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November 30, 2020

Via Hand-Delivery

Executive Director Earl Taylor c/o Ectory Lawless Tennessee Public Utility Commission 502 Deaderick Street, Fourth Floor Nashville, Tennessee 37243

> Re: Petition of Piedmont Natural Gas Company, Inc. for Approval of an Integrity Management Rider to its Approved Rate Schedules and Service Regulations Docket No. 20- 00130

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, 2021 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 1<sup>st</sup> 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 30<sup>th</sup> of each year.

Piedmont hereby submits its 2020 annual filing which includes the following information in accordance with Service Schedule No. 317: (a) the monthly IMR filing for October 2020, (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 Sixty-Eighth Revised Sheet No. 1 reflecting the proposed billing rates for January 1, 2021.

Also included with this filing is the Direct Testimony of Pia K. Powers in support of Piedmont's 2020 annual filing.

This material is also being filed today by way of email to the Tennessee Public Utility Commission docket manager, Ectory Lawless. Please file the original and four copies and stamp

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Executive Director Earl Taylor c/o Ectory Lawless November 30, 2020 Page 2

the additional copies as "filed." Then please return the stamped copy to me by way of our courier. Very truly yours,

Very truly yours,

Paul S. Davidson

Jul S. Davidson Ign

PSD:

Enclosures

cc:

David Foster

Daniel Whitaker Vance Broemel Bruce Barkley Pia Powers

James H. Jeffries IV

# **Before the Tennessee Public Utility Commission**

Docket No. 20-00130

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** 

2020 Annual Filing



TPUC Docket No. 20-<u>00130</u>
Integrity Management Rider
October 2020 Monthly Report

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 20-

## <u>Cumulative Integrity Management Investment Amount</u> Actual Integrity Management Investment, by Integrity Project Type

		Current Vintage Year: Vintage Year 8						All Vintage Years
<u>Line No.</u>		October 2020 Capital Expenditure <sup>1</sup>		rior Cumulative pital Expenditure <sup>2</sup>		Cumulative pital Expenditure of October 2020 3		Cumulative pital Expenditure of October 2020 <sup>6</sup>
	TN Direct							
1	Corrosion Control	\$ 32,879.27	\$	650,323.34	\$	683,202.61	\$	8,624,926.04
2	Casing Remediation	\$ 825,087.99	\$	238,600.11	\$	1,063,688.10	\$	1,940,962.95
3	Distribution Integrity	\$ 3,030,871.97	\$	21,362,413.58	\$	24,393,285.55	\$	110,308,600.23
4	Transmission Integrity	\$ 2,112,765.65	\$	40,401,205.24	\$	42,513,970.89	\$	253,785,210.25
5	Total	\$ 6,001,604.88	\$	62,652,542.27	\$	68,654,147.15	\$	374,659,699.47
	Joint Property: CO3-State							
6	OASIS Project (Work & Asset Management System)	\$ -	\$	-	\$	-	\$	133,880,060.70
7	TN % of CO-3 for Current Month <sup>4</sup>	 15.65%						
8	Total Allocated to TN	\$ -	\$	-	\$	-	\$	23,535,435.31
9	Total Capital Expenditures [Line 5 + Line 8]	\$ 6,001,604.88	\$	62,652,542.27	\$	68,654,147.15	\$	398,195,134.78
10	Less: Amount Included in the Attrition Period <sup>5</sup>	\$ -	\$	-	\$	-	\$	32,900,000.00
11	<b>Total Integrity Management Investment</b>	\$ 6,001,604.88	\$	62,652,542.27	\$	68,654,147.15	\$	365,295,134.78

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

<sup>2/</sup> 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

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

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

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

<sup>6/</sup> 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, 4, 5, 6 and 7 which captures amounts through 10/31/19, is \$296,640,987.63 (\$100,306,282.52 for Vintage Year 1, \$53,974,676.19 for Vintage Year 2, \$18,441,896.09 for Vintage Year 3, \$20,076,717.97 for Vintage Year 4, \$38,244,253.18 for Vintage 5, \$27,564,238.09 for Vintage Year 6 and \$38,032,923.59 for Vintage Year 7).

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

Line No.	Funding Project Capital Project Type Number District Funding Project Description				
1	CORR-Corrosion Control	F0228798	17	Hillsboro Rd. Rectifier & Ground Bed	October 2020 1.491.19
2	CORR-Corrosion Control	F0229704	17	Nashville Rectifier & Ground Bed	62.95
3	CORR-Corrosion Control	F0232178	17	Cedar Hill Park Deep Well-New Rec	31,325.13
4	CSNG-Casing & Remediation	F0232178	17	Main Street @ I-65 Casing Removal	44,279.35
5	CSNG-Casing & Remediation	F0231470	17   Main Street @ 1-65 Casing Removal 17   44th Ave N @ 1-40 - 8" Pipe		780,808.64
6	DIMP-Distribution Integrity	F0221773	17	Walton Lane Valve Replacements	(9,257.60)
7	DIMP-Distribution Integrity	F0222120	17	31st Ave @ West end Valve Replacement	(28,674.37)
8	DIMP-Distribution Integrity	F0222124	17	Harding PI & Granny White Pk Valve	(2,412.36)
9	DIMP-Distribution Integrity	F0222865	17	Post Place Retirement and pressure	42,870.43
10	DIMP-Distribution Integrity	F0224311	17	Hermitage Pressure Downgrade	77,630.61
11	DIMP-Distribution Integrity		17		46,318.40
12	DIMP-Distribution Integrity	F0224331 F0224337	17	Paragon Mills Road  Van Buren Renewel	90,857.37
13	DIMP-Distribution Integrity	F0224337	17	4934 Whites Creek Pk	(13,659.08)
14			17		
	DIMP-Distribution Integrity	F0225445		22nd Ave N @ Murphy Valve Replacement	(28,674.37)
15	DIMP-Distribution Integrity	F0226414	17	Line 304 Convert to Dist (Station)	3,230.99
16 17	DIMP-Distribution Integrity	F0228432	17 17	21st and Jefferson	(2,661.88)
	DIMP-Distribution Integrity	F0229092		39th Ave North	7,352.46
18	DIMP-Distribution Integrity	F0229495	17	1st ave south 12" 175# Replacement	21,362.65
19	DIMP-Distribution Integrity	F0230663	17	Ann Street and Branch St Dresser Co	312.49
20	DIMP-Distribution Integrity	F0230664	17 Doak Ave 2" and 4" DIMP		359,300.68 95,481.72
21	DIMP-Distribution Integrity	F0230665		17 O'Brien St and Eastboro Ave Min	
22	DIMP-Distribution Integrity	F0230666	17 Old Lebanon Dirt Road Main Replacement		82,599.40
23	DIMP-Distribution Integrity	F0230667	17 Pennington Bend Station Relocation		11,772.98
24	DIMP-Distribution Integrity	F0230676	17 5285 Whites Creek Pike Exposure		326,398.34
25	DIMP-Distribution Integrity	F0230684	17 Bordeaux Bridge Expainsion Joint		149,419.96
26	DIMP-Distribution Integrity	F0231383	17 28th Ave N		335,965.03
27	DIMP-Distribution Integrity	FP1733460	17	Queens Street	(1,955.69)
28	DIMP-Distribution Integrity	FP1733501	17	Murfreesboro Pk 3" Replacement	(3,446.39)
29	DIMP-Distribution Integrity	FP1733503	17	Broadmoor Dr	(1,531.56)
30	DIMP-Distribution Integrity	FP1733760	17	Main St @ No 1st St	(6,990.79)
31	DIMP-Distribution Integrity	FP1733761	17	Kline Ave.	(5,297.77)
32	DIMP-Distribution Integrity	FP1733939	17	500 Lawrence St to Tenth St	(17,187.03)
33	DIMP-Distribution Integrity	FP1734137	17	Overton St	(8,536.73)
34	DIMP-Distribution Integrity	FP1734239	17	47th Ave North	(4,854.37)
35	DIMP-Distribution Integrity	FP1734412	17	Vine Ridge Drive	(60,123.21)
36	DIMP-Distribution Integrity	FP1734428	17	Broadmoor Drive	23,110.56
37	DIMP-Distribution Integrity	FP1734592	17	Elm Hill Pk Ext	(3,121.73)
38	DIMP-Distribution Integrity	FP1734695	17	Spence Lane	1,442,189.84
39	DIMP-Distribution Integrity	FP1734726	17	Cowan St HP Distribution Pipeline	126,339.97
40	DIMP-Distribution Integrity	FP1734770	17	Ash Street and 2nd Ave S	(1,409.46)
41	DIMP-Distribution Integrity	FP1734799	17	Nashville Bridge Attachments	(1,730.17)
42	DIMP-Distribution Integrity	FP1734807	17	Wingo Regulator Station Removal	(790.48)
43	DIMP-Distribution Integrity	FP1734819	17	Shelby Railroad Tressell Retirement	(9,326.87)
44	TIMP-Transmission Integrity	F0230575	17	Line 384 - Valve Automation	2,000.55
45	TIMP-Transmission Integrity	F0230600	17	Line 301-Valve Automation	908.02
46	TIMP-Transmission Integrity	F0231370	17	Line 320 ILI Retrofit	983.92
47	TIMP-Transmission Integrity	FP1733461	17	Nashville ILI Retrofit Holtsho	(23,810.46)
48	TIMP-Transmission Integrity	FP1733462	17	Nashville ILI Retrofit- Holtsh	(2,571.16)
49	TIMP-Transmission Integrity	FP1734120	17	Line 431 Replacement	21,139.40
50	TIMP-Transmission Integrity	FP1734142	17	Line 308 Replacement	137,754.66
51	TIMP-Transmission Integrity	FP1734394	17	Line 431 Ph II Land	1,976,360.72

52 Total (unallocated) <u>\$ 6,001,604.88</u>

subtotal: TN Direct (unallocated) subtotal: CO-3 (unallocated) \$ 6,001,604.88 \$ -\$ 6,001,604.88

### IMR Monthly Report for October 2020 Schedule 3

# <u>Schedule Detailing the Integrity Management Deferred Account Adjustment Recorded for the Month</u> Calculation of the IM Deferred Account Balance Amount Due From (To) Customers per GL Account No. 0253139

Line No.			Oct-20
1	Beginning Balance	Prior Month's IMR Report	\$ (7,399,579.48)
2	IMR Revenue Recognition	Prior Annual IMR Report	1,348,107.52
3	(Collections from IM Adjustment)	see Separate Schedule	(831,067.08)
4	Ending Balance Before Interest	sum Lines 1 thru 3	(6,882,539.04)
5	Average Balance	(Line 1 + Line 4) /2	(7,141,059.26)
6	Accrued Interest	Line 5 * Line 9	(19,337.99)
7	Ending Balance After Interest	Line 4 + Line 6	\$ (6,901,877.03)
8	Applicable Annual Interest Rate	same as for ACA	0.032500
9	Monthly Interest Rate	Line 8 / 12	0.002708
10	Actual GL #0253139 EOM Balance	per GL	\$ (6,901,877.03)
11	Variance	Line 7 - Line 10	\$ -
	to To Donald Donald		
Journal Er	ntry: To Record Revenue 47136 0253139 GA489 PTOP		1,348,107.52
	47136 0480000 GA489 PTOP 0526 RESVAL		(804,065.25)
	47136 0481200 GA489 PTOP 0526 KESVAL 47136 0481200 GA489 PTOP 0526 COMSTD		(420,609.55)
	47136 0481000 GA489 PTOP 0526 INDSLS		(18,185.97)
	47136 0483011 GA489 PTOP 0526 GASRSL		(377.47)
	47136 0489000 GA489 PTOP 0526 BOTHRV		(104,869.28)
Journal Er	ntry: To Record Interest		
	47136 0253139 GA626 PTOP		(19,337.99)
	47136 0431150 GA626 PTOP 0526		19,337.99

### **General Ledger Support**

### Integrity Management Deferred Account Adjustment Recorded for the Month

Calculation of the IM Adjustment Collections:

			Oct-20				
		IM Adjustment		Usage		Collections	
		(\$ per therm)	х	(therms)	=	(\$)	
Line No.	_						
1	Residential (301)	0.11730		3,146,555		369,090.90	
2	Small General Sales (302)	0.10247		2,009,273		205,890.20	
3	Medium General Sales (352)	0.10247		768,617		78,760.18	
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		11,173		1,144.90	
5	Firm Lg General Sales (303)	0.04551		427,764		19,467.54	
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		1,059		48.20	
7	Firm Lg General Transportation (313)	0.04551		1,415,108		64,401.56	
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		115,849		5,272.29	
9	Firm Resale (310)	0.04551		1,987		90.43	
10	Interruptible Lg General Sales (304)	0.01138		32,062		364.86	
11	Interruptible Lg General Transportation (314)	0.01138		7,604,220		86,536.02	
12	Total				\$	831,067.08	

Journal Entry: To Record Concessions	
47136 0480000 GA489 PTOP 0526 RESVAL	369,090.90
47136 0481200 GA489 PTOP 0526 COMSTD	205,890.20
47136 0481200 GA489 PTOP 0526 COMSTD	79,905.08
47136 0481000 GA489 PTOP 0526 INDSLS	19,515.74
47136 0489000 GA489 PTOP 0526 BOTHRV	69,673.85
47136 0483011 GA489 PTOP 0526 GASRSL	90.43
47136 0481000 GA489 PTOP 0526 INDSLS	364.86
47136 0489000 GA489 PTOP 0526 BOTHRV	86,536.02
47136 0253139 GA489 PTOP	(831,067.08)

TPUC Docket No. 20-\_\_\_\_
Integrity Management Rider
Proposed Billing Rates for January 2021

PIEDMONT NATURAL GAS COMPANY, INC. Tennessee Service Territory

Billing Rates Effective:

