Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Revenue Requirement Unadjusted
For Twelve Months Ended December 31, 2016

Line	Description	Revenue Requirement	
	Expenses:		
1	Purchased Power	$ 12,833,738.40	PP
2	Distribution	$ 1,113,605.12	D
3	Customer Service	$ 558,704.70	C
4	Administrative & General	$ 832,057.79	AG
5	ASU Administrative Support	$ 201,580.00	ASU
6	Depreciation	$ 902,971.32	DP
7	(Gain)Loss on Disposition of Property	$ 2,525.52	Prop
8	Interest Expense	$ 12,933.20	IE
9	Jobbing Expenses	$ 30,344.14	J
10	**Total Expenses**	**$ 16,488,460.19**	
11	**Less: Other Operating Revenues**	$ (104,181.07)	OR
	Rate Base Calculations:		
12	Electric Plant In Service	$ 28,495,777.63	
13	LESS: Accumulated Depreciation	$ (13,029,169.91)	
14	Net Plant in Service	$ 15,466,607.72	
15	Construction Work in Progress	$ 893,581.76	
16	Investments - Blue Ridge Electric Membership Corporation	$ 6,973,505.98	
17	Investments - North Carolina Electric Membership Corporation	$ 407,837.00	
18	Prepayments	$ 29,823.80	
19	Cash Working Capital	$ 861,023.89	
20	Total Rate Base	$ 24,632,380.15	
21	Rate of Return	6.97%	
22	**Return on Rate Base**	**$ 1,715,645.28**	
23	**Total Revenue Requirement**	**$ 18,099,924.40**	
24	Uncollectible Accounts	$ 18,200.18	
25	Regulatory Commission Fee	$ 30,094.45	
26	**Adjusted Revenue Requirement**	**$ 18,148,219.03**	

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Revenue Requirement Unadjusted
For Twelve Months Ended December 31, 2016

Line	Description	Revenue Requirement
	Rate Revenues:	
27	Residential	$ 4,965,837.46
28	Commercial	$ 7,088,874.87
29	ASU Campus	$ 3,683,516.56
30	Security Lighting	$ 335,437.47
31	**Total Rate Revenues**	**$ 16,073,666.36**
	Revenue Deficiency at Present Rates	
32	Total Revenue Deficiency	**$ 2,074,552.67**
33	Percent Revenue Deficiency	**12.91%**
	Sum Check:	
	Total from Exh SLB-7 (Rev Req)	$ 18,148,219.03
	Difference (Should be $0)	$ -

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Addition of
Automated Metering Infrastructure
Rate Base, Depreciation, and O&M Adjustments

Line	Month	Expenditures [1]	AFUDC [2]	Total at Commercial Operation Date
1	Jun-13	$ 4,350.00	$ 1,561.55	$ 5,911.55
2	Jul-13	2,400.00	$ 842.72	3,242.72
3	Aug-13	2,700.00	$ 927.01	3,627.01
4	Sep-13	3,600.00	$ 1,208.11	4,808.11
5	Oct-13	-	$ -	-
6	Nov-13	5,500.00	$ 1,761.18	7,261.18
7	Dec-13	2,800.00	$ 875.27	3,675.27
8	Jan-14	-	$ -	-
9	Feb-14	5,800.00	$ 1,725.45	7,525.45
10	Mar-14	4,126.30	$ 1,196.64	5,322.94
11	Apr-14	2,224.96	$ 628.68	2,853.64
12	May-14	4,554.51	$ 1,253.21	5,807.72
13	Jun-14	3,116.05	$ 834.48	3,950.53
14	Jul-14	2,756.00	$ 717.89	3,473.89
15	Aug-14	750.00	$ 189.91	939.91
16	Sep-14	1,800.00	$ 442.76	2,242.76
17	Oct-14	900.00	$ 214.91	1,114.91
18	Nov-14	525.00	$ 121.61	646.61
19	Dec-14	-	$ -	-
20	Jan-15	-	$ -	-
21	Feb-15	-	$ -	-
22	Mar-15	-	$ -	-
23	Apr-15	-	$ -	-
24	May-15	1,200.00	$ 227.53	1,427.53
25	Jun-15	-	$ -	-
26	Jul-15	-	$ -	-
27	Aug-15	-	$ -	-
28	Sep-15	-	$ -	-
29	Oct-15	-	$ -	-
30	Nov-15	-	$ -	-
31	Dec-15	-	$ -	-
32	Jan-16	-	$ -	-
33	Feb-16	-	$ -	-
34	Mar-16	860.54	$ 105.60	966.14
35	Apr-16	21,645.99	$ 2,516.00	24,161.99
36	May-16	3,922.04	$ 430.61	4,352.65
37	Jun-16	7,412.74	$ 766.39	8,179.13

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Addition of
Automated Metering Infrastructure
Rate Base, Depreciation, and O&M Adjustments

Line	Month	Expenditures [1]	AFUDC [2]	Total at Commercial Operation Date
38	Jul-16	-	$ -	-
39	Aug-16	-	$ -	-
40	Sep-16	4,299.72	$ 362.88	4,662.60
41	Oct-16	20.00	$ 1.56	21.56
42	Nov-16	300.45	$ 21.61	322.06
43	Dec-16	1,054.02	$ 69.28	1,123.30
44	Jan-17	-	$ -	-
45	Feb-17	49,249.77	$ 2,633.23	51,883.00
46	Mar-17	119,607.59	$ 5,667.92	125,275.51
47	Apr-17	769,706.58	$ 31,822.37	801,528.95
48	May-17	841,930.74	$ 29,748.99	871,679.73
49	Jun-17	123,064.74	$ 3,613.14	126,677.88
50	Jul-17	104,313.92	$ 2,442.99	106,756.91
51	Aug-17	15,960.86	$ 279.53	16,240.39
52	Sep-17	6,583.78	$ 76.65	6,660.43
53	Oct-17	3,177.59	$ 18.44	3,196.03
54	Total	$ 2,122,213.89	$ 95,306.10	$ 2,217,519.99

52	Annual Depreciation, SL 20 Yrs		$ 110,876.00
	Accumulated Depreciation		
53	Beginning Balance	$ -	
54	Ending Balance	$ 110,876.00	
55	Average Balance		$ 55,438.00
	CWIP		
56	Remove Balance in December 31, 2016 CWIP		$ (88,618.32)
	Operating and Maintenance [3]		
57	Contracted annual licensing and maintenance	$ 17,458.00	
58	Annual hosting at $800/month	$ 9,600.00	
59	Total O&M Adjustments		$ 27,058.00

Notes:
[1] Actual expenditures through August 2017. Estimated final expenditures for October.
[2] At the weighted average cost of capital of 6.97%

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Removal of
Meters to be Replaced
Rate Base, Depreciation, and Regulatory Asset Adjustments

Line	Description	Amount
	Remove Plant in Service and Accumulated Depreciation	
1	Plant in Service at 12/31/16	$ 940,426.72
2	Accumulated Depreciation at 12/31/16	$ 785,195.18
3	Net Plant in Service at 12/31/16	$ 155,231.54
	Remove Annual Depreciation Expense	
4	Annual Depreciation Expense	$ 30,366.72
	Establish Regulatory Asset to Recover Remaining Balance	
5	Regulatory Asset	
6	Beginning Balance	$ 155,231.54
7	Less First Year Amortization	$ (31,046.31)
8	Ending Balance	$ 124,185.23
9	Average Balance	$ 139,708.39
	Amortization of Regulatory Asset to Recover Old Meters	
10	(5 year amortization)	$ 31,046.31

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Addition of
General Office Building Renovation
To Rate Base

Line	Month	Expenditures [1]	AFUDC [2]	Total at Commercial Operation Date
1	Mar-16	$ 1,360.00	$ 123.34	$ 1,483.34
2	Apr-16	12,240.00	1,033.01	13,273.01
3	May-16	33,984.00	2,655.46	36,639.46
4	Jun-16	12,470.05	896.81	13,366.86
5	Jul-16	12,196.27	801.68	12,997.95
6	Aug-16	21,689.62	1,292.30	22,981.92
7	Sep-16	4,881.66	261.01	5,142.67
8	Oct-16	67,323.18	3,190.29	70,513.47
9	Nov-16	85,759.05	3,545.58	89,304.63
10	Dec-16	490,767.23	17,340.89	508,108.12
11	Jan-17	4,540.00	133.29	4,673.29
12	Feb-17	72,318.25	1,693.66	74,011.91
13	Mar-17	17,556.72	307.48	17,864.20
14	Apr-17	5,302.00	61.73	5,363.73
15	May-17	67,568.88	392.18	67,961.06
16	Jun-17	(4,500.00)	-	(4,500.00)
17	Total	$ 905,456.91	$ 33,728.71	$ 939,185.62
	Depreciation			
18	Depreciation Expense	0.21430%		$ 24,152.10
	Accumulated Depr			
19	Beginning Balance		$ -	
20	Ending Balance		$ 24,152.10	
21	Average Balance			$ 12,076.05

Notes:
[1] Actual expenditures through June 2017.
[2] At the weighted average cost of capital of 6.97%

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Labor Adjustments

Line	Description		Amount
	Regular Salary Increases		
1	Salaries for the year at regular pay rates	$	1,347,080
2	Less Associate Vice Chancellor of Business Affairs under separate adjustment	$	(26,625)
3	2016 Employees	$	1,320,455
4	October, 2017 annual pay rate	$	1,594,598
5	Less new Engineering Supervisor position	$	(95,000)
6	Less 50% of Associate Vice Chancellor of Business Affairs	$	(87,500)
7	Annualize salaries	$	1,412,098
8	Increase in salaries	$	91,643
	Increase in benefits		
9	FICA at 6.2%	$	5,682
10	Medicare at 1.45%	$	1,329
11	Retirement Employer Contribution at 17.13%	$	15,698
12	Total Increase in Benefits associated with Salary Increases	$	22,709
13	Incr in Benefits associated with 2016 Salary expense (Incr from 16.54% to 17.13%)	$	7,791
14	Total Increase in Salaries and Benefits for Existing Positions as of 12/31/16	$	122,143
15	A&G Related	*$*	*43,881*
16	Customer Service Related	*$*	*27,970*
17	Distribution Related	*$*	*48,950*
18	Contract Related	*$*	*1,342*
	Associate Vice Chancellor Position		
19	Remove Salary for January through March, 2016 when position was vacated[1]	$	(31,995)
20	Remove Benefits for prior AVC for January through March, 2016	$	(6,684)
21	Add Annualized Salary for new AVC position filled in June, 2017	$	87,500
	Add Annualized Benefits for new AVC position filled in June, 2017		
22	FICA at 6.2% on 50% of first $127,200	$	3,943
23	Medicare at 1.45%	$	1,269
24	Retirement Employer Contribution at 17.13%	$	14,989
25	50% of Contributions to State Health Plan	$	2,877
26	Total Increase in Benefits associated with AVC Position	$	23,078
27	Total Increase in Salaries and Benefits for Associate Vice Chancellor Posiiton	$	71,899

Category	Percentage
A&G	35.9%
Customer Service	22.9%
Distribution	40.1%
Contract	1.1%
Total	100.0%

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Labor Adjustments

Line	Description	Amount
	Engineering Supervisor Position	
28	Annualized Salary for new Engineering Supervisor Position filled July, 2017	$ 95,000
	Annualized Benefits for new Engineering Supervisor	
29	FICA at 6.2%	$ 5,890
30	Medicare at 1.45%	$ 1,378
31	Retirement Employer Contribution at 17.13%	$ 16,274
32	Contributions to State Health Plan	$ 5,754
33	Total Increase in Benefits associated with new Engineering Supervisor	$ 29,295
34	Total Increase in Salaries and Benefits for new Engineering Supervisor	$ 124,295
35	***Total Increase in Salaries and Benefits for Rate Year***	**$ 318,337**

Notes:

[1] Includes termination payments.

