R. DALE GRIMES
TEL: (615) 742-6244

FAX: (615) 742-2744

dgrimes@bassberry.com

BERRY SIMS

A PROFESSIONAL LIMITED LIABILITY COMPANY ATTORNEYS AT LAW KNOXVILLE MEMPHIS WASHINGTON, D.C.

OTHER OFFICES:

150 THIRD AVENUE SOUTH, SUITE 2800 NASHVILLE, TN 37201 (615) 742-6200

www.bassberry.com

October 21, 2013

Via Hand-Delivery

Chairman James M. Allison c/o Sharla Dillon Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, Tennessee 37243

> Re: Petition of Piedmont Natural Gas, Inc. for Approval of an Integrity Management Rider to its Approved Rate Schedules and Service Regulations Docket No. 13-00118

Dear Chairman Allison:

I am enclosing an original and five (5) copies of Piedmont's Responses to the Consumer Advocate and Protection Division's Informal Questions of September 24, 2013. These responses were sent to the Consumer Advocate on October 1, 2013. This is also being filed today by way of email to the Tennessee Regulatory Authority Docket Manager, Sharla Dillon.

Please file the original and four copies of this filing and stamp the additional copy as "filed". Then please return the stamped copies to me by way of our courier.

Should you have any questions concerning this matter, please do not hesitate to contact me at the email address or telephone number listed above.

With kindest regards, I remain

Very truly yours,

2. Phunes

R. Dale Grimes

RDG:smb Enclosures

1. Which USOA accounts will be used for the costs recovered in this rider?

Response: Approval of the IMR will not change Piedmont's accounting for utility investments in Tennessee. In other words, the Integrity Management Investment Amount will continue to be recorded in the same balance sheet accounts for utility plant (accounts 10100, 10600, and 10700) and the same utility plant accounts (accounts 3xxxxx) that would ordinarily be used. Approval of the IMR will, however, prompt Piedmont to create a new deferred account (account 186xx) for recording the Integrity Management Deferred Account Balance.

There will be four possible entries to the books each month following the effective date of the Rider:

- 1) Integrity Management Deferred Account Adjustment debit the deferred account and credit an income account for the monthly amount determined in the annual filing.
- 2) Recovery of the deferred account through an increment on customer rates credit the deferred account and debit revenues.
- 3) Recording of interest owed to or owed from customers debit/credit the deferred account and debit/credit interest expense.
- 4) Recovery of or refund of the balance in the deferred account at the end of each plan year through an increment or decrement on customer rates debit/credit the deferred account and debit/credit revenues.

2. What is the forecasted impact on rates for the first three to five years of the rider?

Response: See attachment for detailed calculation of the Integrity Management Revenue Requirement based on the current forecast for the Integrity Management Investment Amount.

In summary:

(in \$ millions)	Projected	Incremental	Total
	Integrity	Integrity	Amount
	Management	Management	Collectible Through
	Investment Amt	Revenue Reg'ment	<u>IMR</u>
Year 1	80.3*	10.5	10.5
Year 2	41.1	5.4	15.4
Year 3	5.7	0.7	15.6
Year 4	3.7	0.5	15.5
Year 5	4.5	0.6	15.0
Year 6	6.5	0.8	14.5

^{*} The \$80.3 million reflects the current projected Integrity Management Investment Amount of \$113.3 million at October 31, 2013 less the \$33 million included in the 2011 rate case.

Piedmont Natural Gas Company, Inc. Integrity Management Rider State of Tennessee Illustration of Annual Revenue Requirement Computation

Management Management Investment Amt Revenue Reg'ment 80.3* 10.5 41.1 5.4 5.7 0.7 3.7 0.5 4.5 0.6	(in \$ millions)	Projected Integrity	Incremental Integrity	Total Amount
80.3* 10.5 41.1 5.4 5.7 0.7 3.7 0.5 4.5 0.6		Management <u>Investment Amt</u>	Management <u>Revenue Reg'ment</u>	Collectible Through <u>IMR</u>
41.1 5.4 5.7 0.7 3.7 0.5 4.5 0.6	Year 1	80.3*	10.5	10.5
5.7 0.7 3.7 0.5 4.5 0.6	Year 2	41.1	5.4	15.4
3.7 0.5 4.5 0.6	Year 3	5.7	0.7	15.6
4.5 0.6	Year 4	3.7	0.5	15.5
000	Year 5	4.5	9'0	15.0
0.0	Year 6	6.5	0.8	14.5
	* The \$80.3 million refle	cts the current projected	Integrity Management Inv	vestment Amount of
* The \$80.3 million reflects the current projected Integrity Management Investment Amount of	\$113.3 million at Octobe	er 31, 2013 less the \$33 r	\$113.3 million at October 31, 2013 less the \$33 million included in the 2011 rate case.	Lrate case.

Rider Rate Period: January 1, 2014 - December 3	11, 2014
Vintage Year 1 - Fiscal year October 31, 2013	