January 1, 2021

Rate Schedule	Description	Tariff Rate Approved In Docket Nos. 11-00144 18-00040	Cumulativ Demand	Commodity	Current Demand	Commodity	Current IPA	Current IM Adjustment	Temporary I Approved in Dock Deferred Base Revenue Refund	Unprotected Excess ADIT Refund	Total Adj. Factor (Sum Col.2 thru Col.8)	Proposed Billing Rate (Col.1+Col.9)
		<1>	<2>	<3>	<4a>	<4b>	<5>	<6>		<8>	<9>	<10>
Residential 301 301	Monthly Charge-NovMar. Monthly Charge-AprOct. Nov Mar. per TH Apr Oct. per TH	\$17.45 \$13.45 0.29009 0.24009	0.07577 0.07577	0.19717 0.19717	(0.01181) (0.01181)	(0.01044) (0.01044)	0.00830 0.00830	(0.03699) (0.03699)	, ,	(0.04211) (0.04211)	0.16031 0.16031	\$17.45 \$13.45 0.45040 0.40040
Small General	Monthly Charge	\$44.00										\$44.00
302 302	Nov Mar. per TH Apr Oct. per TH	0.32787 0.27387	0.07577 0.07577	0.19717 0.19717	(0.01181) (0.01181)	(0.01044) (0.01044)	0.00830 0.00830	(0.03231) (0.03231)		(0.03678) (0.03678)	0.17280 0.17280	0.50067 0.44667
Medium General 352 352	Monthly Charge Nov Mar. per TH Apr Oct. per TH	\$225.00 0.32787 0.27387	0.07577 0.07577	0.19717 0.19717	(0.01181) (0.01181)	(0.01044) (0.01044)	0.00830 0.00830	(0.03231) (0.03231)		(0.03678) (0.03678)	0.17280 0.17280	\$225.00 0.50067 0.44667
Experimental Motor Vehicle Fuel 343 343	Monthly Charge Nov Mar. per TH Apr Oct. per TH	varies by customer per t varies by customer per t varies by customer per t	heir correspondin	g rate schedule								
303 Firm General Sales	Monthly Charge Demand Charge per TH First 15,000 TH/TH Next 25,000 TH/TH Next 50,000 TH/TH Over 90,000 TH/TH	\$800.00 0.80000 0.09195 0.08466 0.05963 0.02277	0.82829	0.19717 0.19717 0.19717 0.19717	(0.18957)	(0.01044) (0.01044) (0.01044) (0.01044)	0.00830 0.00830 0.00830 0.00830	(0.01435) (0.01435) (0.01435) (0.01435)	(0.00319) (0.00319)	(0.00685) (0.00685) (0.00685) (0.00685)	0.63872 0.17064 0.17064 0.17064 0.17064	\$800.00 1.43872 0.26259 0.25530 0.23027 0.19341
304 Interruptible General Sales	Monthly Charge First 15,000 TH/TH Next 25,000 TH/TH Next 50,000 TH/TH Over 90,000 TH/TH	\$800.00 0.09195 0.08466 0.05963 0.02277		0.19717 0.19717 0.19717 0.19717		(0.01044) (0.01044) (0.01044) (0.01044)	0.00830 0.00830 0.00830 0.00830	(0.00359) (0.00359) (0.00359) (0.00359)	(0.00319) (0.00319)	(0.00685) (0.00685) (0.00685) (0.00685)	0.18140 0.18140 0.18140 0.18140	\$800.00 0.27335 0.26606 0.24103 0.20417
313 Firm Transportation	Monthly Charge Demand Charge per TH First 15,000 TH/TH Next 25,000 TH/TH Next 50,000 TH/TH Over 90,000 TH/TH	\$800.00 0.80000 0.09195 0.08466 0.05963 0.02277	0.82829	-	(0.18957)			(0.01435) (0.01435) (0.01435) (0.01435)	(0.00319) (0.00319)	(0.00685) (0.00685) (0.00685) (0.00685)	0.63872 (0.02439) (0.02439) (0.02439) (0.02439)	\$800.00 1.43872 0.06756 0.06027 0.03524 -0.00162
314 Interruptible Transportation	Monthly Charge First 15,000 TH/TH Next 25,000 TH/TH Next 50,000 TH/TH Over 90,000 TH/TH	\$800.00 0.09195 0.08466 0.05963 0.02277						(0.00359) (0.00359) (0.00359) (0.00359)	(0.00319) (0.00319)	(0.00685) (0.00685) (0.00685) (0.00685)	(0.01363) (0.01363) (0.01363) (0.01363)	\$800.00 0.07832 0.07103 0.04600 0.00914
310 Resale Service	Demand Charge per TH Commodity Charge	0.80000 0.07518	0.82829	0.19717	(0.18957)	(0.01044)	0.00830	(0.01435)	(0.00970)	(0.02086)	0.63872 0.15012	1.43872 0.22530

### NOTES:

In accordance with the Tennessee Public Service Commission order in Docket U-7074 customers metered inside Davidson County are required to pay an additional 6.25% for collection of the Metro Franchise Fee. Customers served by the Ashland City, Fairview, Franklin, Greenbrier, Hartsville, Mt. Juliet and White House systems are required to pay 5.0%. Customers served by the Nolensville system are required to pay 3%.

TPUC Docket No. 20-\_\_\_\_ Integrity Management Rider 2020 Annual Report

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

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. 0253139

1 Beginning Balance	
2 IMR Revenue Recognition	40\
3 (Collections from IM Adjustment) see Separate Schedule (2,639,203.09) (4,335,954.72) (4,591,595.97) (4,940,454.02) (4,085,841.64) (2,206,225.68) (1,624,717.99) (799,053.31) (636,416.71) (599,698.12) (653,069.04) (831,067.14) (599,698.12) (653,069.04) (831,067.14) (599,698.12) (653,069.04) (831,067.14) (7,973,717.73) (7,650,136.09) (7,378,072.22) (6,882,539.14) (7,973,717.73) (7,650,136.09) (7,378,072.22) (6,882,539.14) (7,891,891.64) (7,891,891.64) (7,973,717.73) (7,650,136.09) (7,378,072.22) (6,882,539.14) (7,891,891.64) (7,991,891.64) (7,891,891.64) (7,991,891.64) (7,891,891.64) (7,891,891.64) (7,991,891.64) (7,991,891.64) (7,991,891.64) (7,991,891.64) (7,991,891.64) (7,891,891.64) (7,991,891.64) (7,891,891.64) (7,991,891.64) (	,
4 Ending Balance Before Interest sum Lines 1 thru 3 (6,639,297.11) (7,425,593.93) (7,203,635.83) (7,563,476.90) (8,198,321.61) (8,187,329.28) (8,420,098.23) (8,243,418.08) (7,973,717.73) (7,650,136.09) (7,378,072.22) (6,882,539.15) (7,380,530.53) (7,398,704.91) (7,896,188.68) (8,209,142.92) (8,319,959.65) (8,348,223.36) (8,125,089.04) (7,823,537.66) (7,525,283.99) (7,141,059.65) (7,504,050.55)	
5 Average Balance (Line 1 + Line 4) /2 (6,43,687.74) (7,046,998.59) (7,330,530.53) (7,398,704.91) (7,896,188.68) (8,209,142.92) (8,319,959.65) (8,348,223.36) (8,125,089.04) (7,823,537.66) (7,525,283.99) (7,141,059.16) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99) (7,525,283.99	,
6 Accrued Interest Line 5 * Line 9 (29,106.14) (31,831.29) (30,297.08) (30,578.85) (32,634.95) (32,491.79) (32,930.40) (33,042.27) (23,221.50) (22,359.67) (21,507.26) (19,337.25) (19,337	,
7 Ending Balance After Interest Line 4 + Line 6 \$ (6,668,403.25) \$ (7,457,425.22) \$ (7,233,932.91) \$ (7,594,055.75) \$ (8,230,956.56) \$ (8,219,821.07) \$ (8,453,028.63) \$ (8,276,460.35) \$ (7,996,939.23) \$ (7,672,495.76) \$ (7,399,579.48) \$ (6,901,877.48) \$ (6,901,877.48) \$ (7,906,939.23) \$ (7,672,495.76) \$ (7,399,579.48) \$ (7,399,	,
8 Applicable Annual Interest Rate same as for ACA 0.054200 0.054200 0.049600 0.049600 0.049500 0.047500 0.047500 0.047500 0.034300 0.034300 0.034300 0.034300	,
	J3)
	500
	00
10 Actual GL #0253139 EOM Balance per GL \$ (6,668,403.25) \$ (7,623,560.19) \$ (8,356,066.00) \$ (9,276,076.78) \$ (9,449,977.33) \$ (8,453,028.63) \$ (8,276,460.35) \$ (7,996,939.23) \$ (7,672,495.76) \$ (7,399,579.48) \$ (6,601,877.18) \$ (7,996,939.23)	03)
11 Variance Line 7 - Line 10 \$ - \$ - \$ 389,627.28 \$ 762,010.25 \$ 1,045,120.22 \$ 1,230,156.26 \$ - \$ - \$ - \$ - \$ - \$ - \$	2/
Journal Entry: To Record Revenue	
47136 0253139 GA489 PTOP 2,247,984.34 3,578,764.04 4,456,561.59 4,240,902.01 3,202,192.54 2,069,310.80 1,424,440.83 1,008,663.86 939,159.33 946,501.26 947,492.58 1,348,107.	
47136 0480000 GA489 PTOP 0526 RESVAL (1,340,787.78) (2,134,518.02) (2,658,071.60) (2,529,443.60) (1,909,915.72) (1,234,219.73) (849,593.49) (601,607.47) (560,152.19) (564,531.21) (565,122.47) (804,065.	,
47136 0481200 GA489 PTOP 0526 COMSTD (701,371.11) (1,116,574.38) (1,390,447.22) (1,323,161.42) (999,084.07) (645,624.97) (444,425.54) (314,703.11) (293,017.71) (295,308.39) (295,617.69) (420,609.	
47136 0481000 GA489 PTOP 0526 INDSLS (30,325.31) (48,277.53) (60,119.01) (57,209.77) (43,197.58) (27,915.00) (19,215.71) (13,606.88) (12,669.26) (12,768.31) (12,781.67) (18,185.	,
47136 0483011 GA489 PTOP 0526 GASRSL (629.44) (1,002.05) (1,247.84) (1,187.45) (896.61) (579.41) (398.84) (282.43) (262.96) (265.02) (265.00) (377.	,
47136 0489000 GA489 PTOP 0526 BOTHRV (174,870.70) (278,392.06) (346,675.92) (329,899.77) (249,098.56) (160,971.69) (110,807.25) (78,463.97) (73,057.21) (73,628.33) (73,705.45) (104,869.	28)
Journal Entry: To Record Interest	
47136 (253139 GAG26 PTOP (29,106.14) (31,831.29) (31,100.59) (32,953.80) (36,361.68) (36,985.67) (32,930.40) (33,042.27) (23,221.50) (22,359.67) (21,507.26) (19,337.25)	99)
47136 0431150 GAGG PTOP 0526 29,106.14 31,831.29 31,100.59 32,953.80 36,361.68 36,985.67 32,930.40 33,042.27 23,221.50 22,359,67 21,5507.26 19,337.	,

<sup>1/</sup> Pursuant to the TPUC's May 11, 2020 ruling in Docket No. 19-00107, this schedule reflects beginning January 2020 the approved monthly amortization of the annual Integrity Management Revenue Requirement from Piedmont's 2019 Annual Integrity Management Rider Report, which was filed by the Company on December 11, 2019.

<sup>2/</sup> Pursuant to the TPUC's ruling in Docket No. 19-00107, Piedmont recorded the approved IM Revenue Requirement to its general ledger for January 2020. It was recorded as a true-up adjustment in May 2020.

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

		October 2020				
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.11730		3,146,555		369,090.90
2	Small General Sales (302)	0.10247		2,009,273		205,890.20
3	Medium General Sales (352)	0.10247		768,617		78,760.18
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		11,173		1,144.90
5	Firm Lg General Sales (303)	0.04551		427,764		19,467.54
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		1,059		48.20
7	Firm Lg General Transportation (313)	0.04551		1,415,108		64,401.56
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		115,849		5,272.29
9	Firm Resale (310)	0.04551		1,987		90.43
10	Interruptible Lg General Sales (304)	0.01138		32,062		364.86
11	Interruptible Lg General Transportation (314)	0.01138		7,604,220		86,536.02
12	Total				-	\$ 831,067.08

30 a	
47136 0480000 GA489 PTOP 0526 RESVAL	369,090.90
47136 0481200 GA489 PTOP 0526 COMSTD	205,890.20
47136 0481200 GA489 PTOP 0526 COMSTD	79,905.08
47136 0481000 GA489 PTOP 0526 INDSLS	19,515.74
47136 0489000 GA489 PTOP 0526 BOTHRV	69,673.85
47136 0483011 GA489 PTOP 0526 GASRSL	90.43
47136 0481000 GA489 PTOP 0526 INDSLS	364.86
47136 0489000 GA489 PTOP 0526 BOTHRV	86,536.02
47136 0253139 GA489 PTOP	(831,067.08)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

		September 2020				
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.11730		2,094,775		245,717.11
2	Small General Sales (302)	0.10247		1,711,835		175,411.73
3	Medium General Sales (352)	0.10247		774,517		79,364.76
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		23,737		2,432.33
5	Firm Lg General Sales (303)	0.04551		327,068		14,884.87
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		907		41.28
7	Firm Lg General Transportation (313)	0.04551		1,158,603		52,728.02
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		117,741		5,358.39
9	Firm Resale (310)	0.04551		1,199		54.57
10	Interruptible Lg General Sales (304)	0.01138		5,783		65.81
11	Interruptible Lg General Transportation (314)	0.01138		6,767,151		77,010.17
12	Total				_	\$ 653,069.04

Journal Entry:	To Docord	Callactions

47136 0480000 GA489 PTOP 0526 RESVAL	245,717.11
47136 0481200 GA489 PTOP 0526 COMSTD	175,411.73
47136 0481200 GA489 PTOP 0526 COMSTD	81,797.09
47136 0481000 GA489 PTOP 0526 INDSLS	14,926.15
47136 0489000 GA489 PTOP 0526 BOTHRV	58,086.41
47136 0483011 GA489 PTOP 0526 GASRSL	54.57
47136 0481000 GA489 PTOP 0526 INDSLS	65.81
47136 0489000 GA489 PTOP 0526 BOTHRV	77,010.17
47136 0253139 GA489 PTOP	(653,069.04)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

			August 2020			
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.11730		1,995,084		234,023.35
2	Small General Sales (302)	0.10247		1,560,283		159,882.20
3	Medium General Sales (352)	0.10247		539,311		55,263.20
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		37,921		3,885.76
5	Firm Lg General Sales (303)	0.04551		299,997		13,652.87
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		596		27.12
7	Firm Lg General Transportation (313)	0.04551		1,099,951		50,058.77
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		118,898		5,411.05
9	Firm Resale (310)	0.04551		1,113		50.65
10	Interruptible Lg General Sales (304)	0.01138		23,265		264.76
11	Interruptible Lg General Transportation (314)	0.01138		6,781,933		77,178.39
12	Total				_	\$ 599,698.12