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Addition of New Trucks
and Removal of Old Trucks

Line	Description	Amount
	Depreciation Expense	
1	New Trucks	$ 89,971.00
2	Amount Estimated for Salvage	$ 8,997.10
3	Truck value to be depreciated	$ 80,973.90
4	Depreciation Rate (Months)	$ 114.00
5	Annual Depreciation	$ 8,523.57
6	Remove Annual Depreciation on 2008 Colorado Truck	$ 1,593.67
7	Adjustment to Depreciation Expense	$ 6,929.90
	Adjustment to Rate Base	
8	New Trucks	$ 89,971.00
	Minus Old Trucks at Original Cost	
	Old Trucks-Original Cost	
9	2002 CHEV 1500 TRUCK S/N V52136224 #40 (PP-020042)	$ 22,847.60
10	2005 CHEV SILVERADO S/N 291627 #43 (PP-050045)	$ 16,087.25
11	2008 COLORADO TRUCK EXT CAB #47 (PP-080049)	$ 16,822.08
12	Total Plant in Service at 12/31/2016	$ 55,756.93
13	**Adjustment to Plant in Service**	$ 34,214.07
	Accumulated Depreciation on Old Trucks	
14	2002 CHEV 1500 TRUCK S/N V52136224 #40 (PP-020042)	$ 20,562.84
15	2005 CHEV SILVERADO S/N 291627 #43 (PP-050045)	$ 14,478.53
16	2008 COLORADO TRUCK EXT CAB #47 (PP-080049)	$ 14,105.38
17	Total Accumulated Depreciation as of 12/31/2016	$ 49,146.75
18	Beginning Balance of Accumulated Depreciation on New Trucks	$ -
19	Ending Balance of Accumulated Depreciation on New Trucks	$ 8,523.57
20	Average Balance of Accumulated Depreciation on New Trucks	$ 4,261.78
21	**Adjustment to Accumulated Depreciation**	$ (44,884.96)

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Addition of New Trucks
and Removal of Old Trucks

Line	Description	Amount
	Gain on Trade-in[a]	
	Salvage Value (Estimated and not Depreciated	
22	2002 CHEV 1500 TRUCK S/N V52136224 #40 (PP-020042)	$ 2,284.76
23	2005 CHEV SILVERADO S/N 291627 #43 (PP-050045)	$ 1,608.73
24	2008 COLORADO TRUCK EXT CAB #47 (PP-080049)	$ 1,682.21
25	Total Salavage Value not Depreciated	$ 5,575.69
	Actual Trade-in Value	
26	2002 CHEV 1500 TRUCK S/N V52136224 #40 (PP-020042)	$ 6,725.00
27	2005 CHEV SILVERADO S/N 291627 #43 (PP-050045)	$ 7,575.00
28	2008 COLORADO TRUCK EXT CAB #47 (PP-080049)	$ 5,400.00
29	Total Trade-In Value	$ 19,700.00
	Gain on Trade-in	
30	2002 CHEV 1500 TRUCK S/N V52136224 #40 (PP-020042)	$ 4,440.24
31	2005 CHEV SILVERADO S/N 291627 #43 (PP-050045)	$ 5,966.28
32	2008 COLORADO TRUCK EXT CAB #47 (PP-080049)	$ 3,717.79
33	Total Gain on Trade-in	$ 14,124.31
34	Annual Amortization of Gain over 114 months	$ 1,486.77
	Adjustment to Rate Base for Unamortized Gain	
35	Beginning Balance	$ 14,124.31
36	Ending Balance	$ 12,637.54
37	Average Balance of Unamortized Gain	$ 13,380.92

[a] The 2002 and 2005 trucks were fully depreciated by 12/31/2016 but remained on the books. The 2008 truck will be fully depreciated by August, 2017. NRLP depreciates on the basis of 90% of original cost and assumes a 10% salvage value.

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Proforma Adjusted Revenue Requirement
For Twelve Months Ended December 31, 2016

Line	Main	GL#	Description	Revenue Requirement	Proforma Adjustment	Adjusted Revenue Requirement
			Other Operating Income:			
1	415	4151000	Revenue Job & Contract ASU	$ (23,777.17)	$ -	$ (23,777.17)
2	415	4152000	Rev Job&Con TOB	$ (6,824.00)	$ -	$ (6,824.00)
3	415	4156000	Revenue Job & Contract Cmp Broadstone	$ (509.12)	$ -	$ (509.12)
4	419	4191100	Int Inc Other	$ (9,831.23)	$ -	$ (9,831.23)
5	421	4210000	Misc Non-Operating Income	$ (51.24)	$ -	$ (51.24)
6	451	4511000	Misc Svc Revenue-Conn & Reconnect Chrgs	$ (10,645.31)	$ -	$ (10,645.31)
7	442	4423000	Temporary Construct Revenue	$ (21,974.45)	$ -	$ (21,974.45)
8	454	4540000	Rent Electric Property	$ (24,568.55)	$ -	$ (24,568.55)
9	454	4541000	Rent Electric Property-Fiber	$ (6,000.00)	$ -	$ (6,000.00)
10			**Total Other Operating Income**	**$ (104,181.07)**	**$ -**	**$ (104,181.07)**
11			**Operating Expenses:**			
12	403	4030000	Depreciation Expense	$ 902,971.32		$ 902,971.32
13			Plus: Depreciation on General Office Building Renovation		$ 24,152.10	$ 24,152.10
14			Less Depreciation on Old Trucks		$ (1,593.67)	$ (1,593.67)
15			Plus: Depreciation on New Trucks		$ 8,523.57	$ 8,523.57
16			Less: Old Meters		$ (30,366.72)	$ (30,366.72)
17			Plus: New AMI Meters		$ 110,876.00	$ 110,876.00
18			Total Depreciation Expense	$ 902,971.32	$ 111,591.27	$ 1,014,562.59
19			Amortization of Gain on Old Trucks	$ -	$ (1,486.77)	$ (1,486.77)
20			Amortization of Regulatory Asset (Old Meters)	$ -	$ 31,046.31	$ 31,046.31
21			Amortization of Regulatory Asset-Hydroelectric Removal and Clean-up	$ -	$ 15,000.00	$ 15,000.00
22	414	4140000	Gain/Loss Disposing Utility Property	$ 3,375.87	$ -	$ 3,375.87
23	414	4140001	Sale Of Surplus Property	$ (850.35)	$ -	$ (850.35)
24			Total Property Transaction Costs	$ 2,525.52	$ -	$ 2,525.52
25	416	4161000	Expense Job & Contract ASU	$ 3,651.94	$ -	$ 3,651.94
26	416	4161001	Expense Job & Contract ASU-Labor	$ 9,511.50	$ -	$ 9,511.50
27	416	4161002	Expense Job & Contract ASU-Benefits	$ 9,609.27	$ -	$ 9,609.27
28	416	4161004	Expense Job & Contract ASU-Transportation	$ 1,400.51	$ -	$ 1,400.51
29	416	4162001	Expense Job & Contract TOB-Labor	$ 3,355.94	$ -	$ 3,355.94
30	416	4162002	Expense Job & Contract TOB-Benefits	$ 1,823.83	$ -	$ 1,823.83
31	416	4162004	Expense Job & Contract TOB-Transportation	$ 594.85	$ -	$ 594.85
32	416	4166001	Expense Job & Contract Camp Broadstone	$ 218.69	$ -	$ 218.69
33	416	4166002	Expense Job & Contract Camp Broadstone-Benefits	$ 107.11	$ -	$ 107.11
34	416	4166004	Expense Job & Contract Camp Broadstone-Transportation	$ 70.50	$ -	$ 70.50
35			Total Expense Job & Contract ASU	$ 30,344.14	$ -	$ 30,344.14
36	431	4310000	Interest Expense Consumer Deposits	$ 12,933.20	$ -	$ 12,933.20
37			Total Interest Expense	$ 12,933.20	$ -	$ 12,933.20
38	555	5550000	Purchased Power	$ 12,825,500.24	$ 16,039.45	$ 12,841,539.69
39	555	5551000	Purchased Power-Generation (Avoided Energy Cost)	$ 8,238.16	$ -	$ 8,238.16
40			Total Purchased Power	$ 12,833,738.40	$ 16,039.45	$ 12,849,777.85
41	580	5800001	Operations Superv & Engineering-Labor	$ 24,979.71	$ 95,000.00	$ 119,979.71
42	580	5800002	Operations Superv & Engineering-Benefits	$ 13,515.99	$ 29,294.76	$ 42,810.75
43	580	5800004	Operations Superv & Engineering-Transportation	$ 2,977.30	$ -	$ 2,977.30
44			Total Operations Superv & Engineering	$ 41,473.00	$ 124,294.76	$ 165,767.76

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Proforma Adjusted Revenue Requirement
For Twelve Months Ended December 31, 2016

