3 17 6220 489	0.56
01 01 48110 3 17 6220 489	165.27
01 01 48900 3 17 6220 489	93,368.20
01 01 25351 3 17 6250 489	(1,002,035.68)

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Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		April - 2017			=	Collections (\$)
		IM Adjustment (\$ per therm)	x	Usage (therms)		
1	Residential (301)	0.10144		8,308,108		842,774.48
2	Small Commercial (302)	0.08861		3,798,685		336,601.48
3	Medium Commercial (352)	0.08861		1,407,837		124,748.44
4	Experimental Motor Vehicle Fuel (343/352)	0.08861		2,587		229.23
5	Firm Lg General Sales (303)	0.03936		459,601		18,089.90
6	Experimental Motor Vehicle Fuel (343/303)	0.03936		-		-
7	Firm Lg General Transportation (313)	0.03936		1,287,380		50,671.28
8	Experimental Motor Vehicle Fuel (343/313)	0.03936		-		-
9	Firm Resale (310)	0.03936		22		0.87
10	Interruptible Lg General Sales (304)	0.00984		20,539		202.10
11	Interruptible Lg General Transportation (314)	0.00984		7,241,218		71,253.59
12	Total					\$ 1,444,571.37

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	842,774.48
01 01 48110 3 17 6220 489	336,601.48
01 01 48110 3 17 6220 489	124,977.67
01 01 48120 3 17 6220 489	18,089.90
01 01 48900 3 17 6220 489	50,671.28
01 01 48300 3 17 6220 489	0.87
01 01 48110 3 17 6220 489	202.10
01 01 48900 3 17 6220 489	71,253.59
01 01 25351 3 17 6250 489	(1,444,571.37)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		March - 2017		
		IM Adjustment (\$ per therm)	Usage (therms)	Collections (\$)
1	Residential (301)	0.10144	12,163,554	1,233,870.92
2	Small Commercial (302)	0.08861	5,313,493	470,828.61
3	Medium Commercial (352)	0.08861	1,978,912	175,351.39
4	Experimental Motor Vehicle Fuel (343/352)	0.08861	2,017	178.73
5	Firm Lg General Sales (303)	0.03936	636,500	25,052.64
6	Experimental Motor Vehicle Fuel (343/303)	0.03936	124,963	4,918.54
7	Firm Lg General Transportation (313)	0.03936	1,832,596	72,130.98
8	Experimental Motor Vehicle Fuel (343/313)	0.03936	13,068	514.36
9	Firm Resale (310)	0.03936	99	3.90
10	Interruptible Lg General Sales (304)	0.00984	17,323	170.46
11	Interruptible Lg General Transportation (314)	0.00984	8,889,124	87,468.98
12	Total			\$ 2,070,489.51

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	1,233,870.92
01 01 48110 3 17 6220 489	470,828.61
01 01 48110 3 17 6220 489	175,530.12
01 01 48120 3 17 6220 489	29,971.18
01 01 48900 3 17 6220 489	72,645.34
01 01 48300 3 17 6220 489	3.90
01 01 48110 3 17 6220 489	170.46
01 01 48900 3 17 6220 489	87,468.98
01 01 25351 3 17 6250 489	(2,070,489.51)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		February - 2017		
		IM Adjustment (\$ per therm)	Usage (therms)	Collections (\$)
1	Residential (301)	0.10144	16,260,452	1,649,460.25
2	Small Commercial (302)	0.08861	6,773,308	600,182.82
3	Medium Commercial (352)	0.08861	2,463,009	218,247.23
4	Experimental Motor Vehicle Fuel (343/352)	0.08861	2,548	225.78
5	Firm Lg General Sales (303)	0.03936	597,453	23,515.75
6	Experimental Motor Vehicle Fuel (343/303)	0.03936	104,479	4,112.29
7	Firm Lg General Transportation (313)	0.03936	1,798,272	70,779.99
8	Experimental Motor Vehicle Fuel (343/313)	0.03936	10,353	407.49
9	Firm Resale (310)	0.03936	-	-
10	Interruptible Lg General Sales (304)	0.00984	13,565	133.48
11	Interruptible Lg General Transportation (314)	0.00984	8,294,298	81,615.89
12	Total			\$ 2,648,680.97

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	1,649,460.25
01 01 48110 3 17 6220 489	600,182.82
01 01 48110 3 17 6220 489	218,473.01
01 01 48120 3 17 6220 489	27,628.04
01 01 48900 3 17 6220 489	71,187.48
01 01 48300 3 17 6220 489	-
01 01 48110 3 17 6220 489	133.48
01 01 48900 3 17 6220 489	81,615.89
01 01 25351 3 17 6250 489	(2,648,680.97)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		January - 2017		
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)
1	Residential (301)	0.10144	21,278,516	2,158,492.66
2	Small Commercial (302)	0.08861	8,598,099	761,877.55
3	Medium Commercial (352)	0.08861	3,194,095	283,028.75
4	Experimental Motor Vehicle Fuel (352/343)	0.08861	2,341	207.44
5	Firm Lg General Sales (303)	0.03936	809,688	31,869.32
6	Experimental Motor Vehicle Fuel (303/343)	0.03936	110,777	4,360.18
7	Firm Lg General Transportation (313)	0.03936	2,158,457	84,956.87
8	Experimental Motor Vehicle Fuel (313/343)	0.03936	7,937	312.40
9	Firm Resale (310)	0.03936	-	-
10	Interruptible Lg General Sales (304)	0.00984	18,455	181.60
11	Interruptible Lg General Transportation (314)	0.00984	9,970,739	98,112.07
12	Total			\$ 3,423,398.84

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	2,158,492.66
01 01 48110 3 17 6220 489	761,877.55
01 01 48110 3 17 6220 489	283,236.19
01 01 48120 3 17 6220 489	36,229.50
01 01 48900 3 17 6220 489	85,269.27
01 01 48300 3 17 6220 489	-
01 01 48110 3 17 6220 489	181.60
01 01 48900 3 17 6220 489	98,112.07
01 01 25351 3 17 6250 489	(3,423,398.84)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		December - 2016			
		IM Adjustment (\$ per therm)	x Usage (therms)	= Collections (\$)	
1	Residential (301)	0.10144	14,832,111		1,504,569.34
2	Small Commercial (302)	0.08861	6,340,099		561,796.17
3	Medium Commercial (352)	0.08861	2,471,409		218,991.55
4	Firm Lg General Sales (303)	0.03936	1,035,216		40,746.10
5	Firm Lg General Transportation (313)	0.03936	2,291,947		90,211.03
6	Firm Resale (310)	0.03936	-		-
7	Interruptible Lg General Sales (304)	0.00984	21,486		211.42
8	Interruptible Lg General Transportation (314)	0.00984	10,113,483		99,516.67
9	Total				<u>\$ 2,516,042.28</u>