 47136 0480000 GA489 PTOP 0526 RESVAL	234,023.35
47136 0481200 GA489 PTOP 0526 COMSTD	159,882.20
47136 0481200 GA489 PTOP 0526 COMSTD	59,148.96
47136 0481000 GA489 PTOP 0526 INDSLS	13,679.99
47136 0489000 GA489 PTOP 0526 BOTHRV	55,469.82
47136 0483011 GA489 PTOP 0526 GASRSL	50.65
47136 0481000 GA489 PTOP 0526 INDSLS	264.76
47136 0489000 GA489 PTOP 0526 BOTHRV	77,178.39
47136 0253139 GA489 PTOP	(599,698.12)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

				July 2020		
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.	_					
1	Residential (301)	0.11730		2,286,854		268,247.97
2	Small General Sales (302)	0.10247		1,649,937		169,069.04
3	Medium General Sales (352)	0.10247		586,398		60,088.21
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		4,054		415.41
5	Firm Lg General Sales (303)	0.04551		270,243		12,298.76
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		916		41.69
7	Firm Lg General Transportation (313)	0.04551		990,819		45,092.19
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		125,137		5,694.98
9	Firm Resale (310)	0.04551		980		44.60
10	Interruptible Lg General Sales (304)	0.01138		2,140		24.35
11	Interruptible Lg General Transportation (314)	0.01138		6,625,616		75,399.51
12	Total				_	\$ 636,416.71

 47136 0480000 GA489 PTOP 0526 RESVAL	268,247.97
47136 0481200 GA489 PTOP 0526 COMSTD	169,069.04
47136 0481200 GA489 PTOP 0526 COMSTD	60,503.62
47136 0481000 GA489 PTOP 0526 INDSLS	12,340.45
47136 0489000 GA489 PTOP 0526 BOTHRV	50,787.17
47136 0483011 GA489 PTOP 0526 GASRSL	44.60
47136 0481000 GA489 PTOP 0526 INDSLS	24.35
47136 0489000 GA489 PTOP 0526 BOTHRV	75,399.51
47136 0253139 GA489 PTOP	(636,416.71)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

			June 2020			
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.	_					
1	Residential (301)	0.11730		3,418,963		401,044.36
2	Small General Sales (302)	0.10247		1,757,704		180,111.93
3	Medium General Sales (352)	0.10247		725,368		74,328.46
4	Experimental Motor Vehicle Fuel (343/302/352)	0.10247		16,853		1,726.93
5	Firm Lg General Sales (303)	0.04551		277,261		12,618.15
6	Experimental Motor Vehicle Fuel (343/303)	0.04551		906		41.23
7	Firm Lg General Transportation (313)	0.04551		1,068,087		48,608.65
8	Experimental Motor Vehicle Fuel (343/313)	0.04551		124,256		5,654.89
9	Firm Resale (310)	0.04551		1,026		46.69
10	Interruptible Lg General Sales (304)	0.01138		17,855		203.19
11	Interruptible Lg General Transportation (314)	0.01138		6,561,409		74,668.83
12	Total				_	\$ 799,053.31

### Journal Entry: To Record Collections 47136 0480000 GA489 PTOP 05

47136 0480000 GA489 PTOP 0526 RESVAL	401,044.36
47136 0481200 GA489 PTOP 0526 COMSTD	180,111.93
47136 0481200 GA489 PTOP 0526 COMSTD	76,055.39
47136 0481000 GA489 PTOP 0526 INDSLS	12,659.38
47136 0489000 GA489 PTOP 0526 BOTHRV	54,263.54
47136 0483011 GA489 PTOP 0526 GASRSL	46.69
47136 0481000 GA489 PTOP 0526 INDSLS	203.19
47136 0489000 GA489 PTOP 0526 BOTHRV	74,668.83
47136 0253139 GA489 PTOP	(799,053.31)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

			May 2020			
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.	_					
1	Residential (301)	0.14605		6,868,528		1,003,148.51
2	Small General Sales (302)	0.12759		2,376,269		303,188.16
3	Medium General Sales (352)	0.12759		1,014,043		129,381.75
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		1,743		222.39
5	Firm Lg General Sales (303)	0.05667		338,166		19,163.86
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		1,572		89.09
7	Firm Lg General Transportation (313)	0.05667		1,204,863		68,279.57
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		119,620		6,778.87
9	Firm Resale (310)	0.05667		1,575		89.26
10	Interruptible Lg General Sales (304)	0.01417		14,343		203.24
11	Interruptible Lg General Transportation (314)	0.01417		6,645,962		94,173.29
12	Total				-	\$ 1,624,717.99

## Journal Entry: To Record Collections 47136 0480000 GA489 PTC

47136 0480000 GA489 PTOP 0526 RESVAL	1,003,148.51
47136 0481200 GA489 PTOP 0526 COMSTD	303,188.16
47136 0481200 GA489 PTOP 0526 COMSTD	129,604.14
47136 0481000 GA489 PTOP 0526 INDSLS	19,252.95
47136 0489000 GA489 PTOP 0526 BOTHRV	75,058.44
47136 0483011 GA489 PTOP 0526 GASRSL	89.26
47136 0481000 GA489 PTOP 0526 INDSLS	203.24
47136 0489000 GA489 PTOP 0526 BOTHRV	94,173.29
47136 0253139 GA489 PTOP	(1,624,717.99)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)
General Ledger Support: Integrity Management Deferred Account Adjustment
Billing Determinants & Collections from the Integrity Management Adjustment By Month

		April 2020				
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.14605		9,363,206		1,367,496.24
2	Small General Sales (302)	0.12759		3,484,273		444,558.39
3	Medium General Sales (352)	0.12759		1,429,260		182,359.28
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		129		16.46
5	Firm Lg General Sales (303)	0.05667		407,618		23,099.71
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		12,831		727.13
7	Firm Lg General Transportation (313)	0.05667		1,363,526		77,271.02
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		130,758		7,410.06
9	Firm Resale (310)	0.05667		2,360		133.74
10	Interruptible Lg General Sales (304)	0.01417		15,441		218.80
11	Interruptible Lg General Transportation (314)	0.01417		7,264,280		102,934.85
12	Total				-	\$ 2,206,225.68

47136 0480000 GA489 PTOP 0526 RESVAL	1,367,496.24
47136 0481200 GA489 PTOP 0526 COMSTD	444,558.39
47136 0481200 GA489 PTOP 0526 COMSTD	182,375.74
47136 0481000 GA489 PTOP 0526 INDSLS	23,826.84
47136 0489000 GA489 PTOP 0526 BOTHRV	84,681.08
47136 0483011 GA489 PTOP 0526 GASRSL	133.74
47136 0481000 GA489 PTOP 0526 INDSLS	218.80
47136 0489000 GA489 PTOP 0526 BOTHRV	102,934.85
47136 0253139 GA489 PTOP	(2,206,225.68)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

			March 2020			
		IM Adjustment		Usage		Collections
		(\$ per therm)	Х	(therms)	=	(\$)
Line No.	_					
1	Residential (301)	0.14605		17,708,962		2,586,393.90
2	Small General Sales (302)	0.12759		7,138,739		910,831.71
3	Medium General Sales (352)	0.12759		2,609,351		332,927.09
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		236		30.11
5	Firm Lg General Sales (303)	0.05667		616,894		34,959.38
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		27,694		1,569.42
7	Firm Lg General Transportation (313)	0.05667		1,728,185		97,936.24
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		136,338		7,726.27
9	Firm Resale (310)	0.05667		3,338		189.16
10	Interruptible Lg General Sales (304)	0.01417		19,015		269.44
11	Interruptible Lg General Transportation (314)	0.01417		7,975,224		113,008.92
12	Total				-	\$ 4,085,841.64

47136 0480000 GA489 PTOP 0526 RESVAL	2,586,393.90
47136 0481200 GA489 PTOP 0526 COMSTD	910,831.71
47136 0481200 GA489 PTOP 0526 COMSTD	332,957.20
47136 0481000 GA489 PTOP 0526 INDSLS	36,528.80
47136 0489000 GA489 PTOP 0526 BOTHRV	105,662.51
47136 0483011 GA489 PTOP 0526 GASRSL	189.16
47136 0481000 GA489 PTOP 0526 INDSLS	269.44
47136 0489000 GA489 PTOP 0526 BOTHRV	113,008.92
47136 0253139 GA489 PTOP	(4,085,841.64)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

			February 2020				
		IM Adjustment		Usage		Collections	
		(\$ per therm)	Х	(therms)	=	(\$)	
Line No.	_						
1	Residential (301)	0.14605		21,228,260		3,100,387.37	
2	Small General Sales (302)	0.12759		8,638,174		1,102,144.62	
3	Medium General Sales (352)	0.12759		3,240,669		413,476.96	
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		172		21.95	
5	Firm Lg General Sales (303)	0.05667		1,054,742		59,772.23	
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		27,375		1,551.34	
7	Firm Lg General Transportation (313)	0.05667		2,181,191		123,608.09	
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		126,824		7,187.12	
9	Firm Resale (310)	0.05667		5,895		334.07	
10	Interruptible Lg General Sales (304)	0.01417		29,104		412.40	
11	Interruptible Lg General Transportation (314)	0.01417		9,284,253		131,557.87	
12	Total				-	\$ 4,940,454.02	

47136 0480000 GA489 PTOP 0526 RESVAL	3,100,387.37
47136 0481200 GA489 PTOP 0526 COMSTD	1,102,144.62
47136 0481200 GA489 PTOP 0526 COMSTD	413,498.91
47136 0481000 GA489 PTOP 0526 INDSLS	61,323.57
47136 0489000 GA489 PTOP 0526 BOTHRV	130,795.21
47136 0483011 GA489 PTOP 0526 GASRSL	334.07
47136 0481000 GA489 PTOP 0526 INDSLS	412.40
47136 0489000 GA489 PTOP 0526 BOTHRV	131,557.87
47136 0253139 GA489 PTOP	(4,940,454.02)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

		January 2020				
		IM Adjustment		Usage		Collections
		(\$ per therm)	х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.14605		19,309,797		2,820,195.85
2	Small General Sales (302)	0.12759		8,192,387		1,045,266.66
3	Medium General Sales (352)	0.12759		3,066,638		391,272.34
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		749		95.56
5	Firm Lg General Sales (303)	0.05667		1,078,655		61,127.38
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		29,968		1,698.29
7	Firm Lg General Transportation (313)	0.05667		2,213,820		125,457.18
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		137,809		7,809.64
9	Firm Resale (310)	0.05667		6,129		347.33
10	Interruptible Lg General Sales (304)	0.01417		28,722		406.99
11	Interruptible Lg General Transportation (314)	0.01417		9,733,151		137,918.75
12	Total				-	\$ 4,591,595.97

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47136 0480000 GA489 PTOP 0526 RESVAL	2,820,195.85
47136 0481200 GA489 PTOP 0526 COMSTD	1,045,266.66
47136 0481200 GA489 PTOP 0526 COMSTD	391,367.90
47136 0481000 GA489 PTOP 0526 INDSLS	62,825.67
47136 0489000 GA489 PTOP 0526 BOTHRV	133,266.82
47136 0483011 GA489 PTOP 0526 GASRSL	347.33
47136 0481000 GA489 PTOP 0526 INDSLS	406.99
47136 0489000 GA489 PTOP 0526 BOTHRV	137,918.75
47136 0253139 GA489 PTOP	(4,591,595.97)

# Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020) General Ledger Support: Integrity Management Deferred Account Adjustment Billing Determinants & Collections from the Integrity Management Adjustment By Month

			December 2019				
		IM Adjustment		Usage		Collections	
		(\$ per therm)	Х	(therms)	=	(\$)	
Line No.	_						
1	Residential (301)	0.14605		18,333,507		2,677,608.70	
2	Small General Sales (302)	0.12759		7,591,560		968,607.14	
3	Medium General Sales (352)	0.12759		2,968,945		378,807.69	
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		854		108.96	
5	Firm Lg General Sales (303)	0.05667		967,154		54,808.62	
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		33,162		1,879.29	
7	Firm Lg General Transportation (313)	0.05667		2,043,436		115,801.52	
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		131,294		7,440.43	
9	Firm Resale (310)	0.05667		5,103		289.19	
10	Interruptible Lg General Sales (304)	0.01417		34,024		482.12	
11	Interruptible Lg General Transportation (314)	0.01417		9,182,855		130,121.06	
12	Total				-	\$ 4,335,954.72	

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47136 0480000 GA489 PTOP 0526 RESVAL	2,677,608.70
47136 0481200 GA489 PTOP 0526 COMSTD	968,607.14
47136 0481200 GA489 PTOP 0526 COMSTD	378,916.65
47136 0481000 GA489 PTOP 0526 INDSLS	56,687.91
47136 0489000 GA489 PTOP 0526 BOTHRV	123,241.95
47136 0483011 GA489 PTOP 0526 GASRSL	289.19
47136 0481000 GA489 PTOP 0526 INDSLS	482.12
47136 0489000 GA489 PTOP 0526 BOTHRV	130,121.06
47136 0253139 GA489 PTOP	(4,335,954.72)

Schedule of Journal Entries Related to the Integrity Management Rider for the Previous Twelve Months (November 2019 thru October 2020)

General Ledger Support: Integrity Management Deferred Account Adjustment

Billing Determinants & Collections from the Integrity Management Adjustment By Month

		November 2019				
		IM Adjustment		Usage		Collections
		(\$ per therm)	Х	(therms)	=	(\$)
Line No.						
1	Residential (301)	0.14605		10,086,725		1,473,166.19
2	Small General Sales (302)	0.12759		4,731,896		603,742.61
3	Medium General Sales (352)	0.12759		1,998,425		254,979.05
4	Experimental Motor Vehicle Fuel (343/352)	0.12759		672		85.74
5	Firm Lg General Sales (303)	0.05667		969,311		54,930.85
6	Experimental Motor Vehicle Fuel (343/303)	0.05667		32,643		1,849.88
7	Firm Lg General Transportation (313)	0.05667		1,976,390		112,002.02
8	Experimental Motor Vehicle Fuel (343/313)	0.05667		135,685		7,689.27
9	Firm Resale (310)	0.05667		4,918		278.70
10	Interruptible Lg General Sales (304)	0.01417		34,525		489.22
11	Interruptible Lg General Transportation (314)	0.01417		9,173,575		129,989.56
12	Total				-	\$ 2,639,203.09

47136 0480000 GA489 PTOP 0526 RESVAL	1,473,166.19
47136 0481200 GA489 PTOP 0526 COMSTD	603,742.61
47136 0481200 GA489 PTOP 0526 COMSTD	255,064.79
47136 0481000 GA489 PTOP 0526 INDSLS	56,780.73
47136 0489000 GA489 PTOP 0526 BOTHRV	119,691.29
47136 0483011 GA489 PTOP 0526 GASRSL	278.70
47136 0481000 GA489 PTOP 0526 INDSLS	489.22
47136 0489000 GA489 PTOP 0526 BOTHRV	129,989.56
47136 0253139 GA489 PTOP	(2,639,203.09)