Line	Main	GL#	Description	Revenue Requirement	Proforma Adjustment	Adjusted Revenue Requirement
45	582	5820001	Station Expense-Labor	$ 6,930.09	$ -	$ 6,930.09
46	582	5820002	Station Expense-Benefits	$ 3,673.98	$ -	$ 3,673.98
47	582	5820004	Station Expense-Transportation	$ 822.98	$ -	$ 822.98
48			Total Station Expense	$ 11,427.05	$ -	$ 11,427.05
49	583	5830000	Overhead Line Expense	$ 1,722.20	$ -	$ 1,722.20
50	586	5860000	Meter Expense	$ 3,268.41	$ 27,058.00	$ 30,326.41
51	586	5860001	Meter Expense-Labor	$ 18,727.87	$ -	$ 18,727.87
52	586	5860002	Meter Expense-Benefits	$ 11,526.88	$ -	$ 11,526.88
53	586	5860004	Meter Expense-Transportation	$ 2,500.47	$ -	$ 2,500.47
54			Total Meter Expense	$ 36,023.63	$ 27,058.00	$ 63,081.63
55	587	5870001	Customer Install Expense-Labor	$ 6,930.09	$ -	$ 6,930.09
56	587	5870002	Customer Install Expense-Benefits	$ 3,673.98	$ -	$ 3,673.98
57	587	5870004	Customer Install Expense-Transportation	$ 822.98	$ -	$ 822.98
58			Total Customer Install Expense	$ 11,427.05	$ -	$ 11,427.05
59	588	5880000	Miscellaneous Distribution Expense	$ 11,139.14	$ -	$ 11,139.14
60	588	5880001	Miscellaneous Distribution Expense-Labor	$ 151,872.22	$ -	$ 151,872.22
61	588	5880002	Miscellaneous Distribution Expense-Benefits	$ 86,878.69	$ -	$ 86,878.69
62			Total Miscellaneous Distribution Expense	$ 249,890.05	$ -	$ 249,890.05
63	590	5900001	Maintenance Superv & Engineering-Labor	$ 31,881.18	$ -	$ 31,881.18
64	590	5900002	Maintenance Superv & Engineering-Benefits	$ 17,280.95	$ -	$ 17,280.95
65	590	5900004	Maintenance Superv & Engineering-Transportation	$ 3,790.91	$ -	$ 3,790.91
66			Total Maintenance Superv & Engineering	$ 52,953.04	$ -	$ 52,953.04
67	591	5910000	On Call Pay -Primary/Secondary	$ 28,781.75	$ -	$ 28,781.75
68	591	5910002	On Call Pay-Primary/Secondary Benefits	$ 20,336.60	$ -	$ 20,336.60
69			Total On Call Pay	$ 49,118.35	$ -	$ 49,118.35
70	592	5920000	Maintenance Station Equipment	$ 1,387.19	$ -	$ 1,387.19
71	592	5920001	Maintenance Station Equipment-Labor	$ 16,605.63	$ -	$ 16,605.63
72	592	5920002	Maintenance Station Equipment-Benefits	$ 14,463.32	$ -	$ 14,463.32
73	592	5920004	Maintenance Station Equipment-Transportation	$ 1,681.07	$ -	$ 1,681.07
74			Total Maintenance Station Equipment	$ 34,137.21	$ -	$ 34,137.21
75	593	5930000	Maintenance Overhead Lines	$ 157,519.39	$ -	$ 157,519.39
76	593	5930001	Maintenance Overhead Lines-Labor	$ 114,174.34	$ -	$ 114,174.34
77	593	5930002	Maintenance Overhead Lines-Benefits	$ 64,744.30	$ -	$ 64,744.30
78	593	5930004	Maintenance Overhead Lines-Transportation	$ 12,906.93	$ -	$ 12,906.93
79			Total Maintenance Overhead Lines	$ 349,344.96	$ -	$ 349,344.96
80	594	5940000	Maintenance Underground Lines	$ 6,217.67	$ -	$ 6,217.67
81	594	5940001	Maintenance Underground Lines-Labor	$ 18,617.78	$ -	$ 18,617.78
82	594	5940002	Maintenance Underground Lines-Benefits	$ 14,395.81	$ -	$ 14,395.81
83	594	5940004	Maintenance Underground Lines-Transportation	$ 1,988.46	$ -	$ 1,988.46
84			Total Maintenance Underground Lines	$ 41,219.72	$ -	$ 41,219.72
85	595	5950000	Maintenance Line Transformers	$ 16,118.58	$ -	$ 16,118.58
86	595	5950001	Maintenance Line Transformers-Labor	$ 782.85	$ -	$ 782.85
87	595	5950002	Maintenance Line Transformers-Benefits	$ (511.13)	$ -	$ (511.13)
88	595	5950004	Maintenance Line Transformers-Transportation	$ 61.35	$ -	$ 61.35
89			Total Maintenance Line Transformers	$ 16,451.65	$ -	$ 16,451.65

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Appalachian State University
d/b/a New River Light and Power Company
Proforma Adjusted Revenue Requirement
For Twelve Months Ended December 31, 2016

Line	Main	GL#	Description	Revenue Requirement	Proforma Adjustment	Adjusted Revenue Requirement
90	596	5961000	Maintenance Street Lights	$ 16,178.95	$ -	$ 16,178.95
91	596	5961001	Maintenance Street Lights-Labor	$ 17,761.21	$ -	$ 17,761.21
92	596	5961002	Maintenance Street Lights-Benefits	$ 8,362.53	$ -	$ 8,362.53
93	596	5961004	Maintenance Street Lights-Transportation	$ 2,374.77	$ -	$ 2,374.77
94			Total Maintenance Street Lights	$ 44,677.46	$ -	$ 44,677.46
95	597	5970000	Maintenance-Meters	$ 6,430.85	$ -	$ 6,430.85
96	597	5970001	Maintenance-Meters-Labor	$ 52,484.69	$ -	$ 52,484.69
97	597	5970002	Maintenance-Meters-Benefits	$ 30,227.17	$ -	$ 30,227.17
98	597	5970004	Maintenance-Meters-Transportation	$ 5,451.07	$ -	$ 5,451.07
99			Total Maintenance-Meters	$ 94,593.78	$ -	$ 94,593.78
100	598	5980000	Maintenance Misc Distribution Plant	$ 681.13	$ -	$ 681.13
101	598	5980001	Maintenance Misc Distribution Plant-Labor	$ 56,861.66	$ -	$ 56,861.66
102	598	5980002	Maintenance Misc Distribution Plant-Benefits	$ 15,618.32	$ -	$ 15,618.32
103	598	5980004	Maintenance Misc Distribution Plant-Transportation	$ 5,984.86	$ -	$ 5,984.86
104			Total Maintenance Misc Distribution Plant	$ 79,145.97	$ -	$ 79,145.97
105	901	9010001	Supervision Customer Accounts-Labor	$ 30,857.59	$ -	$ 30,857.59
106	901	9010002	Supervision Customer Accounts-Benefits	$ 16,768.29	$ -	$ 16,768.29
107	901	9010004	Supervision Customer Accounts-Transportation	$ 3,681.39	$ -	$ 3,681.39
108			Total Supervision Customer Accounts	$ 51,307.27	$ -	$ 51,307.27
109	902	9020000	Meter Reading Expense	$ 1,454.79	$ -	$ 1,454.79
110	902	9020001	Meter Reading Expense-Labor	$ 20,742.10	$ -	$ 20,742.10
111	902	9020002	Meter Reading Expense-Benefits	$ 11,789.96	$ -	$ 11,789.96
112	902	9020004	Meter Reading Expense-Transportation	$ 2,237.73	$ -	$ 2,237.73
113			Total Meter Reading Expense	$ 36,224.58	$ -	$ 36,224.58
114	903	9030000	Customer Records & Collections Expense	$ 144,195.09	$ -	$ 144,195.09
115	903	9030001	Customer Records & Collections Expense-Labor	$ 173,670.50	$ -	$ 173,670.50
116	903	9030002	Customer Records & Collections Expense-Benefits	$ 94,798.10	$ -	$ 94,798.10
117	903	9031000	Postage	$ 4,976.38	$ -	$ 4,976.38
118	903	9032000	Customer Records Cash Over/Short	$ 13.05	$ -	$ 13.05
119	903	9033000	Customer Records - Bank Service Fees	$ 17,907.53	$ -	$ 17,907.53
120	903	9034000	Customer Records - Credit Card Fees	$ 35,612.20	$ -	$ 35,612.20
121			Total Customer Records	$ 471,172.85	$ -	$ 471,172.85
122	910	9100000	Customer Assistance Expense	$ 3,379.32	$ -	$ 3,379.32
123	911	9110000	Informational Advertising Expense	$ 4,572.31	$ -	$ 4,572.31
124	920	9200001	Administrative & General-Salaries	$ 251,152.98	$ 55,505.21	$ 306,658.19
125	920	9200002	Administrative & General-Benefits	$ 136,259.69	$ 16,393.87	$ 152,653.56
126			Total Administrative & General	$ 387,412.67	$ 71,899.08	$ 459,311.75
127	921	9210000	Office Supplies And Expenses	$ 26,862.16	$ -	$ 26,862.16
128	923	9230000	Consulting Fees	$ 97,087.28	$ -	$ 97,087.28
129	923	9230001	Investment Management Expense	$ 23,887.58	$ -	$ 23,887.58
130			Total Consulting & Investment Management Fees	$ 120,974.86	$ -	$ 120,974.86
131	924	9240000	Property Insurance	$ 6,190.26	$ -	$ 6,190.26

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Appalachian State University
d/b/a New River Light and Power Company
Proforma Adjusted Revenue Requirement
For Twelve Months Ended December 31, 2016

Line	Main	GL#	Description	Revenue Requirement	Proforma Adjustment	Adjusted Revenue Requirement
132	925	9250000	Injuries & Damages Expense	$ 134,939.72	$ (67,200.00)	$ 67,739.72
133	925	9250001	Injuries & Damages Expense-Labor	$ 5,905.44	$ -	$ 5,905.44
134	925	9250002	Injuries & Damages Expense-Benefits	$ 3,353.50	$ -	$ 3,353.50
135	925	9250004	Injuries & Damages Expense-Transportation	$ 828.51	$ -	$ 828.51
136			Total Injuries & Damages Expense	$ 145,027.17	$ (67,200.00)	$ 77,827.17
137	930	9301000	Institutional Advertising Expense	$ 10,456.85	$ -	$ 10,456.85
138	930	9302000	Miscellaneous General Expense	$ 53,958.25	$ -	$ 53,958.25
139			Total Institutional And Miscellaneous	$ 64,415.10	$ -	$ 64,415.10
140	932	9320000	Maintenance Of General Plant	$ 69,681.46	$ -	$ 69,681.46
141	932	9320001	Maintenance Of General Plant-Labor	$ 2,284.23	$ -	$ 2,284.23
142	932	9320002	Maintenance Of General Plant-Benefits	$ 1,108.78	$ -	$ 1,108.78
143	932	9320004	Maintenance Of General Plant-Transportation	$ 149.47	$ -	$ 149.47
144			Total Maintenance Of General Plant	$ 73,223.94	$ -	$ 73,223.94
145			*ASU Administrative Support Costs:*			
146	920		Legal	$ 106,501.00	$ -	$ 106,501.00
147	920		Human Resources	$ 17,351.00	$ -	$ 17,351.00
148	920		Information Technology	$ 16,788.00	$ -	$ 16,788.00
149	920		Administrative Supervision	$ 60,940.00	$ -	$ 60,940.00
150			Total ASU Administrative Support Costs	$ 201,580.00	$ -	$ 201,580.00
151			*Increase in General Salary and Benefits:*			
152			A&G Related	$ -	$ 43,881.27	$ 43,881.27
153			Customer Service Related	$ -	$ 27,969.52	$ 27,969.52
154			Distribution Related	$ -	$ 48,950.34	$ 48,950.34
155			Contract Related	$ -	$ 1,341.84	$ 1,341.84
156			Total Increase in Salary and Benefits	$ -	$ 122,142.97	$ 122,142.97
157			**Total Operating Expenses**	**$ 16,488,460.19**	**$ 450,385.07**	**$ 16,938,845.26**
158			**Rate Base Calculation:**			
159			Electric Plant In Service	$ 28,495,777.63		$ 28,495,777.63
160			New AMI Meters		$ 2,217,519.99	$ 2,217,519.99
161			Remove Old Meters		$ (940,426.72)	$ (940,426.72)
162			General Office Building Renovation		$ 939,185.62	$ 939,185.62
163			New Trucks		$ 89,971.00	$ 89,971.00
164			Remove Old Trucks		$ (55,756.93)	$ (55,756.93)
165			Adjusted Electric Plant In Service	$ 28,495,777.63	$ 2,250,492.96	$ 30,746,270.59
166			Accumulated Depreciation (per books at 12/31/2016)	$ (13,029,169.91)		$ (13,029,169.91)
167			Remove Accumulated Depreciation on Old Meters		$ 785,195.18	$ 785,195.18
168			Remove Accumulated Depreciation on Old Trucks		$ 49,146.75	$ 49,146.75
169			Average B/E Balance for first year of new AMI meters		$ (55,438.00)	$ (55,438.00)
170			Average B/E Balance for first year of General Office Building Renovation		$ (12,076.05)	$ (12,076.05)
171			Average B/E Balance for first year of new trucks		$ (4,261.78)	$ (4,261.78)
172			Adjusted Accumulated Depreciation	$ (13,029,169.91)	$ 762,566.09	$ (12,266,603.82)