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	1,504,569.34
01 01 48110 3 17 6220 489	561,796.17
01 01 48110 3 17 6220 489	218,991.55
01 01 48120 3 17 6220 489	40,746.10
01 01 48900 3 17 6220 489	90,211.03
01 01 48300 3 17 6220 489	-
01 01 48110 3 17 6220 489	211.42
01 01 48900 3 17 6220 489	99,516.67
01 01 25351 3 17 6250 489	(2,516,042.28)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2016 thru October 2017)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

Line No.		November - 2016		
		IM Adjustment (\$ per therm)	Usage (therms)	Collections (\$)
1	Residential (301)	0.10144	3,986,067	404,346.64
2	Small Commercial (302)	0.08861	2,552,763	226,200.33
3	Medium Commercial (352)	0.08861	1,016,771	90,096.08
4	Firm Lg General Sales (303)	0.03936	605,235	23,822.05
5	Firm Lg General Transportation (313)	0.03936	1,680,140	66,130.31
6	Firm Resale (310)	0.03936	-	-
7	Interruptible Lg General Sales (304)	0.00984	15,597	153.47
8	Interruptible Lg General Transportation (314)	0.00984	7,864,588	77,387.55
9	Total			\$ 888,136.43

Journal Entry: To Record Collections

01 01 48010 3 17 6220 489	404,346.64
01 01 48110 3 17 6220 489	226,200.33
01 01 48110 3 17 6220 489	90,096.08
01 01 48120 3 17 6220 489	23,822.05
01 01 48900 3 17 6220 489	66,130.31
01 01 48300 3 17 6220 489	-
01 01 48110 3 17 6220 489	153.47
01 01 48900 3 17 6220 489	77,387.55
01 01 25351 3 17 6250 489	(888,136.43)

Computation of the Integrity Management Adjustment

Line No.	Rider Rate Period	Reference	Residential (301)	Small/Medium General (302,352)	Large General - Firm (303,313,310)	Large General - Interruptible (304,314)	Total
<i>Jan 1 2018 -Dec 31 2018</i>							
1	Customer Class Apportionment Percent	[Schedule 4]	59.6439%	31.2006%	4.9463%	4.2091%	100.0000%
2	IMRR for Recovery, excluding Refund Adjustment	[= Total from Schedule 5 x Line 1]	\$ 15,687,718	\$ 8,206,473	\$ 1,301,000	\$ 1,107,100	\$ 26,302,291
3	Deferred Account Adjustment Due From (To) Customers	Actual Deferred Account Balance at Oct 31, 2017	\$ 3,920,909	\$ 2,051,084	\$ 325,165	\$ 276,703	\$ 6,573,862
4	Total Amount for Recovery in this Rider	[= Line 2 + Line 3]	\$ 19,608,626	\$ 10,257,558	\$ 1,626,165	\$ 1,383,803	\$ 32,876,153
5	Throughput from Relevant Rate Case Order (Dekatherms)	[Schedule 4]	11,130,214	6,664,958	2,378,880	8,098,027	28,272,079
6	Rate per Dekatherm	[= Line 4 / Line 5]	\$1.76170	\$1.53900	\$0.68360	\$0.17090	
7	Proposed Integrity Management Rate per therm	[= Line 6 / 10]	\$0.17617	\$0.15390	\$0.06836	\$0.01709	
<i>As previously approved:</i>							
<i>Jan 1 2017 -Dec 31 2017</i>							
8	Customer Class Apportionment Percent	[Schedule 4]	59.6439%	31.2006%	4.9463%	4.2091%	100.0000%
9	IMRR for Recovery, excluding Refund Adjustment	[= Total from Schedule 5 of 2016 Annual Report x Line 8]	\$ 13,746,705	\$ 7,191,101	\$ 1,140,029	\$ 970,121	\$ 23,047,956
10	Deferred Account Adjustment	Actual Deferred Account Balance at Oct 31, 2016	\$ 860,834	\$ 450,315	\$ 71,390	\$ 60,750	\$ 1,443,289
11	Total Amount for Recovery in this Rider	[= Line 9 + Line 10]	\$ 14,607,539	\$ 7,641,416	\$ 1,211,419	\$ 1,030,871	\$ 24,491,245
12	Throughput from Relevant Rate Case Order (Dekatherms)	[Schedule 4]	11,130,214	6,664,958	2,378,880	8,098,027	28,272,079
13	Rate per Dekatherm	[= Line 11 / Line 12]	\$1.31240	\$1.14650	\$0.50920	\$0.12730	
14	Proposed Integrity Management Rate per therm	[= Line 13 / 10]	\$0.13124	\$0.11465	\$0.05092	\$0.01273	

Allocators from the Relevant Rate Case Order (Docket 11-00144)

Margin	Annual Total	Allocation %	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Residential (301)	\$ 62,049,925	59.64%	973,336	1,730,608	2,359,111	2,385,891	1,619,852	916,259	373,476	147,666	108,017	107,902	110,242	297,754	11,130,214
Small & Medium General Service (302, 352)	32,459,219	31.20%	584,122	941,038	1,236,854	1,246,332	886,901	542,351	290,661	185,427	166,853	166,553	166,151	251,717	6,664,958
Large General Service - Firm (303, 313, 310)	5,145,869	4.95%	215,868	357,459	373,276	272,366	238,238	161,907	152,836	108,789	110,733	112,060	121,273	154,075	2,378,880
Large General Service - Interruptible (304, 314)	4,378,934	4.21%	682,506	880,548	899,370	728,423	753,173	640,120	614,296	571,617	558,058	564,523	554,369	651,023	8,098,027
Total	\$ 104,033,947	100.00%													
Throughput (DTs)															
Residential (301)			973,336	1,730,608	2,359,111	2,385,891	1,619,852	916,259	373,476	147,666	108,017	107,902	110,242	297,754	11,130,214
Small & Medium General Service (302, 352)			584,122	941,038	1,236,854	1,246,332	886,901	542,351	290,661	185,427	166,853	166,553	166,151	251,717	6,664,958
Large General Service - Firm (303, 313, 310)			215,868	357,459	373,276	272,366	238,238	161,907	152,836	108,789	110,733	112,060	121,273	154,075	2,378,880
Large General Service - Interruptible (304, 314)			682,506	880,548	899,370	728,423	753,173	640,120	614,296	571,617	558,058	564,523	554,369	651,023	8,098,027
Total	2,455,831	3,909,653	4,868,611	4,693,012	3,498,264	2,260,637	1,431,269	1,013,499	943,661	951,038	952,034	1,354,569	28,272,079	4,79%	100.00%
Throughput Apportionment	8.69%	13.83%	17.22%	16.39%	12.37%	8.00%	5.06%	3.58%	3.34%	3.36%	3.37%	4.79%	100.00%		