Vintage Year 1 - Fiscal year October 31, 20	72							v •
		Year 1	Year 2	<u>Year 3</u>	Year 4	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u> 80,300,000
Plant		80,300,000	80,300,000	80,300,000	80,300,000	80,300,000	80,300,000 (6,601,865)	(7,766,215)
Accumulated depreciation	-	(780,115)	(1,944,465)	[3,108,815]	(4,273,165)	(5,437,515) 74,862,486	73,698,136	72,533,786
Net plant		79,519,886	78,355,536	77,191,186	76,D26,836	(11,041,368)	(12,486,151)	(13,888,065)
ADIT	-	(3,248,276)	(5,586,034)	(7,645,131)	(9,453,114) 66,573,722	63,821,117	61,211,985	58,645,720
Net investment		76,271,609	72,769,502	69,546,054	11.445%	11,446%	11,446%	11.446%
Pre-lax ROR%	-	11,446%	11.446%	31,446%	7,619,813	7,304,759	7,006,126	6,712,399
Pre-tax rate of return		8,729,802	8,328,962 1,164,350	7,960,016 1,164,350	1,164,350	1,364,350	1,164,350	1,164,350
Depreciation expense		1,164,350			586,190	586,190	586,190	586,190
Property Tex expense	-	586,190	586,190	586,190	9,370,353	9,055,299	B,756,666	8,462,939
Total, excluding uncollectibles		10,480,342	10,079,502	9,710,556 1,000308	1.000308	1.000308	1.000308	1.000308
Uncollectibles gross-up factor		10,483,571	1,000308	9,713,548	9,373,240	9,058,089	8,759,364	8,465,547
Total revenue requirement	-	10,463,371	10,002,007	3,713,310	5,510,510			
Adaylandariana								
Assumptions and calculations: Rider computed each year.								
Normal depreciation and AFUOC practices	anniv. AFUDC end	is and depreciat	lon begins when	plant goes into	service.			
Ne1 of lax rate of relurn		6,96%	6.96%	6.96%	6.96%	6.96%	6.95%	6.96%
Plant amount	80,300,000							
Book depreciation rate	1.45%							
Property Tax Rale	0.73%							
Tax depreciation		assumed no bor	nus depreciation	1				
Plant in service date	31-001-13							
Rider effective date	1-Jan-14							
Fiscal year end	31-Oct-13	c 100°	c ton	E ENV	6.50%	6.50%	6.50%	6.50%
5IY rate		6.50%	6,50%	6.50%	35.00%	35.00%	35,00%	35.00%
FIT rate		35,00%	35,00%	35,00%	35.00%	39.23%	39.23%	39.23%
Composite income tax rate		39.23%	39.23% 0.0308%	39.23% 0.0308%	0.0308%	0.0308%	0.0308%	0.0308%
Uncellectibles rate		0.0308%			1.00030876	1.000308	1.000308	1.000308
Revenue requirement gross-up factor		1.000308	1.000308	1.000308	1.000306	1.000308		2.270200
Capital structure assumptions (rate case):								
LTD	41.42%							
STD	5.87%							
Common equity	52,71%							
Capital cost rate assumptions (rate case):								
LTD	6.05%							
STO	1.59%							
Common equity	10.20%							
Overall and pre-tax RORS					Pre-tax RORs			
	Overall	2,506%	2.506%	2.506%	2,506%	2.506%	2.506%	2.506%
LTO	2.506%		0,093%	0.093%	0.093%	0.093%	0.093%	0.093%
510	0.093%	0.093% 8.846%	E.846%	B.846%	8.846%	8.846%	8.846%	8.846%
Common equity	5,376% 7.976%	11.446%	11.446%	11.446%	11.446%	11,445%	11.446%	11,446%
Total	7.27074	11.44-10						
sea cor as the dependent on schoolide								
MACR5 15 lax depreciation schedule	Rate	Yearly	Cumulative					
	Rate 5.00%	Yearly 4.015.000	Cumulative					
Так усаг 1	5,00%	4,015,000						
Tax year 1 Tax year 2	5,00% 9.50%	4,015,000 7,628,500	11,643,500					
Tax year 1 Yax year 2 Tax year 3	5,00% 9,50% 8,55%	4,015,000 7,628,500 6,865,650	11,643,500 18,509,150					
Tak year 1 Tak year 2 Tak year 3 Tak year 4	5,00% 9,50% 8,55% 7,70%	4,015,000 7,628,500 6,865,650 6,183,100	11,643,500 18,509,150 24,692,250					
Tak year 1 Tak year 2 Tak year 3 Tak year 4 Tak year 5	5,00% 9,50% 8,55%	4,015,000 7,628,500 6,865,650 6,183,100	11,643,500 18,509,150					
Tak year 1 Tak year 2 Tak year 3 Tax year 4 Tax year 5 Tax year 6	5,00% 9,50% 8,55% 7,70% 6,93%	4,015,000 7,628,500 6,865,650 6,183,100 5,564,790 5,002,690	11,643,500 18,509,150 24,692,250 38,257,040					
Yax year 1 Yax year 2 Yax year 3 Yax year 3 Yax year 4 Yax year 5 Yax year 6 Yax year 7	5,00% 9,50% 8,55% 7,70% 6,93% 6,23% 5,90%	4,015,000 7,628,500 6,865,650 6,183,100 5,564,790 5,002,690 4,737,700	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730					
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 5 Tax year 5 Tax year 6 Tax year 7 Tax year 8	5,00% 9,50% 8,55% 7,70% 6,93% 6,23% 5,90% 5,90%	4,015,000 7,628,500 6,865,650 6,183,100 5,564,790 5,002,690 4,737,700 4,737,700	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 39,997,430					
Tay year 1 Tay year 2 Tay year 3 Tay year 4 Tay year 4 Tay year 5 Tay year 6 Tay year 6 Tay year 7 Tay year 8 Tay year 8	5,00% 9,50% 8,55% 7,70% 6,93% 6,23% 5,90% 5,90% 5,91%	4,015,000 7,628,500 6,865,650 6,183,100 5,564,790 5,002,690 4,737,700 4,737,700 4,745,730	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 39,997,430 44,735,130					
Yax year 1 Yax year 2 Yax year 3 Yax year 4 Yax year 5 Yax year 6 Yax year 7 Yax year 7 Yax year 8 Yax year 9 Yax year 10	5,00% 9,50% 8,55% 7,70% 6,93% 6,23% 5,90% 5,90%	4,015,000 7,628,500 6,865,650 6,183,100 5,564,790 5,002,690 4,737,700 4,737,700 4,745,730	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 39,997,430 44,735,130 49,480,860					
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Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tex year 5 Tax year 6 Tex year 7 Tex year 7 Tex year 8 Tex year 9 Tex year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 15 Tax year 16 Total	5,00% 8,55% 7,70% 6,93% 6,23% 5,90% 5,90% 5,91% 5,90% 5,91% 5,90% 5,91% 5,90%	4,015,000 7,628,500 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 49,733,40,735,130 49,480,860 54,218,560 58,964,290 63,701,990 68,447,720 73,185,420 77,931,150					
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Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tex year 4 Tex year 5 Tex year 6 Tex year 7 Tex year 10 Tex year 11 Tex year 11 Tex year 12 Tex year 12 Tex year 12 Tex year 15 Tex year 15 Tex year 16	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,550 6,183,100 5,564,790 5,002,690 4,737,700 4,737,700 4,745,730 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 80,300,000	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 49,733,40,735,130 49,480,860 54,218,560 58,964,290 63,701,990 68,447,720 73,185,420 77,931,150					
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Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 5 Tax year 6 Tax year 6 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Accumulated depreciation Portion of year in sevice before rider Pre-rider amount of depreciation Rider year 80Y snown	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,740 7,745,740 8,745,745 8,745,740 8,745,	11,643,500 18,509,150 24,692,250 89,825,700 35,229,780 39,997,430 44,735,130 49,480,860 54,218,560 58,964,290 65,701,385,420 77,313,150 80,300,000	2,526,640	3,690,990	4,855,340 1164330	6,D19,690 3 1364 350	7,184,040 1,164,350
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 80 Y amount	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 6,745,730 6,737,700 6,745,730 6,737,700 6,745,730 6,737,700 7,745,730 7,745,745,745,745,745,745,745,745,745,74	11,643,500 18,509,150 24,692,250 38,257,260 35,259,730 39,997,430 44,735,130 49,480,860 54,218,630 53,701,990 68,447,720 73,185,420 77,931,150 80,300,000	1,164,350	1,164,350	1,164,350	1,164,350	1,164,350
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 5 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice before rider Pre-fider amount of depreciation Rider year 80 Y amount Depreciation expense	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,730 7,745,730 80,300,000	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 80 Y amount	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 6,745,730 6,737,700 6,745,730 6,737,700 6,745,730 6,737,700 7,745,730 7,745,745,745,745,745,745,745,745,745,74	11,643,500 18,509,150 24,692,250 38,257,260 35,259,730 39,997,430 44,735,130 49,480,860 54,218,630 53,701,990 68,447,720 73,185,420 77,931,150 80,300,000	1,164,350	1,164,350	1,164,350	1,164,350	1,164,350
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 80 Y amount Depreciation expense Rider year 60 Y amount Average accumulated depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,730 7,745,730 80,300,000	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 8 Tax year 9 Tax year 10 Tax year 11 Tax year 12 Tax year 12 Tax year 15 Tax year 15 Tax year 16 Tax year 16 Total Accumulated depreciation Portion of year in sevice before rider Pre-fider semount of depreciation Rider year 80 x mount Depreciation expense Rider year 60 x mount Average accumulated depreciation Acvarge accumulated depreciation Tax depreciation reserve	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.90% 1.91% 1.90% 1.90%	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,730 7,745,730 80,300,000	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 12 Tax year 12 Tax year 15 Tax year 15 Tax year 16 Tax year 16 Tax year 16 Tax year 17 Tax year 18 Tax year 16 Tax year 16 Tax year 17 Tax year 18 Tax year 18 Tax year 19 Tax year 19 Tax year 19 Tax year 10 Tax	5.00% 9.50% 6.55% 7.70% 6.93% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 5.91% 1.90% 1.91% 1.95% 1.91% 1.95%	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 4,745,730 6,737,700 4,745,730 2,346,850 80,300,000	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice before rider Portion of year in sevice Rider year 60 year in sevice Rider year 60 year in year	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.90% 1.91% 1.90% 1.	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,74	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tex year 4 Tex year 5 Tax year 6 Tex year 7 Tex year 7 Tex year 10 Tex year 11 Tex year 12 Tex year 12 Tex year 13 Tex year 12 Tex year 15 Tex year 15 Tex year 15 Tex year 16 Tex year 16 Tex year 16 Tex year 17 Tex year 16 Tex year 17 Tex year 18 Tex year 19 Tex year 19 Tex year 19 Tex year 10 Tex xear 10 Tex	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 6,745,730 7,745,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,74	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 34,735,330 49,480,860 54,218,560 54,218,560 54,947,792 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990	1,164,350 4,855,340	1,164,350 6,019,690	1,164,350 7,184,040	1,164,350 8,348,390
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 6 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portuon of year in sevice befere rider Pre-rider amount of depreciation Rider year 80 Y amount Deprecation expense Rider year 80 Y amount Average accumulated depreciation Post PY tax depreciation Post PY tax depreciation Post PY tax depreciation Tax year 2 ux depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.90% 1.91% 1.90% 1.	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,737,700 4,745,730 6,737,700 6,745,730 6,737,700 7,745,730 7,745,745,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745,745 7,745	11,643,500 18,509,150 24,692,250 88,257,040 53,259,730 39,997,330 49,480,660 54,918,560 54,918,560 54,918,500 56,947,720 73,185,420 77,931,130 80,300,000	1,164,350 3,690,990 3,108,815	1,164,350 4,855,340 4,273,165	1,164,350 6,019,690 5,437,515	1,164,350 7,184,040 6,601,865	1,164,350 8,348,390
Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 13 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice before rider Pre-Tider semount of depreciation Rider year 800 yanount Depreciation expense Rider year 600 yanount Tax year 10 Tax depreciation reserve FY of completien tax depredation Tax year 2 tax depreciation Tax year 2 year-der tax depr Rider year 800 yanount	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 6,747,700 1,746,730 1,747,700 1,746,730 1,747,700 1,747,	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,718,560 58,964,290 63,701,990 68,447,733,135 80,300,000 1,362,290 1,164,350 2,526,640 1,944,465	1,164,350 3,690,990 3,108,815	1,164,350 4,855,340 4,273,165 25,638,264	1,164,350 6,019,690 5,437,515	1,164,350 7,184,040	1,164,350 8,348,390 7,766,215
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 10 Tax year 11 Tax year 12 Tax year 12 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Tax year 16 Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 80 Y amount Deprecation expense Rider year 60 Y amount Average accumulated depreciation Post Pt Tax depreciation Post Pt Tax depreciation Tax year 2 tax depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,500 6,855,650 6,183,100 5,054,790 5,002,690 4,737,700 4,737,700 4,745,730 4,737,700 4,745,730 4,737,700 6,745,730 1,737,700 1,745,730 1,737,700 1,745,730 1,745,	11,643,500 18,509,150 24,692,250 38,257,040 53,259,730 39,397,430 44,785,130 49,480,860 54,984,290 55,701,390 68,447,720 73,185,420 77,381,150 80,300,000 1,367,290 1,164,350 2,526,640 1,544,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776	1,164,350 6,019,690 5,437,515 31,107,497 4,152,233	1,164,350 7,184,040 6,601,865 36,065,139 3,932,291	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291