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Appalachian State University
d/b/a New River Light and Power Company
Proforma Adjusted Revenue Requirement
For Twelve Months Ended December 31, 2016

Line	Main	GL#	Description	Revenue Requirement	Proforma Adjustment	Adjusted Revenue Requirement
173			Net Plant in Service	$ 15,466,607.72	$ 3,013,059.05	$ 18,479,666.77
174			Construction Work in Progress	$ 893,581.76		$ 893,581.76
175			Less Amounts Earning AFUDC and Closed to Plant		$ (831,289.38)	$ (831,289.38)
176			Net Construction Work in Progress	$ 893,581.76	$ (831,289.38)	$ 62,292.38
177			Investments - Blue Ridge Electric Membership Corporation	$ 6,973,505.98	$ -	$ 6,973,505.98
178			Investments - North Carolina Electric Membership Corporation	$ 407,837.00	$ -	$ 407,837.00
179			Regulatory Asset (Unamortized Old Meters)	$ -	$ 139,708.39	$ 139,708.39
180			Regulatory Asset (Hydro Removal and Clean-up)	$ -	$ 52,500.00	$ 52,500.00
181			Regulatory Liabililty on Gain from Old Trucks	$ -	$ 13,380.92	$ 13,380.92
182			Prepayments	$ 29,823.80	$ 4,749.42	$ 34,573.22
183			Cash Working Capital	$ 861,023.89	$ 34,957.15	$ 895,981.03
184			Total Rate Base	$ 24,632,380.15	$ 2,427,065.54	$ 27,059,445.69
185			Rate of Return	6.97%	6.97%	6.97%
186			**Return on Rate Base**	**$ 1,715,645.28**	**$ 169,045.12**	**$ 1,884,690.39**
187			**Revenue Requirement**	**$ 18,099,924.40**	**$ 619,430.19**	**$ 18,719,354.58**
188			Plus Uncollectible Accounts	$ 18,200.18	$ 3,049.52	$ 21,249.70
189	928	9280000	Regulatory Commission Expense	$ 30,094.45	$ (3,820.82)	$ 26,273.63
190			**Total Revenue Requirement to be Recovered from Rates**	**$ 18,148,219.03**	**$ 618,658.88**	**$ 18,766,877.91**
191			**Rate Revenues:**			
192			Residential	$ 4,965,837.46	$ 167,430.24	$ 5,133,267.70
193			Commercial	$ 7,088,874.87	$ 406,388.81	$ 7,495,263.68
194			ASU Campus	$ 3,683,516.56	$ 179,865.30	$ 3,863,381.86
195			Security Lighting	$ 335,437.47	$ 8,230.77	$ 343,668.24
196			**Total Rate Revenues**	$ 16,073,666.36	$ 761,915.12	$ 16,835,581.48
197			**Revenue Deficiency at Present Rates**			
198			Amount	$ 2,074,552.67		$ 1,931,296.43
199			Less: Revenue from Proposed Fee Changes			$ (34,304.00)
200			Adjusted Amount to Recover from Base Rates or PPAC			$ 1,896,992.43
201			Increase Required with No PPAC adjustment	12.91%		11.27%
202			Adjustment for Purchased Power Revenue Recovered through PPA			$ 298,693.47
203			Less Additional Uncollectible Accounts and Regulatory Fee			$ 756.38
204			Net Revenue from PPA Adjustment			$ 297,937.09
205			Net Increase Required			$ 1,599,055.34
206			Revenues at Present Rates Plus PPAC Adjustment			$ 17,133,518.57
207			Percent Increase Requested above Present Revenues with PPAC Adjustment			9.33%
208			Revised Base Purchased Power Factor			$0.0635

For Exh SLB-1 Summary

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For Exh SLB-1 Summary

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For Exh SLB-1 Summary

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For Exh SLB-1 Summary

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FY 2016 Actuals		
Uncollected	Rate Revenues	Percentage
$ 18,200.18	$ 16,073,666.36	0.113%
		0.14%

$ 96,876.78	Town of Boone Security Lights and Traffic Light Revenue
$ 238,560.69	Security Lights Revenue
$ 335,437.47	Total Lighting

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Appalachian State University
d/b/a New River Light and Power Company
CACR Example Calculations

Line	Formula Component	Description		Amount
		<u>January Wholesale/Feb 15 to Mar 14 billing cycle</u>		
1	TCAn-1	January Invoice from BREMCO for Coal Ash Costs		$ 100,000.00
2	ES	Expected kWh Sales for February 15 through March 14 billing Cycles		20,000,000
3		Cost/kWh (Line 1/Line 2)		$ 0.00500
4		Adjustment for Regulatory Commission Fee and Uncollectible Accts		(1-0.0014-0.00113)
5	CACR	CACR to be applied in February 15 through March 14 billing cycle (Line 3/Line 4)		$ 0.00501
		<u>March Wholesale/April 15 to May 14 billing cycle</u>		
6	TCAn-1	March Invoice from BREMCO for Coal Ash Costs		$ 225,000.00
7	ES	Expected kWh Sales for April 15 through May 14 billing Cycles		14,200,000
8		Cost/kWh		$ 0.01585
9		Adjusted for Regulatory Commission Fee and Uncollectible Accounts (Line 8/Line4)		$ 0.01589
		True-up for the Feb 15 to Mar 14 billing cycle		
10	CACRRn-2	Required Revenue from second preceding billing cycle (Line 5*Line 2)		$ 100,253.64
11	ACACRn-2	Actual revenue received from the second preceding billing cycle		
12		Actual kWh Sales	20,800,000	
13		CACR second preceding	$0.00501	$ 104,263.79
14	TUn-2	True-up for second preceding billing cycle (Line 10-Line 13		$ (4,010.15)
15		True-up per kWh (Line 14/Line 7)		$ (0.00028)
16	CACR	Total CACR for billing cycle from April 15 through May 14 (Line 9 + Line 15)		$ 0.01560

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Appalachian State University
d/b/a New River Light and Power Company
Discounted Cash Flow Results

Company Name	13-Week Dividend Yield	4-Week Dividend Yield	1-Week Dividend Yield	Average Dividend Yield	Value Line Growth Rate	Schwab Growth Rate	Thomson Growth Rate	Average Growth Rate	DCF Result
Dominion Energy	4.0%	4.1%	4.1%	4.1%	5.5%	4.0%	4.0%	4.5%	8.6%
Duke Energy Corp New	4.2%	4.2%	4.2%	4.2%	4.5%	2.6%	2.6%	3.2%	7.5%
NextEra Energy Inc	2.9%	2.9%	2.9%	2.9%	6.5%	6.2%	6.2%	6.3%	9.2%
SCANA Corporation	3.7%	3.7%	3.9%	3.8%	4.0%	5.6%	5.6%	5.1%	8.8%
Southern Co	4.7%	4.9%	5.0%	4.9%	3.5%	4.2%	4.0%	3.9%	8.8%

Average	**8.6%**
Median	**8.8%**

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Appalachian State University
d/b/a New River Light and Power Company
Comparable Earnings

Company Name	Earned Returns on Common Equity			
	2016	2017E	2018E	20-22E
Dominion Energy	14.5%	13.5%	15.0%	19.0%
Duke Energy Corp New	6.2%	8.0%	8.0%	8.5%
NextEra Energy Inc	11.1%	12.5%	13.0%	13.0%
SCANA Corporation	10.4%	10.0%	10.0%	10.0%
Southern Co	11.0%	11.5%	11.5%	12.0%
Average	10.6%	11.1%	11.5%	12.5%

Average ROE 2017 - 2022	**11.7%**
Median ROE 2017 - 2022	**11.5%**

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description	Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
			Allocation Factors						
	SPECIFIC ALLOCATOR:								
1.01	Residential	c	1.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1.02	Commercial Non-Demand	c	1.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
1.03	Commercial Demand	c	1.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000
1.04	Commercial Demand High Load Factor	c	1.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
1.05	ASU Campus	c	1.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000
1.06	Security Lighting	c	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
	ENERGY ALLOCATOR:								
	Usage in kWh		202,215,273	53,270,063	23,797,508	53,826,414	19,733,160	48,094,075	3,494,053
2.01	Allocation %	e	100.00%	26.34%	11.77%	26.62%	9.76%	23.78%	1.73%
	Res. And Commercial Usage Only		150,627,145	53,270,063	23,797,508	53,826,414	19,733,160		
2.02	Allocation %	e	100.00%	35.37%	15.80%	35.73%	13.10%		
	DEMAND ALLOCATORS	*Load Factor*	*47.19%*	*37.18%*	*46.91%*	*46.91%*	*71.83%*	*56.40%*	*50.00%*
	Annual NCP Demand (kW) [1]		48,915	16,357	5,791	13,098	3,136	9,735	798
3.01	Allocation %	d	100.00%	33.44%	11.84%	26.78%	6.41%	19.90%	1.63%
		Load Factor	*75.40%*	*69.82%*	*72.75%*	*72.75%*	*95.46%*	*78.83%*	*n/a*
	Average CP Demand (kW) [2]		30,614	8,710	3,734	8,446	2,360	6,964	399
3.02	Allocation %	d	100.00%	28.45%	12.20%	27.59%	7.71%	22.75%	1.30%
	CUSTOMER ALLOCATORS:								
	Average Number of Customers		8,148	6,188	1,494	251	18	107	90
4.01	Allocation %	c	100.00%	75.94%	18.34%	3.07%	0.22%	1.32%	1.11%
4.02	Weighted Customer/Energy/NCP Demand Allocation [3]	c	100.00%	42.29%	13.45%	20.81%	5.70%	16.23%	1.52%
4.03	Weighted Customer/NCP Demand Allocation [4]	c	100.00%	44.07%	13.46%	20.85%	4.86%	15.26%	1.50%
4.04	Number of Customers Excluding Security Lighting Allocation %	c	100.00%	76.80%	18.54%	3.11%	0.22%	1.33%	

Notes:

[1] NCP Load Factors (LF) were estimated for each customer class (except Comm Demand High LF & Security Lighting) by taking the annual NCP LF of the wholesale delivery point that most closely matched the usage pattern of the respective customer class. Comm Demand High LF is based on actual billing data. Security Lighting was estimated by assuming 12 hours of lamp burn time per day.

[2] CP Load Factors (LF) were estimated for each customer class (except Comm Demand High LF & Security Lighting) by taking the average CP LF of the wholesale delivery point that most closely matched the usage pattern of the respective customer class. Comm Demand High LF demand was based on a DEP coincident factor for large general service customers applied to he NCP. Security Lighting is assumed at 50% of its NCP to ensure some fixed demand costs are appropriately assigned.