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Summary of IMRR Computation

Line No.	Vintage Year	Rate Period	
		Jan 1 2017 - Dec 31 2017	Jan 1 2018 - Dec 31 2018
1	Vintage 1	\$ 13,060,485	\$ 12,460,384
2	Vintage 2	5,781,344	5,516,595
3	Vintage 3	1,984,957	1,933,274
4	Vintage 4	2,221,171	2,160,918
5	Vintage 5	n/a	4,231,121
6	Total	23,047,956	26,302,291
7	Total IMRR, excluding IM Deferred Account Adjustment	\$ 23,047,956	\$ 26,302,291

Spread of Total IMRR, excluding IM Deferred Adjustment, by Month

8	January	\$ 3,968,988	\$ 4,529,403
9	February	3,776,923	4,310,218
10	March	2,851,854	3,254,531
11	April	1,842,916	2,103,133
12	May	1,166,798	1,331,549
13	June	826,224	942,886
14	July	769,291	877,914
15	August	775,305	884,777
16	September	776,117	885,704
17	October	1,104,272	1,260,193
18	November	2,002,042	2,284,727
19	December	3,187,226	3,637,258
20	Total	\$ 23,047,956	\$ 26,302,291

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 1 - March 1, 2012 thru October 31, 2013

	Year 1	Year 2	Year 3	Year 4	Year 5
Plant	100,306,283	100,306,283	100,306,283	100,306,283	100,306,283
Accumulated depreciation	(974,476)	(2,428,917)	(3,883,358)	(5,337,799)	(6,792,240)
Net plant	99,331,807	97,877,366	96,422,925	94,968,484	93,514,043
ADIT	(4,057,566)	(6,977,762)	(9,549,872)	(24,529,845)	(25,236,572)
NOL benefit	-	-	-	24,529,845	21,449,590
Net investment	95,274,242	90,899,604	86,873,053	94,968,484	89,727,060
Pre-tax ROR%	11.446%	11.446%	11.446%	11.446%	11.446%
Pre-tax rate of return	10,904,782	10,404,075	9,943,209	10,869,786	10,269,869
Depreciation expense	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441
Property Tax expense	732,236	732,236	732,236	732,236	732,236
Total, excluding uncollectibles	13,091,459	12,590,752	12,129,886	13,056,463	12,456,546
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308	1.000308
Total revenue requirement	13,095,492	12,594,631	12,133,623	13,060,485	12,460,384

Assumptions and calculations:

Rider computed each year.

Normal depreciation and AFUDC practices apply. AFUDC ends and depreciation begins when plant goes into service.

Net of tax rate of return

6.96%

6.96%

6.96%

6.96%

6.96%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 1 - March 1, 2012 thru October 31, 2013

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Plant amount	100,306,283				
Book depreciation rate	1.45%				
Property Tax Rate	0.73%				
Tax depreciation	MACRS 15 Years 1 - 3				
Tax depreciation	BONUS 50% Years 4 - 5				
Plant in service date for this Vintage	31-Oct-13				
Original Rider effective date for this Vintage	1-Jan-14				
Fiscal year end for this Vintage	31-Oct-13				
SIT rate	6.50%	6.50%	6.50%	6.50%	6.50%
FIT rate	35.00%	35.00%	35.00%	35.00%	35.00%
Composite income tax rate	39.23%	39.23%	39.23%	39.23%	39.23%
Uncollectibles rate	0.0308%	0.0308%	0.0308%	0.0308%	0.0308%
Revenue requirement gross-up factor	1.000308	1.000308	1.000308	1.000308	1.000308
Capital structure assumptions (rate case):					
LTD	41.42%				
STD	5.87%				
Common equity	52.71%				
Capital cost rate assumptions (rate case):					
LTD	6.05%				
STD	1.59%				
Common equity	10.20%				
<u>Overall and pre-tax RORs</u>					
	<u>Pre-tax RORs</u>				
Overall					
LTD	2.506%	2.506%	2.506%	2.506%	2.506%
STD	0.093%	0.093%	0.093%	0.093%	0.093%
Common equity	5.376%	8.846%	8.846%	8.846%	8.846%
Total	7.976%	11.446%	11.446%	11.446%	11.446%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 1 - March 1, 2012 thru October 31, 2013

<u>Tax depreciation schedule</u>		<u>MACRS 15</u>		<u>BONUS 50%</u>	
	Rate	Yearly	Cumulative	Yearly	Cumulative
Tax year 1	5.00%	5,015,314	14,544,411	52,660,799	57,425,347
Tax year 2	9.50%	9,529,097	23,120,598	4,764,548	61,713,441
Tax year 3	8.55%	8,576,187	30,844,182	4,288,094	65,575,233
Tax year 4	7.70%	7,723,584	37,795,407	3,861,792	69,050,845
Tax year 5	6.93%	6,951,225	44,044,489	3,475,613	72,175,386
Tax year 6	6.23%	6,249,081	49,962,560	3,124,541	75,134,421
Tax year 7	5.90%	5,918,071	55,880,630	2,959,035	78,093,457
Tax year 8	5.90%	5,918,071	61,808,732	2,964,051	81,057,507
Tax year 9	5.91%	5,928,101	67,726,802	2,959,035	84,016,543
Tax year 10	5.90%	5,918,071	73,654,904	2,964,051	86,980,593
Tax year 11	5.91%	5,928,101	79,572,974	2,959,035	89,939,629
Tax year 12	5.90%	5,918,071	85,501,076	2,964,051	92,903,679
Tax year 13	5.91%	5,928,101	91,419,146	2,959,035	95,862,715
Tax year 14	5.90%	5,918,071	97,347,248	2,964,051	98,826,765
Tax year 15	5.91%	5,928,101	100,306,283	1,479,518	100,306,283
Tax year 16	2.95%	2,959,035		100,306,283	
Total	100.00%	100,306,283			