Tax year 1 Tax year 2 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 4 Tax year 6 Tax year 7 Tax year 8 Tax year 8 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-fider semount of depreciation Rider year 807 smount Depreciation expense Rider year 807 smount Average accumulated depreciation Tax year 12 Tax depreciation reserve FY of completien tax depredation Tax year 2 tax depreciation Tax year 2 tax depreciation Tax year 2 pre-fider tax dapr Rider year 68 tax depreciation Tax year 2 pre-fider tax dapr Rider year 68 tax depreciation Tax year 100' smount Tax period 8 tax depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 2,366,850 80,300,000 1197,940 11,64,350 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,407,3130 49,480,860 44,725,330 49,480,860 45,713,385,420 77,3185,420 77,3185,420 77,3185,420 17,931,130 80,300,000	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457	31,107,497 4,152,233 805,409	1,164,350 7,184,040 6,601,865 36,065,139 3,932,791 805,409	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774
Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tex year 5 Tax year 4 Tex year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Tax year 16 Tax year 16 Tax year 16 Tax year 17 Tax year 18 Tax year 18 Tax year 18 Tax year 19 Tax year 19 Tax year 19 Tax year 10 Tax y	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 1,745,745,745 1,745 1,745	11,643,500 18,509,150 24,692,250 38,957,400 35,259,730 39,997,430 44,735,130 49,480,860 54,218,550 55,954,290 57,031,550 80,300,000 1,367,250 1,164,350 2,526,640 1,994,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,307,497	31,107,497 4,152,233 805,409 36,065,139	36,065,139 36,065,139 40,802,839	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904
Tax year 1 Tax year 2 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 4 Tax year 6 Tax year 7 Tax year 8 Tax year 8 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-fider semount of depreciation Rider year 807 smount Depreciation expense Rider year 807 smount Average accumulated depreciation Tax year 12 Tax depreciation reserve FY of completien tax depredation Tax year 2 tax depreciation Tax year 2 tax depreciation Tax year 2 pre-fider tax dapr Rider year 68 tax depreciation Tax year 2 pre-fider tax dapr Rider year 68 tax depreciation Tax year 100' smount Tax period 8 tax depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.90% 1.91% 1.	4,015,000 7,628,565 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 2,366,850 80,300,000 1197,940 11,64,350 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,407,3130 49,480,860 44,725,330 49,480,860 45,713,385,420 77,3185,420 77,3185,420 77,3185,420 17,931,130 80,300,000	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457	31,107,497 4,152,233 805,409	1,164,350 7,184,040 6,601,865 36,065,139 3,932,791 805,409	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 15 Tax year 16 Tax year 16 Tax year 16 Tax year 17 Tax year 18 Tax year 18 Tax year 18 Tax year 19 Tax year 19 Tax year 19 Tax year 10 Tax	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 1,747,700 1,164,350 1,362,290 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,718,560 58,964,290 63,701,990 68,447,723,185,420 77,931,150 80,300,000 1,362,290 1,164,350 2,526,640 1,944,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,307,497	31,107,497 4,152,233 805,409 36,065,139	36,065,139 36,065,139 40,802,839	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904
Tex year 1 Tax year 2 Tax year 3 Tax year 4 Tex year 5 Tax year 4 Tex year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Tax year 16 Tax year 16 Tax year 16 Tax year 17 Tax year 18 Tax year 18 Tax year 18 Tax year 19 Tax year 19 Tax year 19 Tax year 10 Tax y	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 1,747,700 1,164,350 1,362,290 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,718,560 58,964,290 63,701,990 68,447,723,185,420 77,931,150 80,300,000 1,362,290 1,164,350 2,526,640 1,944,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,307,497	31,107,497 4,152,233 805,409 36,065,139	36,065,139 36,065,139 40,802,839	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904
Tex year 1 Tax year 2 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 8 Tax year 9 Tax year 10 Tax year 11 Tax year 12 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-fider semount of depreciation Rider year 80 yamount Depreciation expense Rider year 80 yamount Average accumulated depreciation Tax year 10 Tax year 2 tax depreciation Rider year 80 yamount Tax period 8 tax depreciation Rider year 80 yamount Average tax depreciation Rider year 10 yamount Average tax depreciation Rider year 10 yamount Average tax depreciation Rider year 10 yamount Average tax depreciation	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 1,747,700 1,164,350 1,362,290 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,718,560 58,964,290 63,701,990 68,447,723,185,420 77,931,150 80,300,000 1,362,290 1,164,350 2,526,640 1,944,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,107,497 28,372,881	31,164,350 6,019,690 5,437,515 31,107,497 4,152,233 805,409 36,065,139 33,586,318	3,164,350 7,184,040 6,601,865 36,065,139 3,932,291 805,409 40,802,839 38,433,989	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904 43,172,372
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 60's amount Average accumulated depreciation Average accumulated depreciation Tax year 12 Tax year 2 Ux depreciation to rider date Tax year 12 Ux depreciation Tax year 2 Ux depreciation Tax year 2 Ux depreciation Tax year 2 Ux depreciation Tax period 6 tax depreciation Nation 10 Rider year 60's amount Average tax depreciation Nation 10 Rider year 60's amount Average tax depreciation Rider year 60's amount	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 4,745,730 1,747,700 1,164,350 1,362,290 780,115	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,718,560 58,964,290 63,701,990 68,447,723,185,420 77,931,150 80,300,000 1,362,290 1,164,350 2,526,640 1,944,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,307,497	31,107,497 4,152,233 805,409 36,065,139	3,64,350 7,184,040 6,601,865 36,065,139 3,932,291 805,409 40,802,839 38,433,989	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904 43,172,372
Tax year 1 Tax year 2 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 8 Tax year 9 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 15 Tax year 15 Tax year 16 Tax year 16 Total Accumulated depreciation Portion of year in sevice before rider Pre-fider semount of depreciation Rider year 260 Yamount Depreciation expense Rider year 260 Yamount Average accumulated depreciation Tax year 2 tax depreciation Rider year E00 yamount Tax period 8 tax depreciation Rider year E0 Wamount Average tax depreciation reserve	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,500 6,185,657 6,183,100 5,564,790 5,000,690 4,737,700 4,737,700 4,745,730 4,737,700 4,745,730 4,745,730 2,346,850 80,300,000 197,940 1,164,350 1,362,290 780,115 5,311,845 6,331,655 1,167,161 1,210,666	11,643,500 18,509,150 24,692,250 38,257,040 35,259,730 39,997,430 44,735,130 49,480,860 54,18,560 58,964,290 63,701,990 68,447,723,135 60,300,000 1,367,290 1,164,360 1,544,465 12,610,661 5,698,490 1,944,465	1,164,350 3,690,990 3,108,815 19,560,277 5,131,979 946,014 25,638,264 22,599,271 3,108,815	3,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,307,497 28,372,881 4,273,365	31,107,497 4,152,233 30,5409 33,586,318 5,437,515	3,640,350 7,384,040 6,601,865 36,065,139 39,327,91 805,409 40,802,839 38,433,989 6,601,865	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904 43,172,372 7,766,215
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 60' amount Average accumulated depreciation Accumulated of preciation Post preciation expense Rider year 60' amount Average accumulated depreciation Tax year 12 tax depreciation Tax year 12 tax depreciation Tax year 2 tax depreciation Tax period of tax depreciation Tax period 6 tax depreciation Rider year E0' amount Average tax depreciation Note - gap between fiscal year and rider Accumulated deferred taxes	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 2,366,850 80,300,000 197,940 1,164,350 1,367,230 780,115 5,311,845 6,331,655 1,167,161 12,110,661 13,961,253 9,061,253	11,643,500 18,509,150 24,692,250 88,257,040 35,259,730 39,997,5130 49,480,660 44,735,130 49,480,660 49,418,560 49,418,560 49,418,560 49,418,5420 77,318,5420 77,318,5420 77,318,5420 77,318,5420 11,642,540 11,944,465	3,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 22,599,271 22,599,271 13,108,615 19,490,456	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,577 28,372,881 28,372,881 28,372,881 24,273,165 4,273,165	3,164,350 6,019,690 5,437,515 31,107,497 4,152,233 805,409 36,065,139 33,586,318 33,586,318 5,437,515 28,148,804	3,60,350 7,184,040 6,601,865 36,065,139 3,937,291 40,607,339 38,433,989 38,433,989	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 43,172,372 43,172,372 43,172,372 5,406,157
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 6 Tax year 7 Tax year 10 Tax year 11 Tax year 12 Tax year 13 Tax year 14 Tax year 15 Tax year 16 Total Accumulated depreciation Portion of year in sevice befere rider Pre-rider amount of depreciation Rider year 807 amount Depreciation expense Rider year 807 amount Average accumulated depreciation Tax year 12 Tax year 15 Tax year 16 Tax year 207 amount Average accumulated depreciation Tax depreciation reserve Rider year 807 amount Average accumulated depreciation Tax year 2 tax depreciation Tax year 20 Tax depreciation Tax period 8 tax depreciation Tax period 8 tax depreciation Note - gap between fiscal year and rider Accumulated deferred taxes Average tax depreciation reserve Average book depreciation reserve	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,505 6,183,100 5,564,790 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 2,368,850 80,300,000 197,940 1,164,350 1,362,290 780,115 5,311,845 6,331,655 1,167,161 12,810,661 3,061,253 780,115	11,643,500 18,509,150 24,692,250 38,937,400 35,259,730 39,997,430 44,735,130 49,480,660 58,964,290 65,701,364 68,447,720 73,185,420 77,318,150 80,300,000 1,367,290 1,144,350 2,526,640 1,344,465 12,810,661 5,698,430 1,051,127 14,560,277 16,185,469 1,1944,465 11,241,004 39,233	1,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 25,638,264 22,599,271 3,108,815 19,490,456 39,223	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,457 31,107,497 28,372,881 4,273,165 20,997,16	3,164,350 6,013,590 5,437,515 31,107,497 4,152,233 805,409 36,065,139 33,586,318 5,437,515 28,148,804 39,23%	1,64,350 7,184,040 6,601,865 36,065,139 3,932,751 805,409 40,802,839 38,433,989 6,601,865 31,822,125	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 45,541,904 43,172,372 7,766,215 35,406,157 39,239
Tax year 1 Tax year 2 Tax year 3 Tax year 4 Tax year 4 Tax year 5 Tax year 6 Tax year 7 Tax year 7 Tax year 10 Tax year 11 Tax year 11 Tax year 12 Tax year 13 Tax year 13 Tax year 15 Tax year 16 Tax year 17 Tax year 16 Tax year 17 Tax year 16 Tax year 16 Tax year 17 Tax year 16 Tax year 17 Depreciation expense Rider year 800 x mount Depreciation expense Rider year 800 x mount Tax year 2 Tax year 2 Tax depredation Tax year 3 Tax depredation Tax year 3 Tax depredation Tax year 3 Tax depredation Tax year 10 Tax depredation 10 Tax depredati	5.00% 9.50% 8.55% 7.70% 6.23% 6.23% 5.90% 5.91% 5.90% 5.91% 5.90% 5.91% 1.90% 1.77% 1.97,940 4,015,000 1.77% 7,628,500 1,296,845	4,015,000 7,628,500 6,185,055 6,183,100 5,002,690 4,737,700 4,745,730 4,745,730 4,745,730 4,745,730 2,364,850 80,300,000 197,940 1,164,350 1,362,290 780,115 5,311,845 6,331,655 1,167,161 12,810,661 12,810,61 13,602,237 y lax period A ar	11,643,500 18,509,150 24,692,250 88,257,040 55,259,730 39,997,30 49,480,660 54,984,290 55,701,990 68,447,720 73,185,420 77,931,130 80,300,000 1,367,290 1,164,350 2,526,640 1,944,465 12,610,661 5,698,490 1,051,127 19,560,277	3,164,350 3,690,990 3,108,815 19,560,277 5,131,973 946,014 22,599,271 22,599,271 13,108,615 19,490,456	1,164,350 4,855,340 4,273,165 25,638,264 4,618,776 850,577 28,372,881 28,372,881 28,372,881 24,273,165 4,273,165	3,164,350 6,019,690 5,437,515 31,107,497 4,152,233 805,409 36,065,139 33,586,318 33,586,318 5,437,515 28,148,804	3,60,350 7,184,040 6,601,865 36,065,139 3,937,291 40,607,339 38,433,989 38,433,989	1,164,350 8,348,390 7,766,215 40,802,839 3,932,291 806,774 43,172,372 43,172,372 43,172,372 5,406,157