[3] 4.02 - Weighted Customer Allocation:

NCP Demand	50.00%
Customer	25.00%
Energy	25.00%
Total	100.00%

[4] 4.03 - Weighted Customer Allocation:

NCP Demand	75.00%
Customer	25.00%
Total	100.00%

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Current Rate Revenues									
1.01	Energy Charges			$ 14,017,770	$ 4,666,191	$ 1,971,838	$ 2,583,991	$ 947,310	$ 3,848,440	$ -
1.02	Demand Charges			$ 1,798,571	$ -	$ -	$ 1,494,995	$ 303,576	$ -	$ -
1.03	Customer Charges			$ 1,019,241	$ 467,077	$ 156,170	$ 34,900	$ 2,485	$ 14,942	$ 343,668
1.04	**Total Revenues from Current Rates**			**$ 16,835,581**	**$ 5,133,268**	**$ 2,128,008**	**$ 4,113,885**	**$ 1,253,370**	**$ 3,863,382**	**$ 343,668**
REV1	Total Revenue Allocator			100.00%	30.49%	12.64%	24.44%	7.44%	22.95%	2.04%
REV2	Total Revenue Allocator Excluding ASU			100.00%	39.57%	16.40%	31.71%	9.66%	0.00%	2.65%
	Other Operating Income									
2.00	Revenue Job & Contract ASU	c	4.04	$ 23,777	$ 18,260	$ 4,409	$ 739	$ 53	$ 316	$ -
2.01	Rev Job&Con TOB	c	4.04	$ 6,824	$ 5,241	$ 1,265	$ 212	$ 15	$ 91	$ -
2.02	Revenue Job & Contract Cmp Broadstone	c	4.04	$ 509	$ 391	$ 94	$ 16	$ 1	$ 7	$ -
2.03	Int Inc Other	c	4.04	$ 9,831	$ 7,550	$ 1,823	$ 306	$ 22	$ 131	$ -
2.04	Misc Non-Operating Income	c	4.04	$ 51	$ 39	$ 10	$ 2	$ 0	$ 1	$ -
2.05	Misc Svc Revenue-Conn & Reconnect Chrgs	c	Direct	$ 44,949	$ 33,712	$ 5,619	$ 5,619	$ -	$ -	$ -
2.06	Temporary Construct Revenue	c	4.04	$ 21,974	$ 16,875	$ 4,075	$ 683	$ 49	$ 292	$ -
2.07	Rent Electric Property	c	4.04	$ 24,569	$ 18,868	$ 4,556	$ 764	$ 54	$ 327	$ -
2.08	Rent Electric Property-Fiber	c	4.04	$ 6,000	$ 4,608	$ 1,113	$ 187	$ 13	$ 80	$ -
2.09	Total Other Operating Income		Sum	$ 138,485	$ 105,544	$ 22,963	$ 8,526	$ 207	$ 1,245	$ -
3.00	**Total Revenues**		Sum	$ 16,974,067	$ 5,238,811	$ 2,150,971	$ 4,122,412	$ 1,253,577	$ 3,864,627	$ 343,668
	Purchased Power									
4.00	Energy Expense	e	2.01	$ 4,893,995	$ 1,289,237	$ 575,945	$ 1,302,702	$ 477,580	$ 1,163,968	$ 84,563
4.01	Demand Expense	d	3.02	$ 6,243,456	$ 1,776,341	$ 761,584	$ 1,722,590	$ 481,267	$ 1,420,328	$ 81,345
4.02	Transmission & Ancillary Expenses	d	3.02	$ 521,183	$ 148,283	$ 63,575	$ 143,796	$ 40,175	$ 118,564	$ 6,790
4.03	BREMCO Distribution Expenses	d	3.02	$ 1,257,246	$ 357,702	$ 153,360	$ 346,878	$ 96,913	$ 286,012	$ 16,380
4.04	Generation Credit	c	1.05	$ (74,340)	$ -	$ -	$ -	$ -	$ (74,340)	$ -
4.05	Avioded Costs for Retail Customer Renewable Energy	c	4.04	$ 8,238	$ 6,327	$ 1,528	$ 256	$ 18	$ 110	$ -
4.06	Total Purchased Power Expense		Sum	$ 12,849,778	$ 3,577,890	$ 1,555,992	$ 3,516,223	$ 1,095,953	$ 2,914,642	$ 189,079
	Total Purchased Power Expense			**$ 12,849,778**	**$ 3,577,890**	**$ 1,555,992**	**$ 3,516,223**	**$ 1,095,953**	**$ 2,914,642**	**$ 189,079**
	Customer-Related	**c**		$ (66,102)	$ 6,327	$ 1,528	$ 256	$ 18	$ (74,230)	$ -
	Energy-Related	**e**		$ 4,893,995	$ 1,289,237	$ 575,945	$ 1,302,702	$ 477,580	$ 1,163,968	$ 84,563
	Demand-Related	**d**		$ 8,021,884	$ 2,282,326	$ 978,519	$ 2,213,265	$ 618,354	$ 1,824,904	$ 104,516
	Gross Income									
5.00	Revenues less Purchased Power		Sum	$ 4,124,289	$ 1,660,921	$ 594,979	$ 606,189	$ 157,625	$ 949,985	$ 154,590

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d/b/a New River Light and Power Company
Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Electric Operating & Maintenance Expenses									
	Expense Job & Contract ASU									
6.00	Expense Job & Contract ASU	c	4.04	$ 3,652	$ 2,805	$ 677	$ 114	$ 8	$ 49	$ -
6.01	Expense Job & Contract ASU-Labor	c	4.04	$ 9,512	$ 7,304	$ 1,764	$ 296	$ 21	$ 127	$ -
6.02	Expense Job & Contract ASU-Benefits	c	4.04	$ 9,609	$ 7,380	$ 1,782	$ 299	$ 21	$ 128	$ -
6.03	Expense Job & Contract ASU-Transportation	c	4.04	$ 1,401	$ 1,076	$ 260	$ 44	$ 3	$ 19	$ -
6.04	Expense Job & Contract TOB-Labor	c	4.04	$ 3,356	$ 2,577	$ 622	$ 104	$ 7	$ 45	$ -
6.05	Expense Job & Contract TOB-Benefits	c	4.04	$ 1,824	$ 1,401	$ 338	$ 57	$ 4	$ 24	$ -
6.06	Expense Job & Contract TOB-Transportation	c	4.04	$ 595	$ 457	$ 110	$ 18	$ 1	$ 8	$ -
6.07	Expense Job & Contract Camp Broadstone	c	4.04	$ 219	$ 168	$ 41	$ 7	$ 0	$ 3	$ -
6.08	Expense Job & Contract Camp Broadstone-Benefits	c	4.04	$ 107	$ 82	$ 20	$ 3	$ 0	$ 1	$ -
6.09	Expense Job & Contract Camp Broadstone-Transportation	c	4.04	$ 71	$ 54	$ 13	$ 2	$ 0	$ 1	$ -
6.10	Total Expense Job & Contract ASU		Sum	$ 30,344	$ 23,303	$ 5,627	$ 943	$ 67	$ 404	$ -
	Operations Superv & Engineering									
7.00	Operations Superv & Engineering-Labor	c	4.03	$ 119,980	$ 52,870	$ 16,153	$ 25,018	$ 5,835	$ 18,303	$ 1,800
7.01	Operations Superv & Engineering-Benefits	c	4.03	$ 42,811	$ 18,865	$ 5,764	$ 8,927	$ 2,082	$ 6,531	$ 642
7.02	Operations Superv & Engineering-Transportation	c	4.03	$ 2,977	$ 1,312	$ 401	$ 621	$ 145	$ 454	$ 45
7.03	Total Operations Superv & Engineering		Sum	$ 165,768	$ 73,047	$ 22,318	$ 34,565	$ 8,061	$ 25,289	$ 2,487
	Station Expense									
8.00	Station Expense-Labor	d	3.01	$ 6,930	$ 2,317	$ 820	$ 1,856	$ 444	$ 1,379	$ 113
8.01	Station Expense-Benefits	d	3.01	$ 3,674	$ 1,229	$ 435	$ 984	$ 236	$ 731	$ 60
8.02	Station Expense-Transportation	d	3.01	$ 823	$ 275	$ 97	$ 220	$ 53	$ 164	$ 13
8.03	Total Station Expense		Sum	$ 11,427	$ 3,821	$ 1,353	$ 3,060	$ 733	$ 2,274	$ 186
9.00	Overhead Line Expense	c	4.03	$ 1,722	$ 759	$ 232	$ 359	$ 84	$ 263	$ 26
	Meter Expense									
10.00	Meter Expense	c	4.04	$ 30,326	$ 23,289	$ 5,623	$ 943	$ 67	$ 404	$ -
10.01	Meter Expense-Labor	c	4.04	$ 18,728	$ 14,382	$ 3,473	$ 582	$ 41	$ 249	$ -
10.02	Meter Expense-Benefits	c	4.04	$ 11,527	$ 8,852	$ 2,137	$ 358	$ 26	$ 153	$ -
10.03	Meter Expense-Transportation	c	4.04	$ 2,500	$ 1,920	$ 464	$ 78	$ 6	$ 33	$ -
10.04	Total Meter Expense		Sum	$ 63,082	$ 48,444	$ 11,697	$ 1,961	$ 140	$ 840	$ -
	Customer Install Expense									
11.00	Customer Install Expense-Labor	c	4.01	$ 6,930	$ 5,263	$ 1,271	$ 213	$ 15	$ 91	$ 77
11.01	Customer Install Expense-Benefits	c	4.01	$ 3,674	$ 2,790	$ 674	$ 113	$ 8	$ 48	$ 41
11.02	Customer Install Expense-Transportation	c	4.01	$ 823	$ 625	$ 151	$ 25	$ 2	$ 11	$ 9
11.03	Total Customer Install Expense		Sum	$ 11,427	$ 8,678	$ 2,095	$ 351	$ 25	$ 150	$ 127