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Accumulated depreciation					
Portion of year in service before rider					
Pre-rider amount of depreciation	247,255	1,701,696	3,156,137	4,610,578	6,065,019
Rider year BOY amount	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441
Depreciation expense	1,701,696	3,156,137	4,610,578	6,065,019	7,519,461
Rider year EOY amount	974,476	2,428,917	3,883,358	5,337,799	6,792,240
Average accumulated depreciation					

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 1 - March 1, 2012 thru October 31, 2013

MACRS 15

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Tax depreciation reserve					
FY of completion tax depreciation	5,015,314				
Post FY tax depreciation to rider date	17%				
Tax year 2 tax depreciation	9,529,097				
Tax year 2 pre-rider tax depr	1,619,946				
Rider Year BOY amount	6,635,261	16,002,363	24,433,607	32,025,890	38,857,751
Tax period A tax depreciation	7,909,150	7,118,235	6,410,575	5,769,517	5,186,738
Tax period B tax depreciation	1,457,952	1,313,009	1,181,708	1,062,344	1,006,072
Rider year EOY amount	16,002,363	24,433,607	32,025,890	38,857,751	45,050,561
Average tax depreciation reserve	11,318,812	20,217,985	28,229,749	35,441,821	41,954,156

Note - gap between fiscal year and rider year addressed by tax period A and tax period B.

Accumulated deferred taxes

Average tax depreciation reserve	11,318,812	20,217,985	28,229,749	35,441,821	41,954,156
Average book depreciation reserve	974,476	2,428,917	3,883,358	5,337,799	6,792,240
Difference	10,344,336	17,789,069	24,346,391	30,104,022	35,161,916
Composite tax rate	39.23%	39.23%	39.23%	39.23%	39.23%
Average ADIT	4,057,566	6,977,762	9,549,872	11,808,303	13,792,262

Note - composite tax rate ignores excess deferred tax flowback

BONUS 50%

Tax depreciation reserve					
FY of completion tax depreciation	52,660,799				
Post FY tax depreciation to rider date	17%				
Tax year 2 tax depreciation	4,764,548				
Tax year 2 pre-rider tax depr	809,973				
Rider year BOY amount	53,470,772	58,154,323	62,369,945	66,166,087	69,582,017
Tax period A tax depreciation	3,954,575	3,559,118	3,205,287	2,884,759	2,593,369
Tax period B tax depreciation	728,976	656,505	590,854	531,172	509,036
Rider year EOY amount	58,154,323	62,369,945	66,166,087	69,582,017	72,678,422
Average tax depreciation reserve	55,812,547	60,262,134	64,268,016	67,874,052	71,130,220

Accumulated deferred taxes

Average tax depreciation reserve	55,812,547	60,262,134	64,268,016	67,874,052	71,130,220
Average book depreciation reserve	974,476	2,428,917	3,883,358	5,337,799	6,792,240
Difference	54,838,072	57,833,217	60,384,658	62,536,253	64,337,980
Composite tax rate	39.23%	39.23%	39.23%	39.23%	39.23%
Average ADIT	21,510,234	22,685,080	23,685,882	24,529,845	25,236,572

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 2 - November 1, 2013 thru October 31, 2014

	Year 1	Year 2	Year 3	Year 4
Plant	53,974,676	53,974,676	53,974,676	53,974,676
Accumulated depreciation	(524,364)	(1,306,997)	(2,089,630)	(2,872,262)
Net plant	53,450,312	52,667,679	51,885,047	51,102,414
ADIT	(2,183,371)	(3,754,724)	(12,745,341)	(13,199,477)
NOI benefit			1,075,611	-
Net investment	51,266,941	48,912,955	40,215,316	37,902,937
Pre-tax ROR%	11.446%	11.446%	11.446%	11.446%
Pre-tax rate of return	5,867,848	5,598,419	4,602,915	4,338,248
Depreciation expense	782,633	782,633	782,633	782,633
Property Tax expense	394,015	394,015	394,015	394,015
Total, excluding uncollectibles	7,044,496	6,775,067	5,779,563	5,514,896
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308
Total revenue requirement	7,046,667	6,777,154	5,781,344	5,516,595

Assumptions and calculations:

Rider computed each year.

Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Net of tax rate of return 6.96% 6.96% 6.96% 6.96%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 2 - November 1, 2013 thru October 31, 2014

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	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Plant amount	53,974,676			
Book depreciation rate	1.45%			
Property Tax Rate	0.73%			
Tax depreciation	MACRS 15 Years 1 - 2			
Tax depreciation	BONUS 50% Years 3 - 4			
Plant in service date for this Vintage	31-Oct-14			
Original Rider effective date for this Vintage	1-Jan-15			
Fiscal year end for this Vintage	31-Oct-14			
SIT rate	6.50%	6.50%	6.50%	6.50%
FIT rate	35.00%	35.00%	35.00%	35.00%
Composite income tax rate	39.23%	39.23%	39.23%	39.23%
Uncollectibles rate	0.0308%	0.0308%	0.0308%	0.0308%
Revenue requirement gross-up factor	1.000308	1.000308	1.000308	1.000308
Capital structure assumptions (rate case):				
LTD	41.42%			
STD	5.87%			
Common equity	52.71%			
Capital cost rate assumptions (rate case):				
LTD	6.05%			
STD	1.59%			
Common equity	10.20%			
<u>Overall and pre-tax RORs</u>				
	<u>Overall</u>	<u>Pre-tax RORs</u>		
LTD	2.506%	2.506%	2.506%	2.506%
STD	0.093%	0.093%	0.093%	0.093%
Common equity	5.376%	8.846%	8.846%	8.846%
Total	7.976%	11.446%	11.446%	11.446%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 2 - November 1, 2013 thru October 31, 2014