### **Computation of the Integrity Management Adjustment**

Line No.		Reference	Residential (301)	Small/Medium General (302,352)	Large General - Firm (303,313,310)	Large General - Interruptible (304,314)	Total
	Jan 1 2021 - Dec 31 2021						
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]	\$ - 5	-	\$ -	\$ -	n/a
3	Deferred Account Adjustment Due From (To) Customers	Actual Deferred Account Balance at Oct 31, 2020	\$ (4,116,550)	(2,153,427)	\$ (341,390)	\$ (290,510) \$	(6,901,877)
4	Total Amount for Recovery in this Rider	[= Line 2 + Line 3]	\$ (4,116,550)	(2,153,427)	\$ (341,390)	\$ (290,510) \$	(6,901,877)
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]	\$ (0.36990)	(0.32310)	\$ (0.14350)	\$ (0.03590)	
7	Proposed Integrity Management Rate per therm	[= Line 6 / 10 ]	\$ (0.03699)	(0.03231)	\$ (0.01435)	\$ (0.00359)	
	As previously approved from prior report:						
	Jan 1 2020 - Dec 31 2020						
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 x Line 1]	\$ 16,782,133	8,778,978	\$ 1,391,761	\$ 1,184,334 <b>\$</b>	28,137,207
10	Deferred Account Adjustment Due From (To) Customers	Actual Deferred Account Balance at Oct 31, 2019	\$ (3,726,599)	(1,949,438)	\$ (309,051)	\$ (262,990) \$	(6,248,078)
11	Total Amount for Recovery in this Rider	[= Line 2 + Line 3]	\$ 13,055,535	6,829,540	\$ 1,082,710	\$ 921,344 \$	21,889,129
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 4 / Line 5]	\$ 1.17300	1.02470	\$ 0.45510	\$ 0.11380	
14	Proposed Integrity Management Rate per therm	[= Line 6 / 10 ]	\$ 0.11730	0.10247	\$ 0.04551	\$ 0.01138	

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

Margin	Annual Total	Allocation %											
Residential (301) Small & Medium General Service (302, 352)	\$ 62,049,925 32,459,219												
Large General Service - Firm (303, 313, 310)	5,145,869	4.95%											
Large General Service - Interruptible (304, 314)	4,378,934	4.21%											
Total	\$ 104,033,947 -												
Throughput (DTs)	Nov	Dec	<u>Jan</u>	Feb	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	Oct	Total
Residential (301)	973,330		2,359,111	2,385,891	1,619,952	916,259	373,476	147,666	108,017	107,902	110,242	297,754	11,130,214
Small & Medium General Service (302, 352)	584,12		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) Large General Service - Interruptible (304, 314)	215,868 682,506		373,276 899,370	272,366 728,423	238,238 753,173	161,907 640,120	152,836 614,296	108,789 571,617	110,733 558,058	112,060 564,523	121,273 554,369	154,075 651,023	2,378,880 8,098,027
Total	2,455,831	3,909,653	4,868,611	4,633,012	3,498,264	2,260,637	1,431,269	1,013,499	943,661	951,038	952,034	1,354,569	28,272,079
Throughput Apportionment	8.69%	6 13.83%	17.22%	16.39%	12.37%	8.00%	5.06%	3.58%	3.34%	3.36%	3.37%	4.79%	100.00%

### Summary of IMRR Computation

Line No.	Vintage Year	Rate Period Jan 1 2020 - Dec 31 2020	Rate Period Jan 1 2021 - Dec 31 2021
1	Vintage 1	\$ 8,765,184	n/a
2	Vintage 2	4,720,636	n/a
3	Vintage 3	1,651,941	n/a
4	Vintage 4	1,843,064	n/a
5	Vintage 5	3,574,259	n/a
6	Vintage 6	3,132,515	n/a
7	Vintage 7	4,449,608	n/a
8	Vintage 8	n/a	n/a
9	Total	28,137,207	n/a
10	Total IMRR, excluding IM Deferred Account Adjustment	\$ 28,137,207	n/a
11	Spread of Total IMRR, excluding IM Deferred Adjustment, by Mo January	ontn \$ 4,845,385	n/a
11			n/a
12	February	4,610,910	n/a
13	March	3,481,576	n/a
14	April	2,249,853	n/a
15	May	1,424,441	n/a
16	June	1,008,664	n/a
17	July	939,159	
18	August	946,501	n/a
19	August	940,501	n/a n/a
20	September	947,493	-
20	5	,	n/a
21	September	947,493	n/a n/a
	September October	947,493 1,348,108	n/a n/a n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Plant	100,306,283	100,306,283	100,306,283	100,306,283	100,306,283	100,306,283	100,306,283	n/a
Accumulated depreciation	(974,476)	(2,428,917)	(3,883,358)	(5,337,799)	(6,792,240)	(8,246,681)	(9,701,122)	n/a
Net plant	99,331,807	97,877,366	96,422,925	94,968,484	93,514,043	92,059,602	90,605,161	n/a
ADIT	(4,057,566)	(6,977,762)	(9,549,872)	(24,529,845)	(25,236,572)	(25,647,749)	(26,041,086)	n/a
NOL benefit	-	-	-	24,529,845	21,449,590	18,707,682	2,006,468	n/a
Net investment	95,274,242	90,899,604	86,873,053	94,968,484	89,727,060	85,119,535	66,570,543	n/a
Pre-tax ROR%	11.446%	11.446%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a
Pre-tax rate of return	10,904,782	10,404,075	9,943,209	10,869,786	8,863,198	8,408,069	6,575,808	n/a
Depreciation expense	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	n/a
Property Tax expense	732,236	732,236	732,236	732,236	732,236	732,236	732,236	n/a
Total, excluding uncollectibles	13,091,459	12,590,752	12,129,886	13,056,463	11,049,875	10,594,746	8,762,485	n/a
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	n/a
Total revenue requirement	13,095,492	12,594,631	12,133,623	13,060,485	11,053,279	10,598,010	8,765,184	n/a
Assumptions and calculations: Rider computed each year. Normal depreciation and AFUDC practices apply, AFUDC ends and	depreciation be	gins when plant	goes into servic	e.				
Net of tax rate of return	6.96%	6.96%	6.96%	6.96%	7.30%	7.30%	7.30%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

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		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Plant amount	100,306,283				<u> </u>	<u> </u>	·		· ·
Book depreciation rate	1.45%								
Property Tax Rate	0.73%								
Tax depreciation	MACRS 15 Ye	ars 1 - 3							
Tax depreciation	BONUS 50% Ye	ars 4 - 6							
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%	6.50%	6.50%	n/a
FIT rate		35.00%	35.00%	35.00%	35.00%	21.00%	21.00%	21.00%	n/a
Composite income tax rate		39.23%	39.23%	39.23%	39.23%	26.14%	26.14%	26.14%	n/a
Uncollectibles rate		0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	n/a
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			F	Pre-tax RORs				
LTD	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	8.846%	8.846%	8.846%	8.846%	7.279%	7.279%	7.279%	n/a
Total	7.976%	11.446%	11.446%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

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

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Accumulated depreciation									
Portion of year in service before rider	17%								
Pre-rider amount of depreciation	247,255								
Rider year BOY amount		247,255	1,701,696	3,156,137	4,610,578	6,065,019	7,519,461	8,973,902	n/a
Depreciation expense		1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	1,454,441	n/a
Rider year EOY amount	_	1,701,696	3,156,137	4,610,578	6,065,019	7,519,461	8,973,902	10,428,343	n/a
Average accumulated depreciation	_	974,476	2,428,917	3,883,358	5,337,799	6,792,240	8,246,681	9,701,122	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

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MACRS 15									
Tax depreciation reserve		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
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	45,050,561	50,968,632	n/a
Tax period A tax depreciation		7,909,150	7,118,235	6,410,575	5,769,517	5,186,738	4,911,999	4,911,999	n/a
Tax period B tax depreciation		1,457,952	1,313,009	1,181,708	1,062,344	1,006,072	1,006,072	1,007,777	n/a
Rider year EOY amount	_	16,002,363	24,433,607	32,025,890	38,857,751	45,050,561	50,968,632	56,888,407	n/a
Average tax depreciation reserve	_	11,318,812	20,217,985	28,229,749	35,441,821	41,954,156	48,009,596	53,928,520	n/a
Note - gap between fiscal year and rider year a	addressed by tax peri	od A and tax pe	riod B.						
Accumulated deferred taxes									
Average tax depreciation reserve		11,318,812	20,217,985	28,229,749	35,441,821	41,954,156	48,009,596	53,928,520	n/a
Average book depreciation reserve		974,476	2,428,917	3,883,358	5,337,799	6,792,240	8,246,681	9,701,122	n/a
Difference	<del>-</del>	10,344,336	17,789,069	24,346,391	30,104,022	35,161,916	39,762,915	44,227,397	n/a
Tax difference balance		10,344,336	17,789,069	24,346,391	30,104,022	35,161,916	35,161,916	35,161,916	n/a
Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	n/a
Incremental tax difference beginning Year 6		-	-	-	-	-	4,600,999	9,065,481	n/a
		0.00%	0.00%	0.00%	0.00%	0.00%	26.14%	26.14%	n/a
Composite tax rate w 21% FIT rate									
Average ADIT  Note - composite tax rate ignores excess defer	rred tax flowback	4,057,566	6,977,762	9,549,872	11,808,303	13,792,262	14,994,733	16,161,525	n/a -
Average ADIT	red tax flowback		6,977,762	9,549,872	11,808,303	13,792,262	14,994,733		n/a -
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%	rred tax flowback 52,660,799		6,977,762 -	9,549,872	11,808,303	13,792,262	14,994,733		n/a -
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve			6,977,762	9,549,872	11,808,303	13,792,262	14,994,733		n/a -
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation	52,660,799		6,977,762	9,549,872	11,808,303		14,994,733		n/a -
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date	52,660,799 17%		6,977,762	9,549,872	11,808,303	13,792,262	14,994,733		n/a -
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation	52,660,799 17% 4,764,548		6,977,762	9,549,872	11,808,303	13,792,262	72,678,422		n/a - n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr	52,660,799 17% 4,764,548	4,057,566	-	-	-	-	-	-	-
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation  Post FY tax depreciation to rider date  Tax year 2 tax depreciation  Tax year 2 pre-rider tax depr  Rider year BOY amount	52,660,799 17% 4,764,548	4,057,566	58,154,323	62,369,945	66,166,087	69,582,017	72,678,422	- 75,637,457	- n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation	52,660,799 17% 4,764,548	4,057,566 - - 53,470,772 3,954,575	- 58,154,323 3,559,118	- 62,369,945 3,205,287	66,166,087 2,884,759	69,582,017 2,593,369	- 72,678,422 2,455,999	- 75,637,457 2,455,999	n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation	52,660,799 17% 4,764,548	4,057,566 - - 53,470,772 3,954,575 728,976	58,154,323 3,559,118 656,505	- 62,369,945 3,205,287 590,854	66,166,087 2,884,759 531,172	69,582,017 2,593,369 503,036	72,678,422 2,455,999 503,036	75,637,457 2,455,999 503,889	n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547	58,154,323 3,559,118 656,505 62,369,945 60,262,134	62,369,945 3,205,287 590,854 66,166,087	66,166,087 2,884,759 531,172 69,582,017	69,582,017 2,593,369 503,036 72,678,422	72,678,422 2,455,999 503,036 75,637,457	75,637,457 2,455,999 503,889 78,597,345	n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve	52,660,799 17% 4,764,548 809,973	4,057,566  - 53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B.	62,369,945 3,205,287 590,854 66,166,087 64,268,016	66,166,087 2,884,759 531,172 69,582,017 67,874,052	69,582,017 2,593,369 503,036 72,678,422 71,130,220	72,678,422 2,455,999 503,036 75,637,457 74,157,940	75,637,457 2,455,999 503,889 78,597,345 77,117,401	n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year and Accumulated deferred taxes Average tax depreciation reserve	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B.	62,369,945 3,205,287 590,854 66,166,087 64,268,016	66,166,087 2,884,759 531,172 69,582,017 67,874,052	69,582,017 2,593,369 503,036 72,678,422 71,130,220	72,678,422 2,455,999 503,036 75,637,457 74,157,940	75,637,457 2,455,999 503,889 78,597,345 77,117,401	n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year a  Accumulated deferred taxes Average tax depreciation reserve  Average book depreciation reserve	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B.	62,369,945 3,205,287 590,854 66,166,087 64,268,016 64,268,016 3,883,358	66,166,087 2,884,759 531,172 69,582,017 67,874,052 67,874,052 5,337,799	69,582,017 2,593,369 503,036 72,678,422 71,130,220 6,792,240	72,678,422 2,455,999 503,036 75,637,457 74,157,940 74,157,940 8,246,681	75,637,457 2,455,999 503,889 78,597,345 77,117,401	n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year and Accumulated deferred taxes Average tax depreciation reserve	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B.	62,369,945 3,205,287 590,854 66,166,087 64,268,016	66,166,087 2,884,759 531,172 69,582,017 67,874,052	69,582,017 2,593,369 503,036 72,678,422 71,130,220	72,678,422 2,455,999 503,036 75,637,457 74,157,940	75,637,457 2,455,999 503,889 78,597,345 77,117,401	n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation Post FY tax depreciation to rider date  Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year a  Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve  Difference	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B.	62,369,945 3,205,287 590,854 66,166,087 64,268,016 64,268,016 3,883,358	66,166,087 2,884,759 531,172 69,582,017 67,874,052 67,874,052 5,337,799	69,582,017 2,593,369 503,036 72,678,422 71,130,220 6,792,240	72,678,422 2,455,999 503,036 75,637,457 74,157,940 74,157,940 8,246,681	75,637,457 2,455,999 503,889 78,597,345 77,117,401 9,701,122	n/a n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year a  Accumulated deferred taxes Average tax depreciation reserve  Average book depreciation reserve	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per 55,812,547 974,476 54,838,072	58,154,323 3,559,118 656,505 62,369,945 60,262,134 riod B. 60,262,134 2,428,917 57,833,217	62,369,945 3,205,287 590,854 66,166,087 64,268,016 64,268,016 3,883,358 60,384,658	66,166,087 2,884,759 531,172 69,582,017 67,874,052 67,874,052 5,337,799 62,536,253	69,582,017 2,593,369 503,036 72,678,422 71,130,220 6,792,240 64,337,980	72,678,422 2,455,999 503,036 75,637,457 74,157,940 8,246,681 65,911,259	75,637,457 2,455,999 503,889 78,597,345 77,117,401 9,701,122 67,416,279	n/a n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve  FY of completion tax depreciation Post FY tax depreciation to rider date  Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year a  Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve Difference  Tax difference balance	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per 55,812,547 974,476 54,838,072	58,154,323 3,559,118 3,559,118 60,262,134 riod B. 60,262,134 2,428,917 57,833,217	62,369,945 3,205,287 59,854 66,166,087 64,268,016 3,883,358 60,384,658 60,384,658	66,166,087 2,884,759 531,172 69,582,017 67,874,052 5,337,799 62,536,253 62,536,253	69,582,017 2,593,369 503,036 72,678,422 71,130,220 6,792,240 64,337,980	72,678,422 2,455,999 575,637,457 74,157,940 8,246,681 65,911,259 64,337,980	75,637,457 2,455,999 78,597,345 77,117,401 9,701,122 67,416,279 64,337,980	n/a n/a n/a n/a n/a n/a n/a
Average ADIT  Note - composite tax rate ignores excess defer  BONUS 50%  Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr Rider year BOY amount Tax period A tax depreciation Tax period B tax depreciation Rider year EOY amount Average tax depreciation reserve  Note - gap between fiscal year and rider year a  Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve Difference  Tax difference balance Composite tax rate w 35% FIT rate	52,660,799 17% 4,764,548 809,973	53,470,772 3,954,575 728,976 58,154,323 55,812,547 od A and tax per 55,812,547 974,476 54,838,072	58,154,323 3,559,118 3,559,118 60,262,134 riod B. 60,262,134 2,428,917 57,833,217	62,369,945 3,205,287 59,854 66,166,087 64,268,016 3,883,358 60,384,658 60,384,658	66,166,087 2,884,759 531,172 69,582,017 67,874,052 5,337,799 62,536,253 62,536,253	69,582,017 2,593,369 503,036 72,678,422 71,130,220 6,792,240 64,337,980 39.23%	72,678,422 2,455,999 503,036 75,637,457 74,157,940 8,246,681 65,911,259 64,337,980 39.23%	75,637,457 2,455,999 503,889 78,597,345 77,117,401 9,701,122 67,416,279 64,337,980 39.23%	n/a n/a n/a n/a n/a n/a n/a n/a n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	53,974,676	53,974,676	53,974,676	53,974,676	53,974,676	53,974,676	n/a
Accumulated depreciation	(524,364)	(1,306,997)	(2,089,630)	(2,872,262)	(3,654,895)	(4,437,528)	n/a
Net plant	53,450,312	52,667,679	51,885,047	51,102,414	50,319,781	49,537,148	n/a
ADIT	(2,183,371)	(3,754,724)	(12,745,341)	(13,199,477)	(13,452,857)	(13,674,111)	n/a
NOL benefit			1,075,611	-	-	-	n/a
Net investment	51,266,941	48,912,955	40,215,316	37,902,937	36,866,924	35,863,037	n/a
Pre-tax ROR%	11.446%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a
Pre-tax rate of return	5,867,848	5,598,419	4,602,915	3,744,035	3,641,698	3,542,534	n/a
Depreciation expense	782,633	782,633	782,633	782,633	782,633	782,633	n/a
Property Tax expense	394,015	394,015	394,015	394,015	394,015	394,015	n/a
Total, excluding uncollectibles	7,044,496	6,775,067	5,779,563	4,920,683	4,818,346	4,719,182	n/a
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	n/a
Total revenue requirement	7,046,667	6,777,154	5,781,344	4,922,199	4,819,830	4,720,636	n/a
Assumptions and calculations:							
Rider computed each year.							
Normal depreciation and AFUDC practices apply, AFUDC ends and de	epreciation begins w	hen plant goes	into service.				
Net of tax rate of return	6.96%	6.96%	6.96%	7.30%	7.30%	7.30%	n/a
						Ĺ	