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Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Miscellaneous Distribution Expense									
12.00	Miscellaneous Distribution Expense	d	3.01	$ 11,139	$ 3,725	$ 1,319	$ 2,983	$ 714	$ 2,217	$ 182
12.01	Miscellaneous Distribution Expense-Labor	d	3.01	$ 151,872	$ 50,786	$ 17,980	$ 40,668	$ 9,736	$ 30,225	$ 2,477
12.02	Miscellaneous Distribution Expense-Benefits	d	3.01	$ 86,879	$ 29,052	$ 10,285	$ 23,264	$ 5,570	$ 17,290	$ 1,417
12.03	Total Miscellaneous Distribution Expense		Sum	$ 249,890	$ 83,563	$ 29,584	$ 66,914	$ 16,020	$ 49,733	$ 4,075
	Maintenance Superv & Engineering									
13.00	Maintenance Superv & Engineering-Labor	c	4.03	$ 31,881	$ 14,049	$ 4,292	$ 6,648	$ 1,550	$ 4,864	$ 478
13.01	Maintenance Superv & Engineering-Benefits	c	4.03	$ 17,281	$ 7,615	$ 2,327	$ 3,603	$ 840	$ 2,636	$ 259
13.02	Maintenance Superv & Engineering-Transportation	c	4.03	$ 3,791	$ 1,671	$ 510	$ 790	$ 184	$ 578	$ 57
13.03	Total Maintenance Superv & Engineering		Sum	$ 52,953	$ 23,334	$ 7,129	$ 11,042	$ 2,575	$ 8,078	$ 795
	On Call Pay									
14.00	On Call Pay -Primary/Secondary	c	4.03	$ 28,782	$ 12,683	$ 3,875	$ 6,001	$ 1,400	$ 4,391	$ 432
14.01	On Call Pay-Primary/Secondary Benefits	c	4.03	$ 20,337	$ 8,962	$ 2,738	$ 4,241	$ 989	$ 3,102	$ 305
14.02	Total On Call Pay		Sum	$ 49,118	$ 21,644	$ 6,613	$ 10,242	$ 2,389	$ 7,493	$ 737
	Maintenance Station Equipment									
15.00	Maintenance Station Equipment	d	3.01	$ 1,387	$ 464	$ 164	$ 371	$ 89	$ 276	$ 23
15.01	Maintenance Station Equipment-Labor	d	3.01	$ 16,606	$ 5,553	$ 1,966	$ 4,447	$ 1,065	$ 3,305	$ 271
15.02	Maintenance Station Equipment-Benefits	d	3.01	$ 14,463	$ 4,837	$ 1,712	$ 3,873	$ 927	$ 2,878	$ 236
15.03	Maintenance Station Equipment-Transportation	d	3.01	$ 1,681	$ 562	$ 199	$ 450	$ 108	$ 335	$ 27
15.04	Total Maintenance Station Equipment		Sum	$ 34,137	$ 11,415	$ 4,041	$ 9,141	$ 2,189	$ 6,794	$ 557
	Maintenance Overhead Lines									
16.00	Maintenance Overhead Lines	d	3.01	$ 157,519	$ 52,675	$ 18,648	$ 42,180	$ 10,098	$ 31,349	$ 2,569
16.01	Maintenance Overhead Lines-Labor	d	3.01	$ 114,174	$ 38,180	$ 13,517	$ 30,573	$ 7,320	$ 22,723	$ 1,862
16.02	Maintenance Overhead Lines-Benefits	d	3.01	$ 64,744	$ 21,651	$ 7,665	$ 17,337	$ 4,151	$ 12,885	$ 1,056
16.03	Maintenance Overhead Lines-Transportation	d	3.01	$ 12,907	$ 4,316	$ 1,528	$ 3,456	$ 827	$ 2,569	$ 210
16.04	Total Maintenance Overhead Lines		Sum	$ 349,345	$ 116,821	$ 41,358	$ 93,546	$ 22,396	$ 69,526	$ 5,697
	Maintenance Underground Lines									
17.00	Maintenance Underground Lines	c	4.03	$ 6,218	$ 2,740	$ 837	$ 1,296	$ 302	$ 949	$ 93
17.01	Maintenance Underground Lines-Labor	c	4.03	$ 18,618	$ 8,204	$ 2,507	$ 3,882	$ 905	$ 2,840	$ 279
17.02	Maintenance Underground Lines-Benefits	c	4.03	$ 14,396	$ 6,344	$ 1,938	$ 3,002	$ 700	$ 2,196	$ 216
17.03	Maintenance Underground Lines-Transportation	c	4.03	$ 1,988	$ 876	$ 268	$ 415	$ 97	$ 303	$ 30
17.04	Total Maintenance Underground Lines		Sum	$ 41,220	$ 18,164	$ 5,550	$ 8,595	$ 2,004	$ 6,288	$ 619
	Maintenance Line Transformers									
18.00	Maintenance Line Transformers	c	4.03	$ 16,119	$ 7,103	$ 2,170	$ 3,361	$ 784	$ 2,459	$ 242
18.01	Maintenance Line Transformers-Labor	c	4.03	$ 783	$ 345	$ 105	$ 163	$ 38	$ 119	$ 12
18.02	Maintenance Line Transformers-Benefits	c	4.03	$ (511)	$ (225)	$ (69)	$ (107)	$ (25)	$ (78)	$ (8)
18.03	Maintenance Line Transformers-Transportation	c	4.03	$ 61	$ 27	$ 8	$ 13	$ 3	$ 9	$ 1
18.04	Total Maintenance Line Transformers		Sum	$ 16,452	$ 7,250	$ 2,215	$ 3,430	$ 800	$ 2,510	$ 247

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Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Maintenance Street Lights									
19.00	Maintenance Street Lights	c	1.06	$ 16,179	$ -	$ -	$ -	$ -	$ -	$ 16,179
19.01	Maintenance Street Lights-Labor	c	1.06	$ 17,761	$ -	$ -	$ -	$ -	$ -	$ 17,761
19.02	Maintenance Street Lights-Benefits	c	1.06	$ 8,363	$ -	$ -	$ -	$ -	$ -	$ 8,363
19.03	Maintenance Street Lights-Transportation	c	1.06	$ 2,375	$ -	$ -	$ -	$ -	$ -	$ 2,375
19.04	Total Maintenance Street Lights		Sum	$ 44,677	$ -	$ -	$ -	$ -	$ -	$ 44,677
	Maintenance-Meters									
20.00	Maintenance-Meters	c	4.04	$ 6,431	$ 4,939	$ 1,192	$ 200	$ 14	$ 86	$ -
20.01	Maintenance-Meters-Labor	c	4.04	$ 52,485	$ 40,306	$ 9,732	$ 1,632	$ 116	$ 699	$ -
20.02	Maintenance-Meters-Benefits	c	4.04	$ 30,227	$ 23,213	$ 5,605	$ 940	$ 67	$ 402	$ -
20.03	Maintenance-Meters-Transportation	c	4.04	$ 5,451	$ 4,186	$ 1,011	$ 169	$ 12	$ 73	$ -
20.04	Total Maintenance-Meters		Sum	$ 94,594	$ 72,644	$ 17,541	$ 2,941	$ 209	$ 1,259	$ -
	Maintenance Misc Distribution Plant									
21.00	Maintenance Misc Distribution Plant	c	4.03	$ 681	$ 300	$ 92	$ 142	$ 33	$ 104	$ 10
21.01	Maintenance Misc Distribution Plant-Labor	c	4.03	$ 56,862	$ 25,057	$ 7,656	$ 11,857	$ 2,765	$ 8,675	$ 853
21.02	Maintenance Misc Distribution Plant-Benefits	c	4.03	$ 15,618	$ 6,882	$ 2,103	$ 3,257	$ 760	$ 2,383	$ 234
21.03	Maintenance Misc Distribution Plant-Transportation	c	4.03	$ 5,985	$ 2,637	$ 806	$ 1,248	$ 291	$ 913	$ 90
21.04	Total Maintenance Misc Distribution Plant		Sum	$ 79,146	$ 34,876	$ 10,656	$ 16,503	$ 3,849	$ 12,074	$ 1,188
	Supervision Customer Accounts									
22.00	Supervision Customer Accounts-Labor	c	4.01	$ 30,858	$ 23,434	$ 5,658	$ 949	$ 68	$ 406	$ 342
22.01	Supervision Customer Accounts-Benefits	c	4.01	$ 16,768	$ 12,734	$ 3,075	$ 516	$ 37	$ 221	$ 186
22.02	Supervision Customer Accounts-Transportation	c	4.01	$ 3,681	$ 2,796	$ 675	$ 113	$ 8	$ 48	$ 41
22.03	Total Supervision Customer Accounts		Sum	$ 51,307	$ 38,965	$ 9,408	$ 1,577	$ 112	$ 675	$ 569
	Meter Reading Expense									
23.00	Meter Reading Expense	c	4.01	$ 1,455	$ 1,105	$ 267	$ 45	$ 3	$ 19	$ 16
23.01	Meter Reading Expense-Labor	c	4.01	$ 20,742	$ 15,752	$ 3,804	$ 638	$ 45	$ 273	$ 230
23.02	Meter Reading Expense-Benefits	c	4.01	$ 11,790	$ 8,954	$ 2,162	$ 362	$ 26	$ 155	$ 131
23.03	Meter Reading Expense-Transportation	c	4.01	$ 2,238	$ 1,699	$ 410	$ 69	$ 5	$ 29	$ 25
23.04	Total Meter Reading Expense		Sum	$ 36,225	$ 27,510	$ 6,643	$ 1,114	$ 79	$ 477	$ 402
	Customer Records									
24.00	Customer Records & Collections Expense	c	4.01	$ 144,195	$ 109,507	$ 26,441	$ 4,433	$ 316	$ 1,898	$ 1,600
24.01	Customer Records & Collections Expense-Labor	c	4.01	$ 173,671	$ 131,892	$ 31,846	$ 5,339	$ 380	$ 2,286	$ 1,927
24.02	Customer Records & Collections Expense-Benefits	c	4.01	$ 94,798	$ 71,993	$ 17,383	$ 2,914	$ 207	$ 1,248	$ 1,052
24.03	Postage	c	4.01	$ 4,976	$ 3,779	$ 913	$ 153	$ 11	$ 66	$ 55
24.04	Customer Records Cash Over/Short	c	4.01	$ 13	$ 10	$ 2	$ 0	$ 0	$ 0	$ 0
24.05	Customer Records - Bank Service Fees	c	4.01	$ 17,908	$ 13,600	$ 3,284	$ 551	$ 39	$ 236	$ 199
24.06	Customer Records - Credit Card Fees	c	4.01	$ 35,612	$ 27,045	$ 6,530	$ 1,095	$ 78	$ 469	$ 395
24.07	Total Customer Records		Sum	$ 471,173	$ 357,826	$ 86,400	$ 14,485	$ 1,031	$ 6,202	$ 5,228

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Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Maintenance Of General Plant									
25.00	Maintenance Of General Plant	c	4.03	$ 69,681	$ 30,706	$ 9,381	$ 14,530	$ 3,389	$ 10,630	$ 1,046
25.01	Maintenance Of General Plant-Labor	c	4.03	$ 2,284	$ 1,007	$ 308	$ 476	$ 111	$ 348	$ 34
25.02	Maintenance Of General Plant-Benefits	c	4.03	$ 1,109	$ 489	$ 149	$ 231	$ 54	$ 169	$ 17
25.03	Maintenance Of General Plant-Transportation	c	4.03	$ 149	$ 66	$ 20	$ 31	$ 7	$ 23	$ 2
25.04	Total Maintenance Of General Plant		Sum	$ 73,224	$ 32,267	$ 9,858	$ 15,268	$ 3,561	$ 11,171	$ 1,099
26.00	Subtotal Electric Operating & Maintenance Expense			$ 14,777,009	$ 4,582,223	$ 1,836,310	$ 3,812,262	$ 1,162,277	$ 3,126,142	$ 257,795
26.01	Subtotal Electric O&M Excluding Purchased Power			$ 1,927,231	$ 1,004,333	$ 280,318	$ 296,039	$ 66,324	$ 211,499	$ 68,716
26.02	**Electric O&M Excluding Purchased Power Allocator**	w		100.00%	52.11%	14.55%	15.36%	3.44%	10.97%	3.57%
	Electric O&M Excluding Purchased Power			**$ 1,927,231**	**$ 1,004,333**	**$ 280,318**	**$ 296,039**	**$ 66,324**	**$ 211,499**	**$ 68,716**
	Customer-Related	**c**		$ 1,282,431	$ 788,712	$ 203,982	$ 123,378	$ 24,987	$ 83,172	$ 58,201
	Energy-Related	**e**		$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Demand-Related	**d**		$ 644,799	$ 215,621	$ 76,336	$ 172,661	$ 41,338	$ 128,327	$ 10,516