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Tax depreciation schedule	Rate	MACRS 15		BONUS 50%	
		Yearly	Cumulative	Yearly	Cumulative
Tax year 1	5.00%	2,698,734		28,336,705	
Tax year 2	9.50%	5,127,594	7,826,328	2,563,797	30,900,502
Tax year 3	8.55%	4,614,835	12,441,163	2,307,417	33,207,920
Tax year 4	7.70%	4,156,050	16,597,213	2,078,025	35,285,945
Tax year 5	6.93%	3,740,445	20,337,658	1,870,223	37,156,167
Tax year 6	6.23%	3,362,622	23,700,280	1,681,311	38,837,478
Tax year 7	5.90%	3,184,506	26,884,786	1,592,253	40,429,731
Tax year 8	5.90%	3,184,506	30,069,292	1,592,253	42,021,984
Tax year 9	5.91%	3,189,903	33,259,195	1,594,952	43,616,936
Tax year 10	5.90%	3,184,506	36,443,701	1,592,253	45,209,189
Tax year 11	5.91%	3,189,903	39,633,605	1,594,952	46,804,140
Tax year 12	5.90%	3,184,506	42,818,111	1,592,253	48,396,393
Tax year 13	5.91%	3,189,903	46,008,014	1,594,952	49,991,345
Tax year 14	5.90%	3,184,506	49,192,520	1,592,253	51,583,598
Tax year 15	5.91%	3,189,903	52,382,423	1,594,952	53,178,550
Tax year 16	2.95%	1,592,253	53,974,676	796,126	53,974,676
Total	100.00%	53,974,676		53,974,676	

Accumulated depreciation	Year 1		Year 2		Year 3		Year 4	
	17%		133,048		133,048		133,048	
Portion of year in service before rider								
Pre-rider amount of depreciation								
Rider year BOY amount			133,048		133,048		133,048	
Depreciation expense			782,633		782,633		782,633	
Rider year EOY amount			915,680		915,680		915,680	
Average accumulated depreciation			524,364		524,364		524,364	

Piedmont Natural Gas Company, Inc.
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Annual Revenue Requirement Computation
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Vintage Year 2 - November 1, 2013 thru October 31, 2014

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MACRS 15		Year 1	Year 2	Year 3	Year 4
Tax depreciation reserve					
FY of completion tax depreciation	2,698,734				
Post FY tax depreciation to rider date	17%				
Tax year 2 tax depreciation	5,127,594				
Tax year 2 pre-rider tax depr	871,691				
Rider year BOY amount		3,570,425	8,610,850	13,147,691	17,233,089
Tax period A tax depreciation		4,255,903	3,830,313	3,449,522	3,104,569
Tax period B tax depreciation		784,522	706,529	635,876	571,646
Rider year EOY amount		8,610,850	13,147,691	17,233,089	20,909,304
Average tax depreciation reserve		6,090,637	10,879,271	15,190,390	19,071,196

Note - gap between fiscal year and rider year addressed by tax period A and tax period B.

Accumulated deferred taxes					
Average tax depreciation reserve		6,090,637	10,879,271	15,190,390	19,071,196
Average book depreciation reserve		524,364	1,306,997	2,089,630	2,872,262
Difference		5,566,273	9,572,274	13,100,760	16,198,934
Composite tax rate		39.23%	39.23%	39.23%	39.23%
Average ADIT		2,183,371	3,754,724	5,138,773	6,354,032

Note - composite tax rate ignores excess deferred tax flowback

BONUS 50%					
Tax depreciation reserve					
FY of completion tax depreciation	28,336,705				
Post FY tax depreciation to rider date	17%				
Tax year 2 tax depreciation	2,563,797				
Tax year 2 pre-rider tax depr	435,846				
Rider year BOY amount		28,772,551	31,292,763	33,561,184	35,603,882
Tax period A tax depreciation		2,127,952	1,915,156	1,724,761	1,552,285
Tax period B tax depreciation		392,261	353,264	317,938	285,823
Rider year EOY amount		31,292,763	33,561,184	35,603,882	37,441,990
Average tax depreciation reserve		30,032,657	32,426,973	34,582,533	36,522,936
Accumulated deferred taxes					
Average tax depreciation reserve		30,032,657	32,426,973	34,582,533	36,522,936
Average book depreciation reserve		524,364	1,306,997	2,089,630	2,872,262
Difference		29,508,293	31,119,977	32,492,903	33,650,674
Composite tax rate		39.23%	39.23%	39.23%	39.23%
Average ADIT		11,574,628	12,206,811	12,745,341	13,199,477

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 3 - November 1, 2014 thru October 31, 2015

	Year 1	Year 2	Year 3
Plant	18,441,896	18,441,896	18,441,896
Accumulated depreciation	(179,163)	(446,571)	(713,978)
Net plant	18,262,733	17,995,326	17,727,918
ADIT	(746,007)	(4,170,784)	(4,354,788)
NOL benefit	-	-	-
Net investment	17,516,726	13,824,541	13,373,130
Pre-tax ROR%	11.446%	11.446%	11.446%
Pre-tax rate of return	2,004,908	1,582,312	1,530,645
Depreciation expense	267,407	267,407	267,407
Property Tax expense	134,626	134,626	134,626
Total, excluding uncollectibles	2,406,941	1,984,346	1,932,679
Uncollectibles gross-up factor	1.000308	1.000308	1.000308
Total revenue requirement	2,407,683	1,984,957	1,933,274

Assumptions and calculations:

Rider computed each year.

Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Net of tax rate of return 6.96% 6.96% 6.96%

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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 3 - November 1, 2014 thru October 31, 2015

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	Year 1	Year 2	Year 3
Plant amount	18,441,896		
Book depreciation rate	1.45%		
Property Tax Rate	0.73%		
Tax depreciation	MACRS 15 Year 1		
Tax depreciation	BONUS 50% Years 2 - 3		
Plant in service date for this Vintage	31-Oct-15		
Original Rider effective date for this Vintage	1-Jan-16		
Fiscal year end for this Vintage	31-Oct-15		
SIT rate	6.50%	6.50%	6.50%
FIT rate	35.00%	35.00%	35.00%
Composite income tax rate	39.23%	39.23%	39.23%
Uncollectibles rate	0.0308%	0.0308%	0.0308%
Revenue requirement gross-up factor	1.000308	1.000308	1.000308
Capital structure assumptions (rate case):			
LTD	41.42%		
STD	5.87%		
Common equity	52.71%		
Capital cost rate assumptions (rate case):			
LTD	6.05%		
STD	1.59%		
Common equity	10.20%		
Overall and pre-tax RORs			
Overall	2.506%	2.506%	2.506%
LTD	0.093%	0.093%	0.093%
STD	5.376%	5.376%	5.376%
Common equity	7.976%	7.976%	7.976%
Total	11.446%	11.446%	11.446%

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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 3 - November 1, 2014 thru October 31, 2015