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2021 - December 31, 2021

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

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		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant amount	53,974,676	1601 1	icai Z	icai 3	10014	1601 3	10010	ical 7
Book depreciation rate	1.45%							
Property Tax Rate	0.73%							
Tax depreciation	MACRS 15 Ye	ars 1 - 2						
Tax depreciation	BONUS 50% Ye	ars 3 - 5						
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	22 000 21	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	n/a
FIT rate		35.00%	35.00%	35.00%	21.00%	21.00%	21.00%	n/a
Composite income tax rate		39.23%	39.23%	39.23%	26.14%	26.14%	26.14%	n/a
Uncollectibles rate		0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	1.000308	1.000308	1.000308	n/a
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 R	ORs			
LTD	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	8.846%	8.846%	8.846%	7.279%	7.279%	7.279%	n/a
Total	7.976%	11.446%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2021 - December 31, 2021

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

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Tax depreciation schedule		MAC	RS 15	BONU	S 50%
	Rate	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	

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Accumulated depreciation								
Portion of year in service before rider	17%							
Pre-rider amount of depreciation	133,048							
Rider year BOY amount		133,048	915,680	1,698,313	2,480,946	3,263,579	4,046,212	n/a
Depreciation expense		782,633	782,633	782,633	782,633	782,633	782,633	n/a
Rider year EOY amount		915,680	1,698,313	2,480,946	3,263,579	4,046,212	4,828,844	n/a
Average accumulated depreciation	_	524,364	1,306,997	2,089,630	2,872,262	3,654,895	4,437,528	n/a

### Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

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MACRS 15								
Tax depreciation reserve		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
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	20,909,304	24,241,646	n/a
Tax period A tax depreciation		4,255,903	3,830,313	3,449,522	3,104,569	2,790,977	2,643,140	n/a
Tax period B tax depreciation		784,522	706,529	635,876	571,646	541,366	541,366	n/a
Rider year EOY amount	_	8,610,850	13,147,691	17,233,089	20,909,304	24,241,646	27,426,152	n/a
Average tax depreciation reserve	_	6,090,637	10,879,271	15,190,390	19,071,196	22,575,475	25,833,899	n/a
Note - gap between fiscal year and rider year add	dressed by tax period	A and tax period E	3.					
Accumulated deferred taxes								
Average tax depreciation reserve		6,090,637	10,879,271	15,190,390	19,071,196	22,575,475	25,833,899	n/a
Average book depreciation reserve		524,364	1,306,997	2,089,630	2,872,262	3,654,895	4,437,528	n/a
Difference	_	5,566,273	9,572,274	13,100,760	16,198,934	18,920,580	21,396,371	n/a
Tax difference balance		5,566,273	9,572,274	13,100,760	16,198,934	16,198,934	16,198,934	n/a
Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	n/a
Incremental tax difference beginning Year 5		-	-	-	-	2,721,646.06	5,197,437.47	n/a
Composite tax rate w 21% FIT rate		0.00%	0.00%	0.00%	0.00%	26.14%	26.14%	n/a
Average ADIT	_	2,183,371	3,754,724	5,138,773	6,354,032	7,065,334	7,712,382	n/a
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	155,616	28,772,551	31,292,763	33,561,184	35,603,882	37,441,990	39,108,161	n/a
Tax period A tax depreciation		2,127,952	1,915,156	1,724,761	1,552,285	1,395,488	1,321,570	n/a
Tax period B tax depreciation		392,261	353,264	317,938	285,823	270,683	270,683	n/a
Rider year EOY amount	-	31,292,763	33,561,184	35,603,882	37,441,990	39,108,161	40,700,414	n/a
Average tax depreciation reserve	_	30,032,657	32,426,973	34,582,533	36,522,936	38,275,076	39,904,288	n/a
Note - gap between fiscal year and rider year add	dressed by tax period	A and tax period E	3.					
Accumulated deferred taxes								
Average tax depreciation reserve		30,032,657	32,426,973	34,582,533	36,522,936	38,275,076	39,904,288	n/a
Average book depreciation reserve		524,364	1,306,997	2,089,630	2,872,262	3,654,895	4,437,528	n/a
Difference	_	29,508,293	31,119,977	32,492,903	33,650,674	34,620,180	35,466,760	n/a
Tax difference balance		29,508,293	31,119,977	32,492,903	33,650,674	33,650,674	33,650,674	n/a
Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	n/a
Incremental tax difference beginning Year 5		-	-	-	-	969,507	1,816,086	n/a
Composite tax rate w 21% FIT rate		0.00%	0.00%	0.00%	0.00%	26.14%	26.14%	n/a
Average ADIT	_	11,574,628	12,206,811	12,745,341	13,199,477	13,452,857	13,674,111	n/a
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Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

### Vintage Year 3 - November 1, 2014 thru October 31, 2015

	V 4	V 2	V 2	V 4	V 5	V6
	<u>Year 1</u>	Year 2	Year 3	Year 4	Year 5	Year 6
Plant	18,441,896	18,441,896	18,441,896	18,441,896	18,441,896	n/a
Accumulated depreciation	(179,163)	(446,571)	(713,978)	(981,386)	(1,248,793)	n/a
Net plant	18,262,733	17,995,326	17,727,918	17,460,511	17,193,103	n/a
ADIT	(746,007)	(4,170,784)	(4,354,788)	(4,458,173)	(4,544,748)	n/a
NOL benefit	-	-	-	-	-	n/a
Net investment	17,516,726	13,824,541	13,373,130	13,002,337	12,648,355	n/a
Pre-tax ROR%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a
Pre-tax rate of return	2,004,908	1,582,312	1,320,992	1,284,365	1,249,399	n/a
Depreciation expense	267,407	267,407	267,407	267,407	267,407	n/a
Property Tax expense	134,626	134,626	134,626	134,626	134,626	n/a
Total, excluding uncollectibles	2,406,941	1,984,346	1,723,025	1,686,398	1,651,432	n/a
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308	1.000308	n/a
Total revenue requirement	2,407,683	1,984,957	1,723,556	1,686,918	1,651,941	n/a
Assumptions and calculations: Rider computed each year. Normal depreciation and AFUDC practices apply, AFUDC ends and dep	reciation begins when plant goe	es into service.				
Net of tax rate of return	6.96%	6.96%	7.30%	7.30%	7.30%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

Vintage Year 3 - November 1, 2014 thru October 31, 2015

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		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plant amount	18,441,896	<u>rear r</u>	Teal Z	<u>rear 5</u>	icai 4	<u>rear 5</u>	<u>rear o</u>
Book depreciation rate	1.45%						
Property Tax Rate	0.73%						
Tax depreciation	MACRS 15 Ye	ar 1					
Tax depreciation	BONUS 50% Ye						
Plant in service date for this Vintage	31-Oct-15	u152 4					
Original Rider effective date for this Vintage	1-lan-16						
Fiscal year end for this Vintage	31-Oct-15						
SIT rate	31-001-13	6.50%	6.50%	6.50%	6.50%	6.50%	n/a
FIT rate		35.00%	35.00%	21.00%	21.00%	21.00%	n/a
		39.23%	39.23%	26.14%	26.14%	26.14%	
Composite income tax rate							n/a
Uncollectibles rate		0.0308%	0.0308%	0.0308%	0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	1.000308	1.000308	n/a
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	e-tax RORs				
LTD	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	8.846%	8.846%	7.279%	7.279%	7.279%	n/a
Total	7.976%	11.446%	11.446%	9.878%	9.878%	9.878%	n/a
<del>-</del>							

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

Vintage Year 3 - November 1, 2014 thru October 31, 2015

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Tax depreciation schedule		MACRS 15 BONUS 50%			5 50%
	Rate	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	Year 4	Year 5	Year 6
Accumulated depreciation							
Portion of year in service before rider	17%						
Pre-rider amount of depreciation	45,459						
Rider year BOY amount		45,459	312,867	580,274	847,682	1,115,089	n/a
Depreciation expense		267,407	267,407	267,407	267,407	267,407	n/a
Rider year EOY amount		312,867	580,274	847,682	1,115,089	1,382,497	n/a
Average accumulated depreciation		179,163	446,571	713,978	981,386	1,248,793	n/a

#### Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

## Vintage Year 3 - November 1, 2014 thru October 31, 2015

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MACRS 15	7						
Tax depreciation reserve	_	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
FY of completion tax depreciation	922,095		<u></u>	<u> </u>			
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	5,888,147	7,144,225	n/a
Tax period A tax depreciation		1,454,144	1,308,729	1,178,622	1,060,759	953,612	n/a
Tax period B tax depreciation		268,053	241,404	217,264	195,318	184,972	n/a
Rider year EOY amount	_	2,942,128	4,492,261	5,888,147	7,144,225	8,282,809	n/a
Average tax depreciation reserve	_	2,081,030	3,717,195	5,190,204	6,516,186	7,713,517	n/a
Note - gap between fiscal year and rider year addre	ssed by tax period A and tax pe	riod B.					
Accumulated deferred taxes							
Average tax depreciation reserve		2,081,030	3,717,195	5,190,204	6,516,186	7,713,517	n/a
Average book depreciation reserve		179,163	446,571	713,978	981,386	1,248,793	n/a
Difference	_	1,901,867	3,270,624	4,476,226	5,534,800	6,464,724	n/a n/a
billerence		1,501,807	3,270,024	4,470,220	3,334,800	0,404,724	11/ a
Tax difference balance		1,901,867	3,270,624	4,476,226	4,476,226	4,476,226	n/a
Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	39.23%	39.23%	n/a
Incremental tax difference beginning Year 4		-	-	-	1,058,574.06	1,988,497.45	n/a
Composite tax rate w 21% FIT rate		0.00%	0.00%	0.00%	26.14%	26.14%	n/a
Average ADIT	_	746,007	1,282,902	1,755,800	2,032,458	2,275,494	n/a
BONUS 50%							
Tax depreciation reserve	0.604.005						
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			44.457.070		40 =00 000	,
Rider year BOY amount		9,830,914	10,692,012	11,467,079	12,165,022	12,793,060	n/a
Tax period A tax depreciation		727,072	654,365	589,311	530,380	476,806	n/a
Tax period B tax depreciation	<del>-</del>	134,026	120,702	108,632	97,659	92,486	n/a
Rider year EOY amount	_	10,692,012	11,467,079	12,165,022	12,793,060	13,362,352	n/a
Average tax depreciation reserve	and the second and the second	10,261,463	11,079,545	11,816,050	12,479,041	13,077,706	n/a
Note - gap between fiscal year and rider year addre	sseu by tax period A and tax pe	riod B.					
Accumulated deferred taxes							
Average tax depreciation reserve		10,261,463	11,079,545	11,816,050	12,479,041	13,077,706	n/a
Average book depreciation reserve	<u> </u>	179,163	446,571	713,978	981,386	1,248,793	n/a
Difference		10,082,300	10,632,975	11,102,072	11,497,655	11,828,913	n/a
Tax difference balance		10,082,300	10,632,975	11,102,072	11,102,072	11,102,072	n/a
Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	39.23%	39.23%	n/a
Incremental tax difference beginning Year 4		-	-	-	395,583.28	726,841.23	n/a
Composite tax rate w 21% FIT rate		0.00%	0.00%	0.00%	26.14%	26.14%	n/a
Average ADIT	_	3,954,782	4,170,784	4,354,788	4,458,173	4,544,748	n/a
	<del>-</del>		•			·	•