General & Administrative Expenses

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Administration - Other									
27.00	Customer Assistance Expense	w	26.02	$ 3,379	$ 1,761	$ 492	$ 519	$ 116	$ 371	$ 120
27.01	Informational Advertising Expense	w	26.02	$ 4,572	$ 2,383	$ 665	$ 702	$ 157	$ 502	$ 163
27.02	Administrative & General-Salaries	w	26.02	$ 306,658	$ 159,808	$ 44,604	$ 47,105	$ 10,553	$ 33,653	$ 10,934
27.03	Administrative & General-Benefits	w	26.02	$ 152,654	$ 79,552	$ 22,204	$ 23,449	$ 5,253	$ 16,753	$ 5,443
27.04	Office Supplies And Expenses	w	26.02	$ 26,862	$ 13,999	$ 3,907	$ 4,126	$ 924	$ 2,948	$ 958
27.05	Consulting Fees	w	26.02	$ 97,087	$ 50,595	$ 14,121	$ 14,913	$ 3,341	$ 10,655	$ 3,462
27.06	Investment Management Expense	w	26.02	$ 23,888	$ 12,448	$ 3,474	$ 3,669	$ 822	$ 2,621	$ 852
27.07	Property Insurance	w	26.02	$ 6,190	$ 3,226	$ 900	$ 951	$ 213	$ 679	$ 221
27.08	Injuries & Damages Expense	w	26.02	$ 67,740	$ 35,301	$ 9,853	$ 10,405	$ 2,331	$ 7,434	$ 2,415
27.09	Injuries & Damages Expense-Labor	w	26.02	$ 5,905	$ 3,077	$ 859	$ 907	$ 203	$ 648	$ 211
27.10	Injuries & Damages Expense-Benefits	w	26.02	$ 3,354	$ 1,748	$ 488	$ 515	$ 115	$ 368	$ 120
27.11	Injuries & Damages Expense-Transporation	w	26.02	$ 829	$ 432	$ 121	$ 127	$ 29	$ 91	$ 30
27.12	Institutional Advertising Expense	w	26.02	$ 10,457	$ 5,449	$ 1,521	$ 1,606	$ 360	$ 1,148	$ 373
27.13	Miscellaneous General Expense	w	26.02	$ 53,958	$ 28,119	$ 7,848	$ 8,288	$ 1,857	$ 5,922	$ 1,924
27.14	Total Administrative-Other		Sum	$ 763,533	$ 397,898	$ 111,057	$ 117,285	$ 26,276	$ 83,792	$ 27,224
	ASU Administrative Support Costs									
28.00	Legal	w	26.02	$ 106,501	$ 55,501	$ 15,491	$ 16,359	$ 3,665	$ 11,688	$ 3,797
28.01	Human Resources	w	26.02	$ 17,351	$ 9,042	$ 2,524	$ 2,665	$ 597	$ 1,904	$ 619
28.02	Information Technology	w	26.02	$ 16,788	$ 8,749	$ 2,442	$ 2,579	$ 578	$ 1,842	$ 599
28.03	Administrative Supervision	w	26.02	$ 60,940	$ 31,758	$ 8,864	$ 9,361	$ 2,097	$ 6,688	$ 2,173
28.04	Total ASU Administrative Support Costs		Sum	$ 201,580	$ 105,049	$ 29,320	$ 30,964	$ 6,937	$ 22,122	$ 7,187

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For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Increase in Salary and Benefits									
29.00	A&G Related	w	26.02	$ 43,881	$ 22,868	$ 6,383	$ 6,741	$ 1,510	$ 4,816	$ 1,565
29.01	Customer Service Related	c	4.01	$ 27,970	$ 21,241	$ 5,129	$ 860	$ 61	$ 368	$ 310
29.02	Distribution Related	c	4.03	$ 48,950	$ 21,570	$ 6,590	$ 10,207	$ 2,380	$ 7,468	$ 735
29.03	Contract Related	c	4.04	$ 1,342	$ 1,030	$ 249	$ 42	$ 3	$ 18	$ -
29.04	Total Increase in Salary and Benefits		Sum	$ 122,143	$ 66,710	$ 18,351	$ 17,849	$ 3,955	$ 12,669	$ 2,609
30.00	**Total O&M**		Sum	$ 15,864,264	$ 5,151,880	$ 1,995,038	$ 3,978,361	$ 1,199,445	$ 3,244,725	$ 294,816
30.01	Total O&M Allocator			100.00%	32.47%	12.58%	25.08%	7.56%	20.45%	1.86%
30.02	Total O&M Less Purchased Power		Sum	$ 3,014,487	$ 1,573,990	$ 439,046	$ 462,138	$ 103,493	$ 330,083	$ 105,737
30.03	Total O&M Less Purchased Power Allocator			100.00%	52.21%	14.56%	15.33%	3.43%	10.95%	3.51%
	Total O&M Excluding Purchased Power			**$ 3,014,487**	**$ 1,573,990**	**$ 439,046**	**$ 462,138**	**$ 103,493**	**$ 330,083**	**$ 105,737**
	Customer-Related	c		$ 2,032,105	$ 1,245,481	$ 322,744	$ 199,081	$ 40,513	$ 134,571	$ 89,716
	Energy-Related	e		$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Demand-Related	d		$ 982,381	$ 328,509	$ 116,302	$ 263,058	$ 62,980	$ 195,512	$ 16,021
	Depreciation and Property Transaction Expense									
31.00	Depreciation	d	3.01	$ 1,014,563	$ 339,270	$ 120,112	$ 271,675	$ 65,043	$ 201,917	$ 16,546
31.01	Amortization of Regulatory Asset and Gain on Old Trucks	d	3.01	$ 44,560	$ 14,901	$ 5,275	$ 11,932	$ 2,857	$ 8,868	$ 727
31.02	Gain/Loss Disposing Utility Property	d	3.01	$ 3,376	$ 1,129	$ 400	$ 904	$ 216	$ 672	$ 55
31.03	Sale Of Surplus Property	d	3.01	$ (850)	$ (284)	$ (101)	$ (228)	$ (55)	$ (169)	$ (14)
31.04	Total Depreciation and Property Transaction Expense		Sum	$ 1,061,648	$ 355,015	$ 125,686	$ 284,283	$ 68,062	$ 211,288	$ 17,314
	Interest Expense									
	Interest Expense:									
32.00	Interest Expense Consumer Deposits	c	4.01	$ 12,933	$ 9,822	$ 2,372	$ 398	$ 28	$ 170	$ 144
32.01	Total Interest Expense		Sum	$ 12,933	$ 9,822	$ 2,372	$ 398	$ 28	$ 170	$ 144
	Total Expenses									
33.00	Total Expenses			$ 16,938,845	$ 5,516,717	$ 2,123,095	$ 4,263,042	$ 1,267,535	$ 3,456,183	$ 312,273
33.01	Total Expenses Less Purchased Power			$ 4,089,067	$ 1,938,827	$ 567,104	$ 746,819	$ 171,582	$ 541,541	$ 123,194
	Total Expenses			**$ 16,938,845**	**$ 5,516,717**	**$ 2,123,095**	**$ 4,263,042**	**$ 1,267,535**	**$ 3,456,183**	**$ 312,273**
	Customer-Related	c		$ 1,978,936	$ 1,261,630	$ 326,643	$ 199,734	$ 40,559	$ 60,510	$ 89,860
	Energy-Related	e		$ 4,893,995	$ 1,289,237	$ 575,945	$ 1,302,702	$ 477,580	$ 1,163,968	$ 84,563
	Demand-Related	d		$ 10,065,913	$ 2,965,850	$ 1,220,507	$ 2,760,605	$ 749,396	$ 2,231,704	$ 137,851
	Total Expenses Less Purchased Power			**$ 4,089,067**	**$ 1,938,827**	**$ 567,104**	**$ 746,819**	**$ 171,582**	**$ 541,541**	**$ 123,194**
	Customer-Related	c		$ 2,045,038	$ 1,255,303	$ 325,116	$ 199,478	$ 40,541	$ 134,741	$ 89,860
	Energy-Related	e		$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Demand-Related	d		$ 2,044,029	$ 683,524	$ 241,988	$ 547,341	$ 131,041	$ 406,800	$ 33,335