Rider Rate Period: January 1, 2015 - December 31, 2015

Vintage Yes	2 - Fiscal year October 31, 2	014

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	41,100,000	41,100,000	41,100,000	41,100,000	41,100,000	41,100,000	41,100,000
Accumulated depreciation	(399,287)	(995,237)	(1,591,187)	(2,187,137)	(2,783,087)	(3,379,037)	(3,974,987)
Net plant	40,700,714	48,104,764	39,508,814	38,912,864	38,316,914	37,720,964	37,125,014
AOIT	(1,662,567)	(2,859,103)	(3,913,812)	(4,838,393)	(5,651,311)	(6,390,795)	(7,108,337)
Net investment	39,038,146	37,245,660	35,595,801	34,074,478	32,665,603	31,330,169	30,016,676
	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%
Pre-tax ROR%	4,468,180	4,263,018	4,074,180	3,900,054	3,738,799	3,585,950	3,435,612
Pre-tax rate of return	595,950	595,950	595,950	595,950	595,950	595,950	595,950
Oepreciation expense		300,030	300,030	300,030	300,830	300,030	300,030
Property Tax expense	300,030		4,970,160	4,796,034	4,634,779	4,481,930	4,331,592
Total, excluding uncollectibles	5,364,160	5,158,998			1.000308	1.000308	3,000308
Uncollectibles gross-up factor	1.000308	1.000308	1.000308	1.000308			
Total revenue requirement	5,365,813	5,160,587	4,971,692	4,797,511	4,636,207	4,483,311	4,332,926