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Tax depreciation schedule	Rate	MACRS 15		BONUS 50%	
		Yearly	Cumulative	Yearly	Cumulative
Tax year 1	5.00%	922,095		9,681,995	
Tax year 2	9.50%	1,751,980	2,674,075	875,990	10,557,986
Tax year 3	8.55%	1,576,782	4,250,857	788,391	11,346,377
Tax year 4	7.70%	1,420,026	5,670,883	710,013	12,056,390
Tax year 5	6.93%	1,278,023	6,948,906	639,012	12,695,401
Tax year 6	6.23%	1,148,930	8,097,837	574,465	13,269,866
Tax year 7	5.90%	1,088,072	9,185,908	544,036	13,813,902
Tax year 8	5.90%	1,088,072	10,273,980	544,036	14,357,938
Tax year 9	5.91%	1,089,916	11,363,896	544,958	14,902,896
Tax year 10	5.90%	1,088,072	12,451,968	544,036	15,446,932
Tax year 11	5.91%	1,089,916	13,541,884	544,958	15,991,890
Tax year 12	5.90%	1,088,072	14,629,956	544,036	16,535,926
Tax year 13	5.91%	1,089,916	15,719,872	544,958	17,080,884
Tax year 14	5.90%	1,088,072	16,807,944	544,036	17,624,920
Tax year 15	5.91%	1,089,916	17,897,860	544,958	18,169,878
Tax year 16	2.95%	544,036	18,441,896	272,018	18,441,896
Total	100.00%	18,441,896		18,441,896	

	Year 1	Year 2	Year 3
Accumulated depreciation			
Portion of year in service before rider	17%		
Pre-rider amount of depreciation	45,459		
Rider year BOY amount		45,459	580,274
Depreciation expense	267,407	267,407	267,407
Rider year EOY amount	312,867	580,274	847,682
Average accumulated depreciation	179,163	446,571	713,978

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 3 - November 1, 2014 thru October 31, 2015

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MACRS 15			
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Tax depreciation reserve			
FY of completion tax depreciation	922,095		
Post FY tax depreciation to rider date	17%		
Tax year 2 tax depreciation	1,751,980		
Tax year 2 pre-rider tax depr	297,837		
Rider year BOY amount	1,219,931	2,942,128	4,492,261
Tax period A tax depreciation	1,454,144	1,308,729	1,178,622
Tax period B tax depreciation	268,053	241,404	217,264
Rider year EOY amount	2,942,128	4,492,261	5,888,147
Average tax depreciation reserve	2,081,030	3,717,195	5,190,204

Note - gap between fiscal year and rider year addressed by tax period A and tax period B.

Accumulated deferred taxes			
Average tax depreciation reserve	2,081,030	3,717,195	5,190,204
Average book depreciation reserve	179,163	446,571	713,978
Difference	1,901,867	3,270,624	4,476,226
Composite tax rate	39.23%	39.23%	39.23%
Average ADIT	746,007	1,282,902	1,755,800

Note - composite tax rate ignores excess deferred tax flowback

BONUS 50%			
Tax depreciation reserve			
FY of completion tax depreciation	9,681,995		
Post FY tax depreciation to rider date	17%		
Tax year 2 tax depreciation	875,990		
Tax year 2 pre-rider tax depr	148,918		
Rider year BOY amount	9,830,914	10,692,012	11,467,079
Tax period A tax depreciation	727,072	654,365	589,311
Tax period B tax depreciation	134,026	120,702	108,632
Rider year EOY amount	10,692,012	11,467,079	12,165,022
Average tax depreciation reserve	10,261,463	11,079,545	11,816,050
Accumulated deferred taxes			
Average tax depreciation reserve	10,261,463	11,079,545	11,816,050
Average book depreciation reserve	179,163	446,571	713,978
Difference	10,082,300	10,632,975	11,102,072
Composite tax rate	39.23%	39.23%	39.23%
Average ADIT	3,954,782	4,170,784	4,354,788

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018
Vintage Year 4 - November 1, 2015 thru October 31, 2016

	<u>Year 1</u>	<u>Year 2</u>
Plant	20,076,718	20,076,718
Accumulated depreciation	(195,045)	(486,158)
Net plant	19,881,673	19,590,560
ADIT	(4,305,362)	(4,540,513)
NOL benefit	-	-
Net investment	15,576,310	15,050,048
Pre-tax ROR%	11.446%	11.446%
Pre-tax rate of return	1,782,814	1,722,580
Depreciation expense	291,112	291,112
Property Tax expense	146,560	146,560
Total, excluding uncollectibles	2,220,487	2,160,252
Uncollectibles gross-up factor	1.000308	1.000308
Total revenue requirement	<u>2,221,171</u>	<u>2,160,918</u>

Assumptions and calculations:

Rider computed each year.

Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Net of tax rate of return 6.96%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 4 - November 1, 2015 thru October 31, 2016

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	<u>Year 1</u>	<u>Year 2</u>
Plant amount	20,076,718	
Book depreciation rate	1.45%	
Property Tax Rate	0.73%	
Tax depreciation	BONUS 50% Years 1 - 2	
Plant in service date for this Vintage	31-Oct-16	
Original Rider effective date for this Vintage	1-Jan-17	
Fiscal year end for this Vintage	31-Oct-16	
SIT rate	6.50%	6.50%
FIT rate	35.00%	35.00%
Composite income tax rate	39.23%	39.23%
Uncollectibles rate	0.0308%	0.0308%
Revenue requirement gross-up factor	1.000308	1.000308
Capital structure assumptions (rate case):		
LTD	41.42%	
STD	5.87%	
Common equity	52.71%	
Capital cost rate assumptions (rate case):		
LTD	6.05%	
STD	1.59%	
Common equity	10.20%	
Overall and pre-tax RORs		
	Overall	Pre-tax RORs
LTD	2.506%	2.506%
STD	0.093%	0.093%
Common equity	5.376%	8.846%
Total	7.976%	11.446%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 4 - November 1, 2015 thru October 31, 2016