Piedmont Natural Gas Company, Inc
Integrity Management Rider
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# Vintage Year 4 - November 1, 2015 thru October 31, 2016

	Year 1	Year 2	Year 3	Year 4	Year 5
Plant	20,076,718	20,076,718	20,076,718	20,076,718	n/a
Accumulated depreciation	(195,045)	(486,158)	(777,270)	(1,068,383)	n/a
Net plant	19,881,673	19,590,560	19,299,448	19,008,335	n/a
ADIT	(4,305,362)	(4,540,513)	(4,673,979)	(4,786,530)	n/a
NOL benefit	-	-	-	-	n/a
Net investment	15,576,310	15,050,048	14,625,469	14,221,806	n/a
Pre-tax ROR%	11.446%	9.878%	9.878%	9.878%	n/a
Pre-tax rate of return	1,782,814	1,486,637	1,444,697	1,404,823	n/a
Depreciation expense	291,112	291,112	291,112	291,112	n/a
Property Tax expense	146,560	146,560	146,560	146,560	n/a
Total, excluding uncollectibles	2,220,487	1,924,309	1,882,370	1,842,496	n/a
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308	n/a
Total revenue requirement	2,221,171	1,924,902	1,882,949	1,843,064	n/a
Assumptions and calculations: Rider computed each year. Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when processing the second secon	•				
Net of tax rate of return	6.96%	7.30%	7.30%	7.30%	n/a

Piedmont Natural Gas Company, Inc
Integrity Management Rider
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## Vintage Year 4 - November 1, 2015 thru October 31, 2016

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		Year 1	Year 2	Year 3	Year 4	Year 5
Plant amount	20,076,718					
Book depreciation rate	1.45%					
Property Tax Rate	0.73%					
Tax depreciation	BONUS 50%					
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%	6.50%	6.50%	n/a
FIT rate		35.00%	21.00%	21.00%	21.00%	n/a
Composite income tax rate		39.23%	26.14%	26.14%	26.14%	n/a
Uncollectibles rate		0.0308%	0.0308%	0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	1.000308	n/a
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>		Pre-tax RORs			
LTD	2.506%	2.506%	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	8.846%	7.279%	7.279%	7.279%	n/a
Total	7.976%	11.446%	9.878%	9.878%	9.878%	n/a

Piedmont Natural Gas Company, Inc
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## Vintage Year 4 - November 1, 2015 thru October 31, 2016

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MACRS 15 tax depreciation schedule		MAC	RS 15	BONUS 50%		
	Rate	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	Year 3	Year 4	Year 5
Accumulated depreciation						
Portion of year in service before rider	17%					
Pre-rider amount of depreciation	49,489					
Rider year BOY amount		49,489	340,602	631,714	922,826	n/a
Depreciation expense		291,112	291,112	291,112	291,112	n/a
Rider year EOY amount		340,602	631,714	922,826	1,213,939	n/a
Average accumulated depreciation	_	195,045	486,158	777,270	1,068,383	n/a

Piedmont Natural Gas Company, Inc
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## Vintage Year 4 - November 1, 2015 thru October 31, 2016

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BONUS 50%		Year 1	Year 2	Year 3	Year 4	Year 5
Tax depreciation reserve						
FY of completion tax depreciation	10,540,277					
Post FY tax depreciation to rider date	17%					
Tax year 2 tax depreciation	953,644					
Tax year 2 pre-rider tax depr	162,119					
Rider year BOY amount		10,702,396	11,639,829	12,483,603	13,243,416	n/a
Tax period A tax depreciation		791,525	712,372	641,552	577,396	n/a
Tax period B tax depreciation		145,908	131,402	118,262	106,316	n/a
Rider year EOY amount		11,639,829	12,483,603	13,243,416	13,927,129	n/a
		11,171,113	12,061,716	12,863,510	13,585,273	n/a
Average tax depreciation reserve  Note - gap between fiscal year and rider year addressed by	tax period A and tax period B.	11,1/1,115	12,001,710	12,003,310	13,363,273	.,, a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes	tax period A and tax period B.		, ,	, ,		·
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve	tax period A and tax period B.	11,171,113	12,061,716	12,863,510	13,585,273	n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve	tax period A and tax period B.	11,171,113 195,045	12,061,716 486,158	12,863,510 777,270	13,585,273 1,068,383	n/a n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve	r tax period A and tax period B.	11,171,113	12,061,716	12,863,510	13,585,273	n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve	tax period A and tax period B.	11,171,113 195,045	12,061,716 486,158	12,863,510 777,270	13,585,273 1,068,383	n/a n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve Difference	r tax period A and tax period B.	11,171,113 195,045 10,976,067	12,061,716 486,158 11,575,558	12,863,510 777,270 12,086,239	13,585,273 1,068,383 12,516,890	n/a n/a n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve Difference Tax difference balance	tax period A and tax period B.	11,171,113 195,045 10,976,067 10,976,067	12,061,716 486,158 11,575,558 11,575,558	12,863,510 777,270 12,086,239 11,575,558	13,585,273 1,068,383 12,516,890 11,575,558	n/a n/a n/a n/a
Note - gap between fiscal year and rider year addressed by Accumulated deferred taxes  Average tax depreciation reserve Average book depreciation reserve Difference  Fax difference balance Composite tax rate w 35% FIT rate	r tax period A and tax period B.	11,171,113 195,045 10,976,067 10,976,067	12,061,716 486,158 11,575,558 11,575,558	12,863,510 777,270 12,086,239 11,575,558 39.23%	13,585,273 1,068,383 12,516,890 11,575,558 39.23%	n/a n/a n/a n/a n/a

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

	Year 1	Year 2	Year 3	Year 4
Plant	38,244,253	38,244,253	38,244,253	n/a
Accumulated depreciation	(371,543)	(926,085)	(1,480,626)	n/a
Net plant	37,872,710	37,318,168	36,763,627	n/a
ADIT	(8,201,309)	(8,649,248)	(9,030,829)	n/a
NOL benefit	-	-	-	n/a
Net investment	29,671,401	28,668,920	27,732,798	n/a
Pre-tax ROR%	9.878%	9.878%	9.878%	n/a
Pre-tax rate of return	2,930,927	2,831,903	2,739,433	n/a
Depreciation expense	554,542	554,542	554,542	n/a
Property Tax expense	279,183	279,183	279,183	n/a
Total, excluding uncollectibles	3,764,652	3,665,628	3,573,158	n/a
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	n/a
Total revenue requirement	3,765,812	3,666,757	3,574,259	n/a
Assumptions and calculations:				
Rider computed each year.				
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation beg	gins when plant goes into	service.		
Net of tax rate of return	7.30%	7.30%	7.30%	n/a
			_	

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

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		Year 1	Year 2	Year 3	Year 4
Plant amount	38,244,253				
Book depreciation rate	1.45%				
Property Tax Rate	0.73%				
Tax depreciation	BONUS 50%				
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				
SIT rate		6.50%	6.50%	6.50%	n/a
FIT rate		21.00%	21.00%	21.00%	n/a
Composite income tax rate		26.14%	26.14%	26.14%	n/a
Uncollectibles rate		0.0308%	0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	n/a
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>		Pre-tax RORs		
LTD	2.506%	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	7.279%	7.279%	7.279%	n/a
Total	7.976%	9.878%	9.878%	9.878%	n/a

Annual Revenue Requirement Computation
Rider Rate Period: January 1, 2021 - December 31, 2021

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

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MACRS 15 tax depreciation schedule		MACRS 15		BONUS 50%	
	Rate	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	25,002,180
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	16,793,051	1,191,308	27,518,652
Tax year 7	5.90%	2,256,411	19,049,462	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	34,291,709
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	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Accumulated depreciation					
Portion of year in service before rider	17%				
Pre-rider amount of depreciation	94,272				
Rider year BOY amount		94,272	648,814	1,203,355	n/a
Depreciation expense		554,542	554,542	554,542	n/a
Rider year EOY amount		648,814	1,203,355	1,757,897	n/a
Average accumulated depreciation		371,543	926,085	1,480,626	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

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

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Process   Proc	BONUS 50%		Year 1	Year 2	Year 3	Year 4
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       22,172,775       23,780,085       n/a         Tax period A tax depreciation       1,507,780       1,357,002       1,222,095       n/a         Tax period B tax depreciation       277,940       250,309       225,278       n/a         Rider year EOY amount       22,172,775       23,780,085       25,227,458       n/a         Average tax depreciation reserve       21,279,915       22,976,430       24,503,772       n/a         Note - gap between fiscal year and rider year addressed by tax period A and tax period B.       21,279,915       22,976,430       24,503,772       n/a         Average tax depreciation reserve       21,279,915       22,976,430       24,503,772       n/a         Average book depreciation reserve       371,543       926,085       1,480,626       n/a         Difference       20,908,372       20,908,372       20,908,372       n/a         Tax difference balance       20,908,372       20,908,372       20,908,372       n/a         Composite tax rate w 35% FIT rate       39,23%       39,23%       39,23%	Tax depreciation reserve					
Tax year 2 tax depreciation 1,816,602 Tax year 2 pre-rider tax depr 308,822 Rider year BOY amount 20,387,055 22,172,775 23,780,085 n/a Tax period A tax depreciation 1,507,780 1,557,002 1,222,095 n/a Tax period B tax depreciation 277,940 250,309 225,278 n/a Rider year EOY amount 22,172,775 23,780,085 25,227,458 n/a Average tax depreciation reserve 22,172,775 23,780,085 25,227,458 n/a Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a  Note - gap between fiscal year and rider year addressed by tax period A and tax period B.  **Accumulated deferred taxes** Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a Average book depreciation reserve 371,543 926,085 1,480,626 n/a Difference 20,908,372 20,908,372 20,908,372 n/a  Tax difference balance 20,908,372 20,908,372 20,908,372 n/a Composite tax rate w 35% FIT rate 39,23% 39,23% 39,23% n/a Incremental tax difference beginning Year 2 - 1,141,973.39 2,114,773.34 n/a Composite tax rate w 21% FIT rate 0,0.00% 26.14% 26.14% n/a	FY of completion tax depreciation	20,078,233				
Tax year 2 pre-rider tax depr Rider year BOY amount  20,387,055 22,172,775 23,780,085 n/a Tax period A tax depreciation 1,507,780 1,357,002 1,222,095 n/a Tax period B tax depreciation 277,940 250,309 225,278 n/a Rider year EOY amount 22,172,775 23,780,085 25,227,458 n/a Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a  Note - gap between fiscal year and rider year addressed by tax period A and tax period B.  ***Accumulated deferred taxes** Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a Average book depreciation reserve 371,543 926,085 1,480,626 n/a Difference 20,908,372 20,908,372 20,908,372 n/a Composite tax rate w 35% FIT rate 39,23% 39,23% 1,44,773,34 n/a Composite tax rate w 21% FIT rate 0,00% 26,14% 26,14% n/a	Post FY tax depreciation to rider date	17%				
Rider year BOY amount       20,387,055       22,172,775       23,780,085       n/a         Tax period A tax depreciation       1,507,780       1,357,002       1,222,095       n/a         Tax period B tax depreciation       277,940       250,309       225,278       n/a         Rider year EOY amount       22,172,775       23,780,085       25,227,458       n/a         Average tax depreciation reserve       21,279,915       22,976,430       24,503,772       n/a         Note - gap between fiscal year and rider year addressed by tax period A and tax period B.       371,543       22,976,430       24,503,772       n/a         Average tax depreciation reserve       21,279,915       22,976,430       24,503,772       n/a         Average book depreciation reserve       371,543       926,085       1,480,626       n/a         Difference       20,908,372       22,050,346       23,023,145       n/a         Tax difference balance       20,908,372       20,908,372       20,908,372       20,908,372       n/a         Composite tax rate w 35% FIT rate       39.23%       39.23%       39.23%       n/a         Incremental tax difference beginning Year 2       -       1,141,973.39       2,114,773.34       n/a         Composite tax rate w 21% FIT rate       0	Tax year 2 tax depreciation	1,816,602				
Tax period A tax depreciation 1,507,780 1,357,002 1,222,095 n/a Tax period B tax depreciation 2277,940 250,309 225,278 n/a Rider year EOY amount 22,172,775 23,780,085 25,227,458 n/a Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a Note - gap between fiscal year and rider year addressed by tax period A and tax period B.    Accumulated deferred taxes   Average tax depreciation reserve   21,279,915 22,976,430 24,503,772 n/a Average tax depreciation reserve   21,279,915 22,976,430 24,503,772 n/a Average book depreciation reserve   371,543 926,085 1,480,626 n/a Difference   20,908,372 22,050,346 23,023,145 n/a     Tax difference balance   20,908,372 20,908,372 20,908,372 n/a     Composite tax rate w 35% FIT rate   39.23% 39.23% 39.23% n/a     Incremental tax difference beginning Year 2	Tax year 2 pre-rider tax depr	308,822				
Tax period B tax depreciation         277,940         250,309         225,278         n/a           Rider year EOY amount         22,172,775         23,780,085         25,227,458         n/a           Average tax depreciation reserve         21,279,915         22,976,430         24,503,772         n/a           Accumulated deferred taxes           Average tax depreciation reserve         21,279,915         22,976,430         24,503,772         n/a           Average book depreciation reserve         371,543         926,085         1,480,626         n/a           Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         n/a           Composite tax rate w 35% FIT rate         39.23%         39.23%         39.23%         n/a           Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	Rider year BOY amount		20,387,055	22,172,775	23,780,085	n/a
Rider year EOY amount         22,172,775         23,780,085         25,227,458         n/a           Average tax depreciation reserve         21,279,915         22,976,430         24,503,772         n/a           Accumulated deferred taxes           Average tax depreciation reserve         21,279,915         22,976,430         24,503,772         n/a           Average book depreciation reserve         371,543         926,085         1,480,626         n/a           Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         n/a           Composite tax rate w 35% FIT rate         39.23%         39.23%         39.23%         n/a           Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	Tax period A tax depreciation		1,507,780	1,357,002	1,222,095	n/a
Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a  Note - gap between fiscal year and rider year addressed by tax period A and tax period B.  Accumulated deferred taxes  Average tax depreciation reserve 21,279,915 22,976,430 24,503,772 n/a  Average book depreciation reserve 371,543 926,085 1,480,626 n/a  Difference 20,908,372 22,050,346 23,023,145 n/a  Tax difference balance 20,908,372 20,908,372 20,908,372 n/a  Composite tax rate w 35% FIT rate 39.23% 39.23% 39.23% n/a  Incremental tax difference beginning Year 2 - 1,141,973.39 2,114,773.34 n/a  Composite tax rate w 21% FIT rate 0.00% 26.14% 26.14% n/a	Tax period B tax depreciation		277,940	250,309	225,278	n/a
Note - gap between fiscal year and rider year addressed by tax period A and tax period B.    Accumulated deferred taxes	Rider year EOY amount	<u> </u>	22,172,775	23,780,085	25,227,458	n/a
Accumulated deferred taxes         21,279,915         22,976,430         24,503,772         n/a           Average tax depreciation reserve         371,543         926,085         1,480,626         n/a           Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         0,908,372         0,908,372         0,008,37	Average tax depreciation reserve		21,279,915	22,976,430	24,503,772	n/a
Average book depreciation reserve         371,543         926,085         1,480,626         n/a           Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         n/a           Composite tax rate w 35% FIT rate         39.23%         39.23%         39.23%         n/a           Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	Accumulated deferred taxes					
Average book depreciation reserve         371,543         926,085         1,480,626         n/a           Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         n/a           Composite tax rate w 35% FIT rate         39.23%         39.23%         39.23%         n/a           Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	<u> </u>		21.279.915	22.976.430	24.503.772	n/a
Difference         20,908,372         22,050,346         23,023,145         n/a           Tax difference balance         20,908,372         20,908,372         20,908,372         n/a           Composite tax rate w 35% FIT rate         39.23%         39.23%         39.23%         n/a           Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	Average book depreciation reserve					•
Composite tax rate w 35% FIT rate       39.23%       39.23%       39.23%       n/a         Incremental tax difference beginning Year 2       - 1,141,973.39       2,114,773.34       n/a         Composite tax rate w 21% FIT rate       0.00%       26.14%       26.14%       n/a	Difference		20,908,372	22,050,346	23,023,145	n/a
Incremental tax difference beginning Year 2         -         1,141,973.39         2,114,773.34         n/a           Composite tax rate w 21% FIT rate         0.00%         26.14%         26.14%         n/a	Tax difference balance		20,908,372	20,908,372	20,908,372	n/a
Composite tax rate w 21% FIT rate 0.00% 26.14% 26.14% n/a	Composite tax rate w 35% FIT rate		39.23%	39.23%	39.23%	n/a
	Incremental tax difference beginning Year 2		-	1,141,973.39	2,114,773.34	n/a
Average ADIT 8,201,309 8,649,248 9,030,829 n/a	Composite tax rate w 21% FIT rate		0.00%	26.14%	26.14%	n/a
	Average ADIT	<u> </u>	8,201,309	8,649,248	9,030,829	n/a