Assumptions and calculations:
Rider computed each year,
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

ook depreciation rate	1.45%							
· · · · · · · · · · · · · · · · · · ·	1.45%							
operty Tax Rate	0.73%							
x depreciation	MACRS 15	assumed no bono	s depreciation					
ant in service date	33-Oct-14							
der effective date	1-Jan-15							
scal year end	31-Oct-14							
Trate		6.50%	6.50%	6.50%	6.50%	6,50%	6.50%	6.509
T rate		35.00%	35.00%	35.00%	35.00%	35.00%	35,00%	35.009
omposite income tax rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.73%	39.237
ncollectibles rate		0.0308%	0.0308%	0.0308%	%80E0.0	O.0308%	0.0308%	0.03087
evenue requirement gross-up factor		1.000308	1.000308	1,000308	1.00030B	1.000308	1,000308	1.00030
apital structure assumptions (rate case)	<u>a</u>							
TP.	41.42%							
TP.	5,87%							
ommon equity	52.71%	,						
apital cost rate assumptions (rate case)								
ro	6.05%							
TP	1.59%	,						
omman equity	10,20%							
verall and pre-tax RORs								
	Overail				re-tax RORs			
то	2.506%	2.506%	2,506%	2,506%	2.506%	2,506%	2.506%	2.5069
TD	0,093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.093
ommon equity	5.376%	8.846%	8.846%	B.846%	8.846%	8.846%	8.846%	8.846
otal	7.976%	11.446%	11,446%	11.446%	11,446%	11,446%	11.446%	11.446

	Rale	Yearly	Cumulative
Tak year 1	5.00%	2,055,000	
Tax year 2	9.50%	3,904,500	5,959,500
Так уевг З	8,55%	3,514,05D	9,473,550
Tak year 4	7.70%	3,164,700	12,638,250
Tax year 5	6,93%	2,848,230	15,486,486
Tax year 6	6,23%	2,560,530	18,047,010
Tax year 7	5.90%	2,424,900	20,471,91
Tax year 8	5.90%	7,424,900	22,896,81
Tax year 9	5.91%	2,429,01D	25,325,82
Tax year 10	5.90%	2,424,900	27,750,72
Yax year 11	5.91%	2,429,01D	30,179,73
Tax year 17	5.90%	2,424,900	37,604,63
Tax year 13	5.91%	2,429,010	35,033,64
Tax year 14	5.90%	2,474,900	37,458,54
Tax year 15	5,91%	2,429,010	39,887,55
Tax year 16	2.95%	1,712,450	41,100,00
Total	100.00%	41,100,000	

Accumulated depreciation						
Portion of year in sevice before rider	17%					
Pre-rider amount of depreciation	101,317					
Rider year 80Y amount		101,312	697,262	1,293,212	1,889,162	2,485,112
Depreciation expense		595,950	595,950	595,950	595,950	595,950
Rider year EOY amount	_	697,262	1,293,212	1,889,162	2,485,117	3,081,062
Maci year cor amount	_	300 107	D05 737	1 591 187	2 187 137	2.783.087

Pre-rider amount of depreciation	101,317							
Rider year 80Y amount		101,312	697,262	1,293,212	1,889,162	2,485,112	3,081,062	3,677,0t7
Depreciation expense		595,950	595,950	595,950	595,950	595,950	595,950	595,950
Rider year EOY amount	-	697,262	1,293,212	1,889,162	2,485,117	3,081,062	3,677,012	4,272,962
Average accumulated depreciation	-	399,287	995,237	1,591,187	2,187,137	2,783,007	3,379,037	3,974,987
Tax depreciation reserve								
FV of completion tax depreciation	2,055,000				*			
Past FY tax depreciation to rider date	17%							
Tax year 2 tax depreciation	3,904,500							
Tax year 2 pre-rider tax depr	663,765							
Rider year 80Y amount		2,718,765	6,556,889	10,011,549	13,122,449	15,921,770	18,459,243	20,884,143
Tax period A tax de preciaion		3,240,735	2,916,662	2,626,701	2,364,031	2,125,240	2,012,667	2,012,667
Tax period 8 tax depreciation		597,389	537,999	484,199	435,290	412,233	412,233	412,932
Rider year EOY arnount	-	6,556,889	10,011,549	13,122,449	15,921,770	18,459,243	20,884,143	23,309,742
Average tax depreciation reserve	-	4,637,827	8,284,219	11,566,999	14,522,110	17,190,507	19,671,693	22,096,942

Note - gap between flocal year and rider year addressed by tax period A and tax period 8.

Accumulated deferred taxes Average tax depractation reserve Average book depractation reserve Difference Composite tax rate	4,637,827 399,287 4,238,540 39,23%	8,284,219 995,237 7,288,982 39,23% 2,859,103	11,566,999 1,591,187 9,975,813 39.23% 3,913,012	14,522,110 2,187,137 12,334,973 39,23% 4,838,393	17,190,507 2,783,087 14,407,42D 39,23% 5,651,311	19,671,693 3,379,037 16,292,657 39.23% 6,390,795	22,096,942 3,974,987 18,121,956 39,23% 7,108,337
Average AOJT	1,662,567	2,859,103	3,913,012	4,838,393	2,651,311	6,390,793	7,108,337

Rider Rate Poriod: January 1, 2016 - December 31, 1016 <u>Violage Year 2 - Fiscal year Octobor 31, 2015</u>

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000
Accumulated depreciation	(55,376)	(138,026)	(220,676)	(303,326)	(385,976)	(468,626)	(551,276)
Net plant	5.644,625	5,561,975	5,479,325	5,396,675	5,314,025	5,231,375	5,148,725
ADIT	(230,575)	(396,518)	(542,681)	(671,D18)	(783,758)	(886,315)	(985,828)
Net investment	5,414,049	5,165,457	4,936,644	4,725,656	4,530,266	4,345,060	4,162,897
Pre-tax ROR%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%
Pre-tax rate of return	619,675	591,221	565,032	540,883	518,520	497,322	476,472
Depreciation expense	82,650	82,650	82,650	82,650	82,650	82,650	82,650
Property Tax expense	41,610	41,610	41,610	41,610	41,610	41,610	41,610
Total, excluding uncollectibles	743,935	715,481	689,292	665,143	642,780	621,582	600,732
Uncollectibles gross-up factor	1.000308	1.000308	1,000308	1,000308	1.000308	1.000308	1.000308
Total revenue requirement	744,164	715,702	689,505	665,348	642,978	621,773	600,917

Assumptions and calculations:
Rider computed each year.
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Plant amount	5,700,000							
Book depreciation rate	1.45%							
Property Tax Rate	D.73%							
Tax depreciation	MACR5 15	assumed no bo	nus deprecial	ion				
Plant in service date	31-Oct-15							
Rider affective date	1-Jan-16							
Fiscal year end	31-Oct-15							
SIT rate		6.50%	6.50%	6.50%	6,50%	6.50%	6.50%	6.50%
FIT rate		35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
Composite income tax rate		39.23%	39.23%	39.23%	39,23%	39.23%	39.23%	39.23%
Uncollectibles rate		D.D308%	D.0388%	D.0308%	0.0308%	0.0388%	0.03D0%	0,0308%
Revenue requirement gross-up factor		1,000308	1,000308	1.000308	1.000308	1.000308	1,000308	1,000308
Capital structure assumptions (rate case)	<u>):</u>							
LTD	42.42%							
STD	5.87%							
Common equity	52,71%							
Capital cost rate assumptions (rate case)	E							
LTO	6.05%							
STP	1.59%							
Common equity	1D.20%							
Overall and pre-tax RORs								
<u> </u>	Over <u>all</u>				Pre-tax RORs			
LTD	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%
STO	0.093%	8.093%	0.093%	0.093%	0.093%	0.093%	D.093%	0.093%
Common equity	5.376%	8.846%	8.846%	8,846%	8.846%	8.846%	8.846%	8,846%
Total	7.976%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%