MACRS 15 tax depreciation schedule

	Rate	MACRS 15		BONUS 50%	
		Yearly	Cumulative	Yearly	Cumulative
Tax year 1	5.00%	1,003,836		10,540,277	
Tax year 2	9.50%	1,907,288	2,911,124	953,644	11,493,921
Tax year 3	8.55%	1,716,559	4,627,683	858,280	12,352,201
Tax year 4	7.70%	1,545,907	6,173,591	772,954	13,125,154
Tax year 5	6.93%	1,391,317	7,564,907	695,658	13,820,813
Tax year 6	6.23%	1,250,780	8,815,687	625,390	14,446,202
Tax year 7	5.90%	1,184,526	10,000,213	592,263	15,038,466
Tax year 8	5.90%	1,184,526	11,184,740	592,263	15,630,729
Tax year 9	5.91%	1,186,534	12,371,274	593,267	16,223,996
Tax year 10	5.90%	1,184,526	13,555,800	592,263	16,816,259
Tax year 11	5.91%	1,186,534	14,742,334	593,267	17,409,526
Tax year 12	5.90%	1,184,526	15,926,860	592,263	18,001,789
Tax year 13	5.91%	1,186,534	17,113,394	593,267	18,595,056
Tax year 14	5.90%	1,184,526	18,297,921	592,263	19,187,319
Tax year 15	5.91%	1,186,534	19,484,455	593,267	19,780,586
Tax year 16	2.95%	592,263	20,076,718	296,132	20,076,718
Total	100.00%	20,076,718		20,076,718	

Year 1 Year 2

Accumulated depreciation
Portion of year in service before rider
Pre-rider amount of depreciation
Rider year BOY amount
Depreciation expense
Rider year EOY amount
Average accumulated depreciation

17%
49,489

	49,489	340,602
	291,112	291,112
	340,602	631,714
	195,045	486,158

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 4 - November 1, 2015 thru October 31, 2016

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MACRS 15	
Tax depreciation reserve	
FY of completion tax depreciation	
Post FY tax depreciation to rider date	1,003,836
Tax year 2 tax depreciation	17%
Tax year 2 pre-rider tax depr	1,907,288
Rider year BOY amount	324,239
Tax period A tax depreciation	
Tax period B tax depreciation	
Rider year EOY amount	1,328,075
Average tax depreciation reserve	1,583,049
	1,424,744
	291,815
	262,804
	3,202,939
	4,890,488
	2,265,507
	4,046,713

Note - gap between fiscal year and rider year addressed by tax period A and tax period B.

Accumulated deferred taxes	
Average tax depreciation reserve	2,265,507
Average book depreciation reserve	195,045
Difference	2,070,462
Composite tax rate	39.23%
Average ADIT	812,139
	1,396,628

Note - composite tax rate ignores excess deferred tax flowback

BONUS 50%	
Tax depreciation reserve	
FY of completion tax depreciation	
Post FY tax depreciation to rider date	10,540,277
Tax year 2 tax depreciation	17%
Tax year 2 pre-rider tax depr	953,644
Rider year BOY amount	162,119
Tax period A tax depreciation	
Tax period B tax depreciation	
Rider year EOY amount	10,702,396
Average tax depreciation reserve	791,525
	712,372
	145,908
	131,402
	11,639,829
	12,483,603
	11,171,113
	12,061,716
Accumulated deferred taxes	
Average tax depreciation reserve	11,171,113
Average book depreciation reserve	195,045
Difference	10,976,067
Composite tax rate	39.23%
Average ADIT	4,305,362
	4,540,513

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 5 - November 1, 2016 thru October 31, 2017

Plant	Year 1
Accumulated depreciation	38,244,253
Net plant	(371,543)
ADIT	37,872,710
NOL benefit	(8,201,309)
Net investment	29,671,401
Pre-tax ROR%	11.446%
Pre-tax rate of return	3,396,093
Depreciation expense	554,542
Property Tax expense	279,183
Total, excluding uncollectibles	4,229,817
Uncollectibles gross-up factor	1.000308
Total revenue requirement	4,231,121

Assumptions and calculations:

Rider computed each year.

Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Net of tax rate of return 6.96%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 5 - November 1, 2016 thru October 31, 2017

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Plant amount	38,244,253	<u>Year 1</u>
Book depreciation rate	1.45%	
Property Tax Rate	0.73%	
Tax depreciation	BONUS 50% Year 1	
Plant in service date for this Vintage	31-Oct-17	
Original Rider effective date for this Vintage	1-Jan-18	
Fiscal year end for this Vintage	31-Oct-17	6.50%
SIT rate		35.00%
FIT rate		39.23%
Composite income tax rate		0.0308%
Uncollectibles rate		1.000308
Revenue requirement gross-up factor		
Capital structure assumptions (rate case):		
LTD	41.42%	
STD	5.87%	
Common equity	52.71%	
Capital cost rate assumptions (rate case):		
LTD	6.05%	
STD	1.59%	
Common equity	10.20%	
Overall and pre-tax RORs		
	<u>Overall</u>	<u>Pre-tax RORs</u>
LTD	2.506%	2.506%
STD	0.093%	0.093%
Common equity	5.376%	8.846%
Total	7.976%	11.446%

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 17-_____

Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 5 - November 1, 2016 thru October 31, 2017

MACRS 15 tax depreciation schedule

	Rate	MACRS 15		BONUS 50%	
		Yearly	Cumulative	Yearly	Cumulative
Tax year 1	5.00%	1,912,213		20,078,233	
Tax year 2	9.50%	3,633,204	5,545,417	1,816,602	21,894,835
Tax year 3	8.55%	3,269,884	8,815,300	1,634,942	23,529,777
Tax year 4	7.70%	2,944,807	11,760,108	1,472,404	25,002,181
Tax year 5	6.93%	2,650,327	14,410,435	1,325,163	26,327,344
Tax year 6	6.23%	2,382,617	16,793,052	1,191,308	27,518,652
Tax year 7	5.90%	2,256,411	19,049,463	1,128,205	28,646,858
Tax year 8	5.90%	2,256,411	21,305,873	1,128,205	29,775,063
Tax year 9	5.91%	2,260,235	23,566,109	1,130,118	30,905,181
Tax year 10	5.90%	2,256,411	25,822,520	1,128,205	32,033,386
Tax year 11	5.91%	2,260,235	28,082,755	1,130,118	33,163,504
Tax year 12	5.90%	2,256,411	30,339,166	1,128,205	34,291,710
Tax year 13	5.91%	2,260,235	32,599,401	1,130,118	35,421,827
Tax year 14	5.90%	2,256,411	34,855,812	1,128,205	36,550,033
Tax year 15	5.91%	2,260,235	37,116,048	1,130,118	37,680,150
Tax year 16	2.95%	1,128,205	38,244,253	564,103	38,244,253
Total	100.00%	38,244,253		38,244,253	

Year 1

Accumulated depreciation
Portion of year in service before rider
Pre-rider amount of depreciation
Rider year BOY amount
Depreciation expense
Rider year EOY amount
Average accumulated depreciation

17%
94,272

94,272
554,542
648,814
371,543

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
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Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2018 - December 31, 2018

Vintage Year 5 - November 1, 2016 thru October 31, 2017

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IMACRS 15		Year 1
Tax depreciation reserve		
FY of completion tax depreciation	1,912,213	
Post FY tax depreciation to rider date	17%	
Tax year 2 tax depreciation	3,633,204	
Tax year 2 pre-rider tax depr	617,645	
Rider year BOY amount		2,529,857
Tax period A tax depreciation		3,015,559
Tax period B tax depreciation		555,880
Rider year EOY amount		6,101,297
Average tax depreciation reserve		4,315,577

Note - gap between fiscal year and rider year addressed by tax period A and tax period B.