Piedmont Natural Gas Company, Inc
Integrity Management Rider
State of Tennessee
TPUC Docket No. 20

## Vintage Year 6 - November 1, 2017 thru October 31, 2018

	Year 1	Year 2	Year 3
Plant	27,564,238	27,564,238	n/a
Accumulated depreciation	(267,787)	(667,468)	n/a
Net plant	27,296,452	26,896,770	n/a
ADIT	(742,922)	(1,277,596)	n/a
NOL benefit	-	-	n/a
Net investment	26,553,530	25,619,174	n/a
Pre-tax ROR%	9.878%	9.878%	n/a
Pre-tax rate of return	2,622,946	2,530,650	n/a
Depreciation expense	399,681	399,681	n/a
Property Tax expense	201,219	201,219	n/a
Total, excluding uncollectibles	3,223,846	3,131,551	n/a
Uncollectibles gross-up factor	1.000308	1.000308	n/a
Total revenue requirement	3,224,839	3,132,515	n/a
Assumptions and calculations:			
Rider computed each year.			
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when pl	lant goes into service.		
Net of tax rate of return	7.30%	7.30%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

# Vintage Year 6 - November 1, 2017 thru October 31, 2018

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		Year 1	Year 2	Year 3
Plant amount	27,564,238			
Book depreciation rate	1.45%			
Property Tax Rate	0.73%			
Tax depreciation	MACRS 15			
Plant in service date for this Vintage	31-Oct-18			
Original Rider effective date for this Vintage	1-Jan-19			
Fiscal year end for this Vintage	31-Oct-18			
SIT rate		6.50%	6.50%	n/a
FIT rate		21.00%	21.00%	n/a
Composite income tax rate		26.14%	26.14%	n/a
Uncollectibles rate		0.0308%	0.0308%	n/a
Revenue requirement gross-up factor		1.000308	1.000308	n/a
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>	Pre-tax RC	ORs	
LTD	2.506%	2.506%	2.506%	n/a
STD	0.093%	0.093%	0.093%	n/a
Common equity	5.376%	7.279%	7.279%	n/a
Total	7.976%	9.878%	9.878%	n/a
_				

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

# Vintage Year 6 - November 1, 2017 thru October 31, 2018

2020 IMR Annual Report Schedule 11 Page 3 of 4

MACRS 15 tax depreciation schedule		MACRS 15		
	Rate	Yearly	Cumulative	
Tax year 1	5.00%	1,378,212		
Tax year 2	9.50%	2,618,603	3,996,815	
Tax year 3	8.55%	2,356,742	6,353,557	
Tax year 4	7.70%	2,122,446	8,476,003	
Tax year 5	6.93%	1,910,202	10,386,205	
Tax year 6	6.23%	1,717,252	12,103,457	
Tax year 7	5.90%	1,626,290	13,729,747	
Tax year 8	5.90%	1,626,290	15,356,037	
Tax year 9	5.91%	1,629,046	16,985,084	
Tax year 10	5.90%	1,626,290	18,611,374	
Tax year 11	5.91%	1,629,046	20,240,420	
Tax year 12	5.90%	1,626,290	21,866,710	
Tax year 13	5.91%	1,629,046	23,495,757	
Tax year 14	5.90%	1,626,290	25,122,047	
Tax year 15	5.91%	1,629,046	26,751,093	
Tax year 16	2.95%	813,145	27,564,238	
Total	100.00%	27,564,238		

		Year 1	Year 2	Year 3
Accumulated depreciation				
Portion of year in service before rider	17%			
Pre-rider amount of depreciation	67,946			
Rider year BOY amount		67,946	467,627	n/a
Depreciation expense		399,681	399,681	n/a
Rider year EOY amount		467,627	867,309	n/a
Average accumulated depreciation		267,787	667,468	n/a

Piedmont Natural Gas Company, Inc
Integrity Management Rider
State of Tennessee
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# Vintage Year 6 - November 1, 2017 thru October 31, 2018

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MACRS 15				
Tax depreciation reserve	<u></u>	Year 1	Year 2	Year 3
FY of completion tax depreciation	1,378,212			
Post FY tax depreciation to rider date	17%			
Tax year 2 tax depreciation	2,618,603			
Tax year 2 pre-rider tax depr	445,162			
Rider year BOY amount		1,823,374	4,397,461	n/a
Tax period A tax depreciation		2,173,440	1,956,096	n/a
Tax period B tax depreciation		400,646	360,816	n/a
Rider year EOY amount		4,397,461	6,714,373	n/a
Average tax depreciation reserve		3,110,418	5,555,917	n/a
Note - gap between fiscal year and rider year addressed by	tax period A and tax period B.			
Accumulated deferred taxes				
Average tax depreciation reserve		3,110,418	5,555,917	n/a
Average book depreciation reserve		267,787	667,468	n/a
Difference		2,842,631	4,888,449	n/a
Composite tax rate		26.14%	26.14%	n/a
Average ADIT	·	742,922	1,277,596	n/a

Note - composite tax rate ignores excess deferred tax flowback

Piedmont Natural Gas Company, Inc.
Integrity Management Rider
State of Tennessee
TPUC Docket No. 20

## Vintage Year 7 - November 1, 2018 thru October 31, 2019

	Year 1	Year 2
Plant	38,032,924	n/a
Accumulated depreciation	(369,490)	n/a
Net plant	37,663,434	n/a
ADIT	(1,025,078)	n/a
NOL benefit	-	n/a
Net investment	36,638,356	n/a
Pre-tax ROR%	9.878%	n/a
Pre-tax rate of return	3,619,120	n/a
Depreciation expense	551,477	n/a
Property Tax expense	277,640	n/a
Total, excluding uncollectibles	4,448,238	n/a
Uncollectibles gross-up factor	1.000308	n/a
Total revenue requirement	4,449,608	n/a
Assumptions and calculations:		
Rider computed each year.		
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when p	olant goes into service.	
Net of tax rate of return	7.30%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

# Vintage Year 7 - November 1, 2018 thru October 31, 2019

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		Year 1	Year 2
Plant amount	38,032,924		
Book depreciation rate	1.45%		
Property Tax Rate	0.73%		
Tax depreciation	MACRS 15		
Plant in service date for this Vintage	31-Oct-19		
Original Rider effective date for this Vintage	1-Jan-20		
Fiscal year end for this Vintage	31-Oct-19		
SIT rate		6.50%	n/a
FIT rate		21.00%	n/a
Composite income tax rate		26.14%	n/a
Uncollectibles rate		0.0308%	n/a
Revenue requirement gross-up factor		1.000308	n/a
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>	Pre-tax RORs	
LTD	2.506%	2.506%	n/a
STD	0.093%	0.093%	n/a
Common equity	5.376%	7.279%	n/a
Total	7.976%	9.878%	n/a

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

# Vintage Year 7 - November 1, 2018 thru October 31, 2019

2020 IMR Annual Report Schedule 12 Page 3 of 4

MACRS 15 tax depreciation schedule		MAC	MACRS 15	
	Rate	Yearly	Cumulative	
Tax year 1	5.00%	1,901,646		
Tax year 2	9.50%	3,613,128	5,514,774	
Tax year 3	8.55%	3,251,815	8,766,589	
Tax year 4	7.70%	2,928,535	11,695,124	
Tax year 5	6.93%	2,635,682	14,330,806	
Tax year 6	6.23%	2,369,451	16,700,257	
Tax year 7	5.90%	2,243,942	18,944,199	
Tax year 8	5.90%	2,243,942	21,188,142	
Tax year 9	5.91%	2,247,746	23,435,888	
Tax year 10	5.90%	2,243,942	25,679,830	
Tax year 11	5.91%	2,247,746	27,927,576	
Tax year 12	5.90%	2,243,942	30,171,518	
Tax year 13	5.91%	2,247,746	32,419,264	
Tax year 14	5.90%	2,243,942	34,663,207	
Tax year 15	5.91%	2,247,746	36,910,952	
Tax year 16	2.95%	1,121,971	38,032,924	
Total	100.00%	38,032,924		

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

	Year 1	<u>Year 2</u>
17%		
93,751		
	93,751	n/a
	551,477	n/a
_	645,229	n/a
	369,490	n/a

Piedmont Natural Gas Company, Inc
Integrity Management Rider
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# Vintage Year 7 - November 1, 2018 thru October 31, 2019

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MACRS 15			
Tax depreciation reserve	_	Year 1	Year 2
FY of completion tax depreciation	1,901,646		
Post FY tax depreciation to rider date	17%		
Tax year 2 tax depreciation	3,613,128		
Tax year 2 pre-rider tax depr	614,232		
Rider year BOY amount		2,515,878	n/a
Tax period A tax depreciation		2,998,896	n/a
Tax period B tax depreciation		552,809	n/a
Rider year EOY amount		6,067,582	n/a
Average tax depreciation reserve		4,291,730	n/a
Note - gap between fiscal year and rider year addressed by t	tax period A and tax period B.		
Accumulated deferred taxes			
Average tax depreciation reserve		4,291,730	n/a
Average book depreciation reserve		369,490	n/a
Difference		3,922,240	n/a
Composite tax rate		26.14%	n/a
Average ADIT		1,025,078	n/a

Note - composite tax rate ignores excess deferred tax flowback

Piedmont Natural Gas Company, Inc
Integrity Management Rider
State of Tennessee
TPUC Docket No. 20

## Vintage Year 8 - November 1, 2019 thru October 31, 2020

	Year 1
Plant	n/a
Accumulated depreciation	n/a
Net plant	n/a
ADIT	n/a
NOL benefit	n/a
Net investment	n/a
Pre-tax ROR%	n/a
Pre-tax rate of return	n/a
Depreciation expense	n/a
Property Tax expense	n/a
Total, excluding uncollectibles	n/a
Uncollectibles gross-up factor	n/a
Total revenue requirement	n/a
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	n/a

Piedmont Natural Gas Company, Inc
Integrity Management Rider
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Vintage Year 8 - November 1, 2019 thru October 31, 2020

2020 IMR Annual Report Schedule 13 Page 2 of 4

	Г	Year 1
Plant amount	68,654,147	
Book depreciation rate	1.45%	
Property Tax Rate	0.73%	
Tax depreciation	MACRS 15	
Plant in service date for this Vintage	31-Oct-20	
Original Rider effective date for this Vintage	1-Jan-20	
Fiscal year end for this Vintage	31-Oct-20	
SIT rate		n/a
FIT rate		n/a
Composite income tax rate		n/a
Uncollectibles rate		n/a
Revenue requirement gross-up factor		n/a
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>	
LTD	2.506%	n/a
STD	0.093%	n/a
Common equity	5.376%	n/a
Total	7.976%	n/a
	L	

Annual Revenue Requirement Computation Rider Rate Period: January 1, 2021 - December 31, 2021

# Vintage Year 8 - November 1, 2019 thru October 31, 2020

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MACRS 15 tax depreciation schedule		MAC	RS 15
	Rate	Yearly	Cumulative
Tax year 1	5.00%	3,432,707	
Tax year 2	9.50%	6,522,144	9,954,851
Tax year 3	8.55%	5,869,930	15,824,781
Tax year 4	7.70%	5,286,369	21,111,150
Tax year 5	6.93%	4,757,732	25,868,883
Tax year 6	6.23%	4,277,153	30,146,036
Tax year 7	5.90%	4,050,595	34,196,631
Tax year 8	5.90%	4,050,595	38,247,225
Tax year 9	5.91%	4,057,460	42,304,685
Tax year 10	5.90%	4,050,595	46,355,280
Tax year 11	5.91%	4,057,460	50,412,740
Tax year 12	5.90%	4,050,595	54,463,335
Tax year 13	5.91%	4,057,460	58,520,795
Tax year 14	5.90%	4,050,595	62,571,390
Tax year 15	5.91%	4,057,460	66,628,850
Tax year 16	2.95%	2,025,297	68,654,147
Total	100.00%	68,654,147	

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

	<u>Year 1</u>
83%	
326,253	
	n/a
	n/a
	n/a
	n/a

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Annual Revenue Requirement Computation

Rider Rate Period: January 1, 2021 - December 31, 2021

Vintage Year 8 - November 1, 2019 thru October 31, 2020

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MACRS 15		
Tax depreciation reserve		Year 1
FY of completion tax depreciation	3,432,707	
Post FY tax depreciation to rider date	83%	
Tax year 2 tax depreciation	6,522,144	
Tax year 2 pre-rider tax depr	5,413,380	
Rider year BOY amount		n/a
Tax period A tax depreciation		n/a
Tax period B tax depreciation		n/a
Rider year EOY amount		n/a
Average tax depreciation reserve		n/a
Note - gap between fiscal year and rider year addressed by tax pe	eriod A and tax period B.	
Accumulated deferred taxes		
Average tax depreciation reserve		n/a
Average book depreciation reserve		n/a
Difference		n/a
Composite tax rate		n/a
Average ADIT		n/a
Note - composite tax rate ignores excess deferred tax flowback		

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# **Schedule of Prior Period Adjustments**

None

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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.