MACRS 15 tax depreciation schedule			
	Rate	Yearly	Cumulative
Tax year 1	5.00%	285,000	
Tax year 2	9.50%	541,500	826,500
Tax year 3	8.55%	487,350	1,313,850
Tax year 4	7.70%	438,900	1,752,750
Tax year 5	6.93%	395,01D	2,147,760
Tax year 6	6.23%	355,110	2,502,870
Tax year 7	5.90%	336,300	2,839,170
Tax year 8	5.90%	336,300	3,175,470
Tax year 9	5.91%	336,870	3,532,348
Tax year 1D	5.90%	336,300	3,848,640
Tax year 11	5.91%	336,870	4,185,510
Tax year 12	5.90%	336,300	4,521,810
Tax year 13	5.91%	336,870	4,858,680
Tax year 14	5,90%	336,300	5,194,980
Tax yoar 15	5.91%	336,870	5,531,850
Tax year 26	2.95%	168,150	5,700,000
Total	100.00%	5,700,000	

Accumulated depreciation								
Portion of year in sevice before rider	17%							
Pre-rider amount of depreciation	14,051							
Rider year BOY amount		14.051	96,701	179,351	267,001	344,651	427,301	509,95
Depreciation expense		82.650	82,650	82,650	82,650	82,650	82,650	82,650
Rider year EOY amount	_	96,701	179,351	262,001	344,651	427,301	509,951	592,601
Average occumulated depreciation	-	55,376	138,026	220,676	303,326	385,976	468,626	551,27

Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to fider date Tax year 2 tax depreciation Tax year 2 pre-rider tax depr filder year 8 0Y amount Tax period A tax depreciation Tax period 5 atsx depreciation Tax period 5 atsx depreciation	285,000 17% 541,500 92,055	377,055 449,445 82,850	909,350 404,501 74,613	1,388,463 364,287 67,152	1,829,902 327,858 60,369	2,208,129 294,741 57,171	2,560,042 279,129 57,172	2,896,342 279,129 57,268
Rider year EOY amount	-	909,350	1.358,463	1,819,902	2,208,129	2,560,041	2,896,341	3,232,738
Average tax depreciation reserve	-	643,202	1,148,906	1,604,182	2,014,015	2,384,085	2,728,191	3,064,539

Note - gap between fiscal year and rider year addressed by tax period A and tax period 8.

Accumulated deferred taxes Average tax depreciation reserve Average box depreciation reserve Oliference Composite tax rate Averago ADIT	643,202	1,148,906	1,604,182	2,014,015	2,384,085	2,728,191	3,064,539
	55,376	138,026	220,676	303,326	385,976	468,626	551,276
	587,827	1,010,881	1,383,587	1,710,690	1,998,109	2,259,566	2,513,264
	39,23%	39,23%	39.23%	39.23%	39.23%	39,23%	39,23%
	230,575	396,518	542,681	671,018	783,758	886,315	985,828

Rider Rate Period: January 1, 2017 - December 31, 2027 Vintage Year 4 - Fiscal year October 31, 2016

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000
Accumulated depreciation	(35,946)	(89,596)	(143,246)	(196,895)	(250,546)	(304,196)	(357,846)
Net plant	3,664,055	3,620,405	3,556,755	3,503,105	3,449,455	3,395,805	3,342,255
ADIT	(149,672)	(257,389)	(352,266)	(435,573)	(5Dg,755)	(575,327)	(639,923)
Net investment	3,514,383	3,353,016	3,204,488	3,067,531	2,940,699	2,820,478	2,702,231
Pre-tax ROR%	12.446%	11.446%	11.446%	11,446%	11.445%	12.446%	11.446%
Pre-tax rate of return	402,245	383,775	366,775	351,100	336,583	327,823	309,289
Depreciation expense	53,650	53,650	53,650	53,650	53,650	53,650	53,650
Property Tax expense	27,010	27,018	27,810	27,01D	27,010	27,D10	27,010
Total, excluding uncollectibles	482,905	464,435	447,435	431,760	417,243	403,483	389,949
Uncollectibles gross-up factor	1.00030K	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308
Total revenue requirement	483,054	464,578	447,573	431,893	417,371	403,607	390,069

<u>Assumptions and calculations:</u>
Rider computed each year.
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service,

Plant amount	3,700,000							
Book depreciation rate	1.45%							
Property Tax Rate	0.73%							
Yax depreciation	MACRS 15	assumed no bo	nus depreciation	on.				
Plant in service date	31-Oct-16							
Rider effective date	1-Jan-17							
Fiscal year end	31-Oct-36							
5 Y rate		6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6,50%
FIT rate		35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
Composite income tax rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	39.23%
Uncollectibles rate		0.0308%	0.0308%	0.0308%	8.0308%	0.0308%	0.8308%	0.0388%
Revenue requirement gross-up factor		2,000388	1,000308	1.000308	1.000308	1.000308	1.000308	1.00038E
Capital structure assumptions (rate case):	i							
LTD	42.42%							
STO	5.87%							
Common equity	52.71%							
Capital cost rate assumptions (rate case):								
LTD	6.05%							
STO	L.59%							
Common equity	10.20%							
Overall and pre-tax RORs								
	Overali	L			Pre-tax RORs			
LTD	2.506%	2,506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%
STD	0.093%	0.093%	0.093%	0.093%	8.093%	0.093%	0.093%	0.093%
Co-uman amults	5 376%	8.R46%	8.846%	8.846%	8.846%	8.846%	8.846%	8.846%

	Overali				Pre-tax RORs			
LTD	2.506%	2,506%	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%
STD	0.093%	0.093%	0.093%	0.093%	8.093%	0.093%	0.093%	0.093%
Common equity	5.376%	8.846%	8.846%	8.846%	8,846%	8.846%	8.846%	8.846%
Totai	7.976%	21.446%	11.446%	11.446%	12.446%	21.446%	11.446%	11.446%
1040								

MACRS 15 tax depreciation schedule			
	Rate	Yearly	Cumulative
Tax year 1	5.00%	185,000	
Tax year 2	9.50%	351,500	536,500
Tax year 3	8.55%	326,350	852,850
Tax year 4	7.70%	284,900	2,137,750
Tax year 5	6.93%	256,41D	1,394,260
Tax year 6	6.23%	230,510	1,624,670
Tax year 7	5.90%	218,300	1,842,970
Tax year B	5.90%	218,300	2,061,270
Tax year 9	5.91%	218,670	2,279,940
Tax year 10	5,90%	218,300	2,498,248
Tax year 11	5.91%	218,67D	2,716,910
Tax year 12	5.90%	218,300	2,935,210
Tax year 13	5.91%	218,670	3,153,880
Tax year 14	5.90%	218,300	3,372,180
Tax year 15	5.91%	218,670	3,590,850
Tax year 16	2.95%	109,150	3,700,000
Total	100.00%	3,700,000	

Tax year 15	2.95%	109,150	3,700,000					
Total	100.00%	3,700,000						
Accumulated depreciation								
Partion of year in sevice before rider	27%							
	9,121							
Pre-rider amount of depreciation	9,141	9,221	62,771	116,421	170,071	223,721	277,371	331,021
Rider year 80Y amount		53,650	53,650	53,650	53,650	53,650	53,650	53,650
Depreciation expense		62,771	116,421	170,071	223,721	277,371	331,021	384,671
Rider year EOV amount		35,946	89,596	143,246	196,896	250,546	304,196	357,846
Average eccumulated depreciation		33,540	00,500	210,210	,	,		
Tax depreciation reserve								
FY of completion tax depreciation	185,000							
Post FY tax depreciation to rider date	17%							
Yax year 2 tax depreciation	351,500							
Tax year 2 pre-rider lax depr	59,755							
Rider year 8 OY amount		244,755	590,280	901,283	1,181,34D	1,433,347	1,661,781	1,880,082
Tax period A lax depreciation		291,745	262,571	236,467	212,8 2 D	191,323	181,189	182,189
Tax period B tax depreciation	_	53,780	48,433	43,590	39,187	37,111	37,111	37,173.90
Rider year EOY amount		590,280	901,283	1,181,340	1,433,347	1,661,781	1,880,881	2,098,444
Average tax depreciation reserve	•	417,517	745,781	1,041,311	1,3D7,343	1,547,564	1,770,931	1,989,262