Accumulated deferred taxes	
Average tax depreciation reserve	4,315,577
Average book depreciation reserve	371,543
Difference	3,944,034
Composite tax rate	39.23%
Average ADIT	1,547,047

Note - composite tax rate ignores excess deferred tax flowback

BONUS 50%		
Tax depreciation reserve		
FY of completion tax depreciation	20,078,233	
Post FY tax depreciation to rider date	17%	
Tax year 2 tax depreciation	1,816,602	
Tax year 2 pre-rider tax depr	308,822	
Rider year BOY amount		20,387,055
Tax period A tax depreciation		1,507,780
Tax period B tax depreciation		277,940
Rider year EOY amount		22,172,775
Average tax depreciation reserve		21,279,915
Accumulated deferred taxes		
Average tax depreciation reserve		21,279,915
Average book depreciation reserve		371,543
Difference		20,908,372
Composite tax rate		39.23%
Average ADIT		8,201,309

Tennessee Allocated NOL Carryforward As of November 30, 2017

<u>Line No.</u>			<u>Line Computation</u>
1	2013	Taxable Income	(20,072,959)
2		Allocated NOL	(7,647,003)
3	2014	Taxable Income	(70,327,409)
4		Allocated NOL	(48,689,253)
5	2015	Taxable Income	35,741,137
6		Allocated NOL	-
7	2016	Taxable Income	(7,598,842)
8		Allocated NOL	(4,948,286)
9	TN Allocated NOL Carryforward		<u>(61,284,542)</u> Line 9 = Lines 2 + 4 + 6 + 8
10	Federal Tax Rate		0.35
11	TN Tax Benefit of NOL Carryforward		<u>(21,449,590)</u> Line 11 = Line 9 x Line 10

Piedmont Natural Gas Company, Inc.
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Schedule of Prior Period Adjustments

None

Piedmont Natural Gas Company, Inc.
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Statement of Public Interest

Piedmont is not aware of any changes in the market conditions or other factors that affect whether this Rider is still in the public interest.

PIEDMONT NATURAL GAS COMPANY, INC.
GUIDELINES FOR SYSTEM INTEGRITY PROJECTS

Purpose is to ensure a safe and reliable steel infrastructure that meets regulations set by the US Department of Transportation.

OPERATIONS & MAINTENANCE (O&M) EXPENSE:

O&M is basically defined as any work done on an asset that deals with a component that is less than a retirement unit. All routine maintenance should be expensed as incurred. Piedmont further defines O&M System Integrity as follows:

- Cathodic Protection (CP) technicians monitor and maintain the CP system
 - o CP readings at testing stations and casings
 - o Troubleshoot interference issues
 - o AC Mitigation results
- Rectifier monitoring and troubleshooting
- Transmission Integrity Management Program (TIMP) support
 - o Annual High Consequence Areas (HCA) field verification
 - o Engineering overall
 - o Bell hole examinations in support of the following work:
 - External Corrosion Direct Assessment (ECDA)
 - Internal Corrosion Direct Assessment (ICDA)
 - Confirmatory Direct Assessment (CDA)
 - Inline Inspection (ILI)
 - Pig runs including equipment and labor
 - Labor & equipment for chemical cleaning, foam pigs
 - Survey Above Ground Marker (AGM) locations
 - Inspection support
 - Contractor support – during tool run only
 - Engineering support interpreting data
 - Engineering, survey, digs, assessment
 - Mowing for Close Interval Pipe-To-Soil Survey (CIS)
 - CIS for those transmission lines being pigged
 - Pipe-to-soil
 - Soil resistivity
 - Depth of cover
 - Ultrasonic thickness (UT)
 - External pit depth measurements
 - TCAT
 - Soil pH
 - Coating inspections
 - Defect analysis and remediation determining defect classification and repair method

CAPITAL EXPENDITURE:

Capital Expenditures are major expenditures on assets that last longer than a year and improve or lengthen the expected useful life of the overall property from original expectations that are recoverable in utility rate base. As a general Company rule, projects costing less than \$1,500 are not capitalized (see section 3.0 of the Company's Corporate Accounting Manual). New additions consist of retirement unit installations that did not currently exist in the system. Replacements are the installation of retirement units where one existed before the new one was installed (see 40 ft rule for the Replacement of Mains under section 3.5 of the Company's Corporate Accounting Manual). In conjunction with a replacement, a retirement is required of the original retirement unit no longer useful. Piedmont further defines Capital Expenditures for System Integrity projects into the following subgroups:

- Remediation of CIS findings
- Regulator station upgrade projects Distribution Integrity Management Program (DIMP)
- Linear anode installations
- AC mitigation projects
- Conventional ground bed installation
- TIMP remediation
 - o Labor, equipment & material for cutouts of ≥ 40 ft
 - o Survey
 - o X-ray

DEFINITIONS:

Retirement Unit – A Retirement Unit is the smallest distinct component of property that is identified and costed individually in the plant records.

Property Unit - A Property Unit is an item or group of items that constitutes the minimum division of plant that is continuously associated with its cost in the plant records. It may include one or more retirement units and associated minor items. It is capitalized when placed in service and retired when no longer "used and useful".

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on November 30, 2017, a copy of the attached was served on the following by electronic mail and by depositing a copy of the same in the United States Mail, First Class Postage Prepaid, addressed as follows:

Wayne Irvin
Emily Knight
Office of the Attorney General
Consumer Advocate and Protection Division
P. O. Box 20207
Nashville TN 37202
Wayne.Irvin@ag.tn.gov
emily.knight@ag.tn.gov