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See attached CONFIDENTIAL Duke Energy Regulated Electric & Gas Capitalization Guidelines dated 1/1/2020.

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# Pipeline Safety Metrics - Tennessee Service Territory

# Response Time to Emergency Calls on Natural Gas Leaks / Odor

Average emergency response time for the period 11/1/2019 thru 10/31/2020 = 32.45 minutes

# **Age of Natural Gas Leaks**

TPUC Docket No. 20-\_\_\_\_

Average age of leaks for the period 11/1/2019 thru 10/31/2020 = 102.56 days

# **Number of Natural Gas Leaks by Grade**

Number of leaks for the period 11/1/2019 thru 10/31/2020 by PHMSA category: Grade 1 = 368; Grade 2 = 349; Grade 3 = 2,942

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# **Projected Integrity Management Rider Investment by Category**

TPUC Docket No. 20-\_\_\_\_

Capital Project Cost Information as reported to the Tennessee Public Utility Commission, Utilities Division Director by letter dated March 30, 2020

IMR Project Categories		Projected		
livik Project Categories	FY2020			
Transmission Integrity	\$	53,296,431		
Distribution Integrity		21,896,259		
Casing and Remediation		2,404,246		
Corrosion Control		948,369		
Total	\$	78,545,305		

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## Projected Integrity Management Rider Investment by Project

Capital Project Cost Information as reported to the Tennessee Public Utility Commission, Utilities Division Director by letter dated March 30, 2020

Project Category	Funding Project Number	Project Name	FY2020	Description	Driver of Work/Necessity	Location (Area of Nashville)
Individual Capital Projects Over \$10	1					
Transmission Integrity	FP1734394	Line 431 Ph II & RcIs Dist Line 310	\$ 47,057,920	Installation of a new 20" transmission pipeline (Line 431 Phase II) and 12" transmission lateral pipeline (Line 469) to functionally replace Line 310. Line 310 will be reclassified from transmission to distribution operation after Line 431 Phase II is placed in-service.	Integrity Management Identified Risk	Downtown
Distribution Integrity	FP1734695	Spence Lane Main Replacement	7,252,217	Install 500'- 6" 125 psig MAOP steel from Lebanon Rd to 12" and 4,500'-12" 125 psig MAOP steel along Spence Lane, from 12" Shelby S main to I-40. Tie in to new 12" main installed as part of the Shelby South Project. Retire casing at rail road crossing.	Integrity Management Identified Risk	Downtown
Transmission Integrity	FP1734142	Line 469 Replacement	4,676,533	Install approximately 4.0 miles of 12" steel pipeline (design pressure: 1000 psig) from the tie-in at Line 310 to Lyndale Station to replace existing Line 308. Install launcher at Tucker Rd Junction and receiver at Lyndale Station. Convert existing line 308 to distribution main.	Integrity Management Identified Risk	Bordeaux and North Nashville
Distribution Integrity	FP1734726	Cowan St HP Distribution Pipeline	2,422,756	Installation of approximately 2,200 feet 16" pipeline along Cowan St north of the Jefferson St intersection due to the proposed new major development River North, which impacted the routing of the future DIMP replacement of 12", 175# Distribution Main. This will be the first phase of the development.	Integrity Management Identified Risk	Downtown
Casing & Remediation	F0231471	44th Ave N @ I-40	2,260,211	Install 1,000' of 2"plastic pipe and install 800' of 8" high pressure distribution steel.	Integrity Management Identified Risk	West Nashville
Distribution Integrity	F0224311	Hermitage Pressure Reduction	2,184,160	Install 6800 linear feet of 6" plastic main (75 psig MAOP) along Andrew Jackson Pkwy and Weber Rd, 2200 linear feet of 4" plastic main (75 psig MAOP) along Tulip Grove Rd and Leesa Ann Ln and 200 linear feet of 2" plastic main (75 psig MAOP) along Racoon Trail. Install 3 new regulator stations. Separate/disconnect system mains at 5 locations and retire/remove regulator stations. Reduce pressure of separated distribution main.	Integrity Management Identified Risk	Hermitage and Nashville
Distribution Integrity	F0224331	Paragon Mills Road	2,043,122	Install 4,000 linear feet of 4" steel main (125 psig MAOP /design pressure: 175 psig) along Paragon Mills Rd and 5,250 linear feet of 2" steel main (125 psig MAOP /design pressure: 175 psig) along Jonquil Drive, Verbena Drive and Fox Glove Drive.	Integrity Management Identified Risk	South Nashville
Distribution Integrity	F0230684	Bordeaux Bridge Expansion Joint	1,051,533	Separate 2" from 14" on the south side of the Bordeaux Bridge. Install new 14" isolation valve on the south side of the Bordeaux Bridge. Replace 14" expansion joint hanging under the north side of the Bordeaux Bridge.	Integrity Management Identified Risk	Bordeaux and North Nashville
Distribution Integrity	F0224337	Van Buren Main Replacement	734,330	Install 2700 linear feet of 2" plastic main (75 psig MAOP) Taylor St, 5th Ave N, and Van Buren St. Retire replaced 4" steel section. Disconnect the 14" 175 psig system from the 60 psig system at the existing valve location.	Integrity Management Identified Risk	Nashville
Distribution Integrity	F0230664	Doak Ave Main Repl	588,840	Install 1,600 feet of 2" and 2,000 feet of 4" MDPE to replace 2" and 4" poorly coated steel. Replace approximately 60 service lines.	Integrity Management Identified Risk	West Nashville
Transmission Integrity	F0231370	3 immediate ILI excavations Line320	518,196	Perform three digs ILI anomaly excavations on Line 320. Repairs in this scope are a minimum of armor plate and new coating but may require pipe replacement. 12" diameter steel transmission pipeline.	Integrity Management Identified Risk	Hendersonville
Distribution Integrity	F0229495	1st Avenue S 12" 175# Replace Ph 1	491,148	Install 500 feet of 12" 175 nsig MAOP steel due to exposed main and coating	Integrity Management Identified Risk	Downtown
Distribution Integrity	F0230665	O'Brien St & Eastboro Ave	487,283	Install 3,500 feet of 4" MDPE. Retire 3,500 feet of 2" poorly coated steel. Replace approximately 38 service lines.	Integrity Management Identified Risk	West Nashville
Corrosion Control	FP1708010	Nashville Anodes	400,811	To install anodes in the Nashville Resource Center as needed based on system needs.	Integrity Management Identified Risk	Various locations

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## Projected Integrity Management Rider Investment by Project

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Project Category	Funding Project Number	Project Name	FY2020	Description	Driver of Work/Necessity	Location (Area of Nashville)
Individual Capital Projects Over \$100	,000					
Distribution Integrity	F0230662	28th Ave N	381,735	Install 8,300' - 2" MDPE along 28th Ave N, 26th Ave N, Merry St, 25th Ave N, Booker St, Batavia St, and Herman St. Retire 8300 2" 25#MAOP steel.	Integrity Management Identified Risk	Downtown
Transmission Integrity	FP1733398	South Nashville 20"	375,822	Run 17 miles of 20" high pressure steel	Integrity Management Identified Risk	South Nashville
Distribution Integrity	F0226414	Line 304 Convert Distribution	364,826	Reduce maximum operating pressure in Line 304 to 75 psig. Line 304 will no longer be a transmission line. Line 304 will become a 75 psig distribution line.	Integrity Management Identified Risk	Downtown
Distribution Integrity	F0224357	Patton Ave	360,707	Install 700' linear feet of 4" plastic main (75 psig MAOP) and install 2000' linear feet of 2" plastic main (75 psig MAOP) along various streets in West Nashville. Retire replaced 2" and 4 steel piping.	Integrity Management Identified Risk	West Nashville
Distribution Integrity	F0231383	Old Hickory Blvd valve replacement	360,060	Replace an existing leaking 10" valve and relocate east of current location.	Integrity Management Identified Risk	South Nashville
Distribution Integrity	F0230676	5285 Whites Creek Pike	331,536	10 inch distribution main steel. Replace 150 ft of 10 inch steel.	Integrity Management Identified Risk	Bordeaux and North Nashville
Transmission Integrity	F0230575	Line 384 - Valve Automation	302,045	Retrofit existing 8 inch MLV. Line 384 currently has a MAOP of 1,008 psig. One 8" ball valve at Columbia Gulf #1 RS.	Integrity Management Identified Risk	South Nashville
Distribution Integrity	FP1734428	Broadmoor Drive	294,901	Install 3200' of 2" MDPE along Broadmoor Drive from Joyce Lane to Graycroft Ave. Retire 3 district regulator stations and 19 farm tap meters.	Integrity Management Identified Risk	East Nashville
Distribution Integrity	F0231296	Ed Temple Blvd DIMP	289,946	Install 1,600' of 2" MDPE along Ed Temple Blvd to transfer mains and customers from the high pressure distribution system to the 75# MAOP distribution system. Separate 2" from 14" on the south side of the Bordeaux Bridge.	Integrity Management Identified Risk	Downtown
Corrosion Control	F0229662	Briley Pkwy @ Cumberland River Brid	285,990	Briley Pkwy at Cumberland River (Ford Glass) bridge attachment application of new coating to the 12" 1234' section.	Integrity Management Identified Risk	West Nashville
Distribution Integrity	F0230666	Old Lebanon Dirt Rd	284,752	Install 1,000 feet of 6" 175 psig MAOP steel via horizontal directional drilling and abandon 1,000 feet of 4" 175 psig MAOP steel.	Integrity Management Identified Risk	Hermitage and Nashville
Distribution Integrity	F0224363	Maxon Ave & Deal Ave Main Repl	237,161	Install 5,400 linear feet of 2" plastic main (75 psig MAOP) along various streets south of Robertson Road in West Nashville . Retire 2" poorly coated steel piping.	Integrity Management Identified Risk	West Nashville
Distribution Integrity	F0224339	Greenbrier Main Replacement	214,920	Install 2000 linear feet of 2" plastic main (75 psig MAOP) along Main St, Broad St and College St. Retire replaced 2" steel section with leak clamps and corrosion.	Integrity Management Identified Risk	Greenbrier, TN
Distribution Integrity	F0231458	Charlotte Ave at 5th Ave N Casing	214,276	Install 300 feet of 6" MDPE along Charlotte Ave, east of 5th Ave N. Retire 300 feet of 4" steel pipe. Replace services if necessary.	Integrity Management Identified Risk	Downtown
Distribution Integrity	F0230670	Scenic Drive Main Repl	196,569	Install 1,800 feet of 2" MDPE. Retire 1,800 feet of 2" poorly coated steel. Replace approximately 15 service lines.	Integrity Management Identified Risk	South Nashville
Distribution Integrity	FP1734427	Grinstead Place	192,703	Install 2400' of 2" MDPE to replace 19 farm taps and 1 district regulator station along Grinstead Place and Joyce Lane.	Integrity Management Identified Risk	East Nashville
Distribution Integrity	F0230667	Pennington Bend Station Relo	186,751	Install 1,600 feet of 6" 300# MAOP steel along Music Valley Drive, east of Pennington Bend Road. Rebuild Pennington Bend regulator station. Retire 1,600 feet of 6" 125# MAOP steel (vintage 1965).	Integrity Management Identified Risk	Nashville
Transmission Integrity	F0230600	Line 301 - Valve Automation	178,583	Retrofit two existing valves to be automated and install two new ROVs. Line 301 and Line 203 currently have an MAOP of 735 psig. Retrofit 20" and 16" ball valves at Tennessee Gas Kinder Portland RS (4759).	Integrity Management Identified Risk	Joelton, TN
Corrosion Control	F0229704	Nashville Rectifier & Ground Bed	160,802	Nashville New Rectifier & Ground Bed Installations - install 2 new rectifier & ground beds, negative cable connections from the main to the rectifier and a power connection for each new rectifier.	Integrity Management Identified Risk	2 locations: Franklin, TN and West Nashville

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Project Category	Funding Project Number	Project Name	FY2020	Description	Driver of Work/Necessity	Location (Area of Nashville)
Individual Capital Projects Over \$100,00	0					
Distribution Integrity	F0230674	Walnut St Main Repl		Install 2,250' of 2" MDPE. Retire 2,000' of 2" poorly coated steel. Replace approximately 20 service lines. Replace 2" cast steel valve with a polyvalve.	Integrity Management Identified Risk	Madison, TN
Distribution Integrity	F0230671	1st Ave N & Stockyard St	134,500	Install 1,000 feet of 2" MDPE along Stockyard Street and 1st Ave N. Replace services.	Integrity Management Identified Risk	Downtown
Distribution Integrity	F0229092	39th Ave N. Main Replacement	107,187	Replace 1,700' of 4" 75# MAOP steel main, installed in 1951, with 6" MDPE along 39th Avenue N, south of John L Driver Avenue. Build new 39th and Centennial Regulator Station, replace inlet piping to regulator station and retire old station.	Integrity Management Identified Risk	West Nashville
Distribution Integrity	F0222865	Post Place Retirement and Pressure	103 603	Cut and cap 4" HPS on Sloan Road from 8". Cut and cap 4" HPS just north of Wilson ave. Retire 6,864' of 4" 1950 Era steel pipe. All services and side roads will be tied over to the existing 6" main once pressure is lowered from 390 # to 125#. Remove a cross over valve that separates pressure.	Integrity Management Identified Risk	South Nashville

Sub-total of Individual Capital Projects Over \$100,000

\$ 77,878,884

Remaining capital expenditures by category:

Distribution Integrity Transmission Integrity Casing & Remediation Corrosion Control	234,289 187,332 144,036 100,766
Grand Total	\$ 78,545,305