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

VACIORE UP 1							
Average ADIT	149,672	257,389	352,266	435,573	508,755	575,327	639,923
Composite tax rate	39.23%	39.23%	39.23%	39.23%	39.23%	39,23%	39.23%
Difference	381,572						
		656,186	898,066	2,110,448	1.297,D18	1,466,736	1.631,417
Average book depreciation reserve	35,946	89,596	243,246	196,896	250,546	304,196	357,846
Accumulated deferred taxes Average tax depreciation reserve	417,517	745,781	1,041,311	1,307,343	1,547,564	2,770,931	2,989,262

Note - composite tax rate ignores excess deferred tax flowback

Rider Rate Period: January 1, 2018 - December 31, 2018 Vintage Year 5 - Fiscal year October 31, 2017

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000
Accumulated depreciation	(43,718)	(108,968)	(174,218)	(239,468)	(304,718)	(369,968)	(435,218)
Net plant	4,456,283	4,391,033	4,325,783	4,260,533	4,195,283	4,130,033	4,064,783
	(82,033)	(313,041)	(428,432)	(529,751)	(618,757)	(699,722)	(778,285)
ADIT	4.274.250	4,077,992	3,897,350	3,730,781	3,576,526	3,43D,310	3,286,497
Net investment	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%
Pre-tax ROR%	489,217	466,754	446,078	427,013	409,358	392,622	375,162
Pre-tax rate of return	65,250	65,25D	65,250	65,250	65,250	65,250	65,250
Depreciation expense	•		32,850	32,850	32,850	32,850	32,850
Property Tax expense	32,850	32,850		525,213	507,45B	490,722	474,262
Total, excluding uncollectibles	587,317	564,854	544,178	,	1.000308	1.000308	1,000308
Uncoilectibles gross-up factor	1.000308	1.000308	1.000308	1.000308			
Total revenue requirement	587,498	\$65,028	544,346	525,275	507,614	490,873	474,408

Assumptions and calculations;
Rider computed exch year.
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goes into service.

Plant amount	4,500,000							
Sook depreciation rate	1.45%	·						
Property Tax Rate	0.73%							
Tax depreciation	MACRS 15	assumed na ba	nus depredati	on .				
Plant in service date	31-Oct-17							
Rider effective date	1-Jan-18							
Fiscal year end	31-Oct-17							
SIT rate		6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
FIT rate		35.00%	35,00%	35.00%	35.00%	35.00%	35.00%	35.00%
Composite income tax rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23%	39,237
Uncollectibles rate		0.0306%	0.0308%	0.0308%	0.03D8%	0.0308%	O.D308%	0.03089
Revenue requirement gross-up factor		1.000308	1.0003DB	1,000308	1.000308	1,000308	1,000308	1.00030
Capital structure assumptions (rate ea	ce)·							
LTD	41.42%							
STD	5.87%							
Cammon equity	52.71%							
Capital cost rate assumptions frate eas	e):							
LTD	6.05%							
STD	1,59%							
Comman equity	10.20%							
Overall and pre-tax ROBs								
Of all all and pieces resident	Overali				Pre-tax RORs			
LTD	2.506%	2.506%	2.506%	2.506%	2,506%	2.506%	2,506%	2.5069
STD	0.093%	D.093%	0.093%	0.093%	0.093%	0.093%	0.093%	0.0939
Common equity	5.376%	8.846%	8.846%	8.846%	8.846%	8.846%	8.846%	8.8469
Total	7.976%	11.446%	11,446%	1t.446%	11,445%	32.446%	11.446%	11.4465
. 5121								
MACRS 15 tax depreciation schedule			Cumulative					
	Rate	Yearly (urnulative					

Tax year 1 Tax year 2	5,00% 9.50%	225,000	
Tax year 2	0.50%		
	9.50%	427,500	652,500
Tax year 3	8.55%	384,750	1,037,250
Tax year 4	7.70%	346,500	1,383,75D
Tax year 5	6.93%	311,850	1,695,600
Tax year 6	6.23%	280,350	1,975,95D
Taxyear 7	5.90%	265,500	2,241,45D
Tax year 8	5.90%	265,500	2,506,950
Tax year 9	5.91%	265,950	2,772,900
Tax year 10	5.90%	265,500	3,038,400
Tax year 11	5.91%	265,950	3,304,350
Tax year 12	5,90%	265,500	3,569,850
Tax year 13	5.91%	265,950	3,835,800
Tax year 14	5.90%	265,500	4,101,300
Tax year 15	5,91%	265,950	4,367,250
Tax year 16	2.95%	132,750	4,500,000
Total	100.00%	4,500,000	

Total	100.00%	4,500,000						
Accumulated depreciation Pertian of year in sevice before rider Pre-rider amount of depreciation Rider year 80'Y amount Depreciation expense Rider year EOY amount	17% 11,093	11,093 65,250 76,343	76,343 65,250 141,593 108,968	141,593 65,250 206,843 174,218	206,843 65,250 272,093 239,468	272,093 65,250 337,343 304,718	337,343 65,250 402,593 369,968	402,593 65,250 467,843 435,218
Average accumulated depreciation		43,718	108,908	174,210	239,400	104,740	505/254	,
Tax depreciation reserve FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation	225,000 17% 427,500 72,675							
Tax year 2 pre-rider tax depr	12,013	297,675	717,908	1,096,155	1,436,765	1,743,260	2,021,085	2,286,585
Rider year 80Y amount Tax period A tax depreciaion		354,825	319,343	287,595	258,836	232,691	22D,365	220,365
Tax period 8 tax depreciation		65,408	58,905	53,815	47,660	45,135	45,135	45,211.50
Rider year EOY amount	-	717,908	2,096,155	1,436,765	1,743,260	2,021,085	2,286,585	2,552,162
Average tax depreciation reserve	•	507,791	907,031	1,266,460	1,590,012	1,882,172	2,153,835	2,419,373

Note \cdot gap between fiscal year and rider year addressed by tax period A and tax period 8.

<u>Aebumulated deferred taxes</u> Average tax depreciation reserve Average book depreciation reserve Oifference Composite tax rate Average ADIT	507,791	907,D31	1,266,460	1,590,012	1,882,172	2,153,835	2,419,373
	43,718	108,968	174,218	239,468	304,718	369,968	435,218
	464,074	798,064	1,092,242	1,350,545	1,577,455	1,783,868	1,984,156
	39,23%	39,23%	39.23%	39,23%	39,23%	39,23%	39.23%
	182,033	313,041	428,432	529,751	618,757	699,722	778,285

Note - composite tax rate ignores excess deferred tax flowback

Rider Rate Peried: January 1, 2019 - December 31, 2019 Vintage Year 6 - Fiscal year October 31, 2018

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Plant	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000
Accumulated depreciation	(63,148)	(157,398)	(251,648)	(345,898)	(44D,14B)	(534,398)	(628,648)
•	6,436,853	6,342,603	6,248,353	6,154,103	6,859,853	5,965,603	5,871,353
Net plant	(262,936)	(452,170)	(618,846)	(765,196)	(893,760)	(1,010,710)	(1,124,190)
ADIT	6,173,916	5,890,433	5,629,506	5,388,906	5,166,093	4,954,893	4,747,163
Net investment	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11,445%
Pre-tax ROR%	706,646	674,200	644,335	616,797	591,294	567,121	543,345
Pre-tax rate of return	94,250	94,250	94,250	94,250	94,250	94,250	94,250
Depreciation expanse	47,450	47,450	47,450	47,458	47,450	47,450	47,450
Property Tax expense	848,346	815,900	786,035	758,497	732,994	708,821	685,045
Total, excluding uncollectibles	1,000308	1.000308	1.000308	1.000308	1.000308	1.000308	1.000308
Uncellectibles gross-up factor	848.608	816,151	786,277	758,730	733,220	709,039	685,256

Assumptions and calculations;
Rider computed each year.
Normal depreciation and AFUDC practices apply, AFUDC ends and depreciation begins when plant goas into service.

Plant amount	6,500,000							
Book depreciation rate	1.45%							
Property Tax Rate	0.73%							
Tax depreciation	MACRS 15	assumed ne be	nus depreciatio	n,				
Plant in service date	31-Oct-18							
Rider effective date	1-Jan-19							
Fiscal year end	31-Oct-18					6.50%	6.50%	6.50%
SIT rate		6.50%	6.50%	6.50%	6.50%			35.00%
FIT rate		35.00%	35.00%	35.00%	35,00%	35,00%	35.00%	39.23%
Composite income tax rate		39.23%	39.23%	39.23%	39.23%	39.23%	39.23% 0.0308%	0.0308%
Uncellectibles rate		0.0308%	D.8308%	0.0308%	0.0308%	%80£Q.Q	1.000308	1.000308/
Revenue requirement gress-up factor		1.000308	1.000308	1.000308	1.000388	1.000308	1.000508	1.000308
Capital structure assumptions (rate case)								
LTD	41.42%	,						
STD	5,87%	•						
Common equity	52,71%	•						
Capital cost rate assumptions (rate case);								
LTD	6.05%	•						
STD	1,59%	,						
Common equity	10.20%	•						
Overall and pre-tax RORs								
	Overall .				Pre-tax RORs			2.506%
LTD	2,5069	2.506%	2.506%	2.506%	2.506%	2.506%	2.506%	0.093%
ราช	8.0939	D.093%	0.093%	0.093%	0.093%	0.093%	0.093%	
Comman equity	5,3769	8.845%	8.845%	8.846%	8.846%	8.846%	8.846%	8.846% 11.445%
Total	7.9767	11.446%	11.446%	11.446%	11.446%	11.446%	11.446%	11.445%

MACR5 15 tax depreciation schedule	Rate	Yearly	Cumulative
Tax year 1	5.00%	325,000	
Yax year 2	9.50%	617,500	942,500
Tax year 3	8.55%	555,75D	1,498,250
Tax year 4	7.70%	500,500	1,996,758
Tax year S	6.93%	450,450	2,449,200
Tax year 6	6.23%	404,950	2,854,150
Tax year 7	5.90%	383,500	3,237,650
Tax year B	5.90%	383,500	3,621,150
Так уеат 9	5.91%	384,150	4,005,300
Yax year 10	5.90%	383,500	4,388,800
Tax year 31	5.91%	384,150	4,772,950
Tax year 12	5.90%	383,500	5,156,450
Tax year 13	5,91%	384,150	5,540,600
Tax year 14	5.90%	383,500	5,924,100
Tax year 15	5.91%	384,150	6,308,250
Tax year 16	2.95%	191,750	6,500,000
Tetal	100,00%	6,500,000	

Tax year 16	2.95%	191,/30	8,500,000					
Tetal	100,00%	6,500,000						
Accumulated depreciation Portion of year in sevice before rider Pre-rider amount of depreciation Rider year 80Y amount Depreciation oxpense Rider year £0Y amount	17% 16,023	16,023 94,250 110,273	110,273 94,250 204,523	204,523 94,250 298,773	298,773 94,250 393,023	393,023 94,250 487,273	487,275 94,250 581,523 534,398	581,523 94,250 675,773 628,648
Average accumulated depreciation		63,148	157,398	251,648	345,898	440,148	534,390	020,044
<u>Tax depreciation reserve</u> FY of completion tax depreciation Post FY tax depreciation to rider date Tax year 2 tax depreciation	325,000 17% 617,500							
Tax year 2 pre-rider tax depr Rider year 80Y ameunt Tax period A tax depreciaton	104,975	429,975 512,525	1,036,978 461,273	1,583,335 415,415	2,D75,327 373,874	2,518,042 336,109	2,919,345 318,305 65,195	3,302,845 318,305 65,305.50
Tax period 8 tax depreciation	•	94,478	85,885 1,583,335	76,577 2,D75,327	58,842 2,518,042	65,195 2,919,345	3,302,845	3,686,456
Rider yeer EOY amount Average tax depreciation reserve	•	733,476	1,310,256	1,829,331	2,296,684	2,718,693	3,112,095	3,494,650

Note - gap between fiscal year and rider year addressed by tax period A and tax period 8.

Accumulated deferred taxes Average tax depreciation reserve	733,476 63,148	1,310,156 157,398	1,829,331 251,648	2,296,684 345,898	2,718,693 440,148	3,111,095 \$34,398	3,494,650 628,648
Average book depreciation reserve	678,329	1,152,759	3,577,683	1,950,787	2,278,546	2,576,698	2,866,003 39,23%
Cemposite tax rate	39.23%	39,23%	39.23%	39,23%	39.23%	39.23%	
Average ADIT	262,936	452,170	618,846	765,196	893,760	3,010,710	1,124,190

3. What is the breakdown of TIMP and DIMP costs that are operating expenses versus capital expenditures?

Response: For TIMP, the capital expenditures are incurred to put into service facilities that enable in-line inspection of our transmission pipelines, as well as any pipe replacement or remediation that is needed following the periodic pipeline integrity assessments. The TIMP expenses associated with performing the periodic pipeline integrity assessments are captured as operating expenses. The majority of the costs for TIMP are capital expenditures.

For DIMP, the Company currently cannot project the breakdown between operating expenses and capital expenditures.

See response to question 4 of this data request for the Company's capitalization policy.

The Company is not requesting any regulatory treatment at this time for the potential increases in O&M expenses related to TIMP and DIMP.

4. What is Piedmont's capitalization policy as it pertains to whether TIMP and DIMP costs are operating expenses or capital expenditures?

Response: See attachment.

Attachment for Response to Question 4

GUIDELINES FOR SYSTEM INTEGRITY PROJECTS

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

OPERATIONS & MAINTENANCE (O&M) EXPENSE:

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

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

CAPITAL EXPENDITURE:

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

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

DEFINITIONS:

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

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

5. Paragraph 7 of the Petition indicates some tests occur every seven years. What are the ongoing costs versus the costs associated with the 7-year period tests and assessments?

Response: The TIMP operating expenses are ongoing. The seven year periodic testing requirement is performed on a rolling basis for each applicable pipeline segment.

6. Do current rates include operating costs based on the procedures used for the initial implementation for TIMP and/or DIMP, as discussed in Paragraph 8?

Response: Current rates are based on operating expenses using a test period of the 12-months ended May 2011. During this test period, the periodic pipeline assessments performed under TIMP were still using direct assessment ("DA"). Piedmont has begun transitioning toward inline inspection ("ILI") of its transmission pipelines. It cannot yet be determined how use of ILI rather than DA will change the going level of operating expenses for TIMP. Due to the increased information that is provided by ILI relative to DA, the Company currently expects that the annual operating expenses for TIMP will not decrease. Piedmont had not yet begun implementation of DIMP as of the test period used in the last rate case. Therefore, current rates do not include operating costs for DIMP.

7. How does Piedmont's change to an in-line assessment approach (discussed in Paragraph 9) affect the operating expenses associated with TIMP and DIMP?

Response: See response to question 6 of this data request. ILI is not an assessment approach that can be used under DIMP.

8. Was none of the \$78 million in new capital discussed in Paragraph 10 included in forecasted pipe replacement in the last rate case?

Response: The \$78 million in new capital discussed in the petition includes \$33 million in forecasted integrity costs that were included in the 2011 general rate case (Docket No. 11-00144). The \$78 million was included in the petition to indicate the material nature of the issue. The Company would exclude the \$33 million in any filings under the requested rider.

The Company's current comprehensive projections of integrity expenditures (Tennessee direct and joint property) is shown in the response to question 2 of this data request.

9. How will Piedmont ensure the costs recovered through the rider are only for capital and not for the O&M expenses, as discussed in Paragraph 14?

Response: Per the Company's proposed tariff, monthly reports will be provided to the Authority detailing the capital expenditure projects to be included in the Rider. The proper accounting treatment on the Company's books is dictated by the Company's capitalization policy and is subject to review by both internal and external auditors.