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description		Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
	Net Income and Return on Rate Base									
34.00	Net Income		Sum	$ 35,221	$ (277,906)	$ 27,876	$ (140,630)	$ (13,958)	$ 408,444	$ 31,395
	Rate Base									
35.00	Plant In Service	d	3.01	$ 30,746,271	$ 10,281,567	$ 3,639,982	$ 8,233,096	$ 1,971,123	$ 6,119,079	$ 501,423
35.01	Less: Accumulated Depreciation	d	3.01	$ (12,266,604)	$ (4,101,958)	$ (1,452,216)	$ (3,284,695)	$ (786,404)	$ (2,441,282)	$ (200,049)
35.02	Net Plant in Service		Sum	$ 18,479,667	$ 6,179,609	$ 2,187,766	$ 4,948,401	$ 1,184,719	$ 3,677,797	$ 301,374
35.03	Construction Work in Progress	d	3.01	$ 62,292	$ 20,831	$ 7,375	$ 16,680	$ 3,994	$ 12,397	$ 1,016
35.04	Investments - Blue Ridge Electric Membership Corporation	c	4.03	$ 6,973,506	$ 3,072,942	$ 938,871	$ 1,454,097	$ 339,116	$ 1,063,840	$ 104,640
35.05	Investments - North Carolina Electric Membership Corporation	c	4.03	$ 407,837	$ 179,717	$ 54,909	$ 85,041	$ 19,833	$ 62,217	$ 6,120
35.06	Regulatory Asset (Unamortized Old Meters)	c	4.01	$ 139,708	$ 106,100	$ 25,619	$ 4,295	$ 306	$ 1,839	$ 1,550
35.07	Regulatory Asset (Hydro Removal and Clean-up)	d	3.02	$ 52,500	$ 14,937	$ 6,404	$ 14,485	$ 4,047	$ 11,943	$ 684
35.08	Regulatory Liabililty on Gain from Old Trucks	d	3.01	$ 13,381	$ 4,475	$ 1,584	$ 3,583	$ 858	$ 2,663	$ 218
35.09	Prepayments	d	3.01	$ 34,573	$ 11,561	$ 4,093	$ 9,258	$ 2,216	$ 6,881	$ 564
35.10	Working Capital	d	3.01	$ 895,981	$ 299,616	$ 106,073	$ 239,922	$ 57,441	$ 178,317	$ 14,612
35.11	**Total Rate Base**		Sum	**$ 27,059,446**	**$ 9,889,788**	**$ 3,332,694**	**$ 6,775,762**	**$ 1,612,529**	**$ 5,017,895**	**$ 430,778**
35.12	**Current Return on Rate Base**		Calc	**0.13%**	**-2.81%**	**0.84%**	**-2.08%**	**-0.87%**	**8.14%**	**7.29%**
36.00	**Proposed Return on Rate Base**		Pulled	**6.97%**	**6.97%**	**6.97%**	**6.97%**	**6.97%**	**6.97%**	**6.97%**
36.01	Targeted Net Income		Calc	$ 1,884,690	$ 688,824	$ 232,122	$ 471,932	$ 112,313	$ 349,496	$ 30,004
36.02	**Revenue Requirement before Uncollectible Accounts Adder**		Sum	**$ 18,685,051**	**$ 6,099,997**	**$ 2,332,255**	**$ 4,726,447**	**$ 1,379,641**	**$ 3,804,434**	**$ 342,277**
36.03	Additional Revenue Requirement to Cover Uncollectible Accounts	c	REV2	$ 21,250	$ 8,409	$ 3,486	$ 6,739	$ 2,053	$ -	$ 563
36.04	Additional Revenue Requirement to Cover Regulatory Commission Expense	c	REV1	$ 26,274	$ 8,011	$ 3,321	$ 6,420	$ 1,956	$ 6,029	$ 536
36.05	**Total Revenue Requirement to Recover from Rates**		Sum	**$ 18,732,574**	**$ 6,116,417**	**$ 2,339,061**	**$ 4,739,606**	**$ 1,383,650**	**$ 3,810,463**	**$ 343,376**
36.06	Total Current Rate Revenues		Pulled	$ 16,835,581	$ 5,133,268	$ 2,128,008	$ 4,113,885	$ 1,253,370	$ 3,863,382	$ 343,668
36.07	**Total Revenue Increase(Decrease) Required**		Sum	**$ 1,896,992**	**$ 983,149**	**$ 211,053**	**$ 625,721**	**$ 130,280**	**$ (52,918)**	**$ (292)**
36.08	**Total Percent Increase(Decrease) Required**		Calc	**11.27%**	**19.15%**	**9.92%**	**15.21%**	**10.39%**	**-1.37%**	**-0.09%**
36.09	*Current Base Rate Revenues*		*Pulled*	*$ 13,806,599*	*$ 4,335,335*	*$ 1,771,545*	*$ 3,307,619*	*$ 957,787*	*$ 3,142,981*	*$ 291,331*
36.10	*Base Revenue Increase(Decrease) Required*		*Sum*	*$ 4,925,975*	*$ 1,781,082*	*$ 567,516*	*$ 1,431,987*	*$ 425,863*	*$ 667,483*	*$ 52,045*
36.11	*Base Percent Increase(Decrease) Required*		*Calc*	*35.68%*	*41.08%*	*32.04%*	*43.29%*	*44.46%*	*21.24%*	*17.86%*

		Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
Total Revenue Requirement to Recover from Rates		**$ 18,685,051**	**$ 6,099,997**	**$ 2,332,255**	**$ 4,726,447**	**$ 1,379,641**	**$ 3,804,434**	**$ 342,277**
Customer-Related	c	$ 2,364,293	$ 1,390,024	$ 374,681	$ 298,708	$ 65,374	$ 137,823	$ 97,682
Energy-Related	e	$ 4,893,995	$ 1,289,237	$ 575,945	$ 1,302,702	$ 477,580	$ 1,163,968	$ 84,563
Demand-Related	d	$ 11,426,763	$ 3,420,736	$ 1,381,628	$ 3,125,037	$ 836,686	$ 2,502,642	$ 160,032

		Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting
Rev Req to Recover from Rates Adj. for Uncollectible Accounts & Reg. Fee		**$ 18,732,574**	**$ 6,116,417**	**$ 2,339,061**	**$ 4,739,606**	**$ 1,383,650**	**$ 3,810,463**	**$ 343,376**
Customer-Related	c	$ 2,411,816	$ 1,406,443	$ 381,488	$ 311,867	$ 69,384	$ 143,853	$ 98,781
Energy-Related	e	$ 4,893,995	$ 1,289,237	$ 575,945	$ 1,302,702	$ 477,580	$ 1,163,968	$ 84,563
Demand-Related	d	$ 11,426,763	$ 3,420,736	$ 1,381,628	$ 3,125,037	$ 836,686	$ 2,502,642	$ 160,032

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Cost of Service Analysis
For Twelve Months Ended December 31, 2016

Line	Description	Allocation Factors	Total System	Residential	Commercial Non-Demand	Commercial Demand	Comm Demand High LF >65%	ASU Campus	Security Lighting

Total Revenue Requirement Check:		
COS Revenue Requirement	$	18,732,574
Total Revenue Requirement	$	18,732,574
Check: Should be $0	$	-

Allocation Check: Should be $0.
$ -

Allocation Check: Should be $0.
$ -

Total Other Revenue

Total	$	138,485	$	105,544	$	22,963	$	8,526	$	207	$	1,245	$	-
Customer Related	$	138,485	$	105,544	$	22,963	$	8,526	$	207	$	1,245	$	-
Energy Related	$	-	$	-	$	-	$	-	$	-	$	-	$	-
Demand Related	$	-	$	-	$	-	$	-	$	-	$	-	$	-

<-- Do not delete this row. It is used in all allocation formulas.

Allocation Check: Should be $0.
$ -

Allocation Check: Should be $0.

$ -

Allocation Check: Should be $0.
$ -

Allocation Check: Should be $0.
$ -

Allocation Check: Should be $0.

$ -

Weighted Functional Costs for O&M excluding PP - Line: 26.02

Total	$ 1,008,994	$ 525,815	$ 146,760	$ 154,990	$ 34,724	$ 110,730	$ 35,976
Customer Related	$ 671,412	$ 412,927	$ 106,794	$ 64,594	$ 13,082	$ 43,545	$ 30,471
Energy Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Related	$ 337,582	$ 112,888	$ 39,966	$ 90,396	$ 21,642	$ 67,185	$ 5,505

Weighted Functional Costs for O&M excluding PP - Line: 26.02

Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Customer Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Energy Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Allocation Check: Should be $0.

$ -

Rate Base:

Weighted Functional Costs for O&M ecluding PP - Line: 26.02

Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Customer Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Energy Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Return on Rate Base:

Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Customer Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Energy Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Demand Related	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Allocation Check: Should be $0.
$ -

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Oct 31 2017

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Current and Proposed Rate Design
For Twelve Months Ended December 31, 2016

Line	Description	Billing Determinants	Current Rates	Current Rate Revenues	Proposed Rates	Proposed Revenue	Increase (Decrease)	Percent Increase
1	**Residential Service:**							
2	Basic Facilities Charge	6,188	$ 6.29	$ 467,077	$ 12.58	$ 934,153	$ 467,077	100.00%
3	Energy Charge:							
4	Base Energy - All kWh	53,270,063	$ 0.072616	$ 3,868,259	$ 0.097283	$ 5,182,272	$ 1,314,013	33.97%
5	PPA Energy - All kWh		$ 0.014979	$ 797,932	$ -	$ -	$ (797,932)	-100.00%
6	Total Energy - All kWh		$ 0.087595	$ 4,666,191	$ 0.097283	$ 5,182,272	$ 516,080	11.06%
7	***Total Residential Service***			***$ 5,133,268***		***$ 6,116,425***	***$ 983,157***	**19.15%**
8	**Commercial Non-Demand Service:**							
9	Basic Facilities Charge	1,494	$ 8.71	$ 156,170	$ 17.42	$ 312,341	$ 156,170	100.00%
10	Energy Charge:							
11	Base Energy - All kWh	23,797,508	$ 0.067880	$ 1,615,375	$ 0.085165	$ 2,026,715	$ 411,340	25.46%
12	PPA Energy - All kWh		$ 0.014979	$ 356,463	$ -	$ -	$ (356,463)	-100.00%
13	Total Energy - All kWh		$ 0.082859	$ 1,971,838	$ 0.085165	$ 2,026,715	$ 54,877	2.78%
14	***Total Commercial Non-Demand Service***			***$ 2,128,008***		***$ 2,339,055***	***$ 211,047***	**9.92%**
15	**Commercial Demand Service:**							
16	Basic Facilities Charge	251	$ 11.61	$ 34,900	$ 23.22	$ 69,799	$ 34,900	100.00%
17	Demand Charge:							
18	All kW	180,773	$ 8.27	$ 1,494,995	$ 8.27	$ 1,494,995	$ -	0.00%
19	Energy Charge:							
20	Base Energy - All kWh	53,826,414	$ 0.033027	$ 1,777,725	$ 0.058982	$ 3,174,790	$ 1,397,065	78.59%
21	PPA Energy - All kWh		$ 0.014979	$ 806,266	$ -	$ -	$ (806,266)	-100.00%
22	Total Energy - All kWh		$ 0.048006	$ 2,583,991	$ 0.058982	$ 3,174,790	$ 590,799	22.86%
23	***Total Commercial Demand Service***			***$ 4,113,885***		***$ 4,739,584***	***$ 625,698***	**15.21%**
24	**Commercial Demand High Load Factor Service:**							
25	Basic Facilities Charge	18	$ 11.61	$ 2,485	$ 23.22	$ 4,969	$ 2,485	100.00%
26	Demand Charge:							
27	All kW	36,708	$ 8.27	$ 303,576	$ 10.00	$ 367,081	$ 63,505	20.92%
28	Energy Charge:							
29	Base Energy - All kWh	19,733,160	$ 0.033027	$ 651,727	$ 0.051264	$ 1,011,601	$ 359,874	55.22%
30	PPA Energy - All kWh		$ 0.014979	$ 295,583	$ -	$ -	$ (295,583)	-100.00%
31	Total Energy - All kWh		$ 0.048006	$ 947,310	$ 0.051264	$ 1,011,601	**$ 64,291**	6.79%
32	***Total Commercial Demand High Load Factor Service***			***$ 1,253,370***		***$ 1,383,651***	***$ 130,280***	**10.39%**
33	**ASU Service:**		*Current Structure*		*Master Meter Structure*			
34	Basic Facilities Charge (Meters at Customer Premises)	107	$ 11.61	$ 14,942				
35	Distribution Facilities Charge (NCP at ASU Substation)	99,961			*$ 8.96*	$ 895,651		
36	Demand Charge:							
37	All kW (NCP at Customer Premises)	95,837	$ -	$ -				
38	All kW (NCP at ASU Substation)	99,961			*$ 8.75*	$ 874,659		
39	Energy Charge:							
40	All kWh (at Customer Premises)	48,094,075						
41	All kWh (at ASU Substation)	50,163,918						
42	Base Energy Charge - All kWh		$ 0.065040	$ 3,128,039	*$ 0.040670*	$ 2,040,167		
43	PPA Energy Charge - All kWh		$ 0.014979	$ 720,401	$ -	$ -		
44	Total Energy Charge - All kWh		$ 0.080019	$ 3,848,440	*$ 0.040670*	$ 2,040,167		
45	***Total ASU Service***			***$ 3,863,382***		***$ 3,810,477***	***$ (52,905)***	**-1.37%**
46	**Security Lighting:**							
47	*Base Charge*							
48	175 Watt MV	242	$ 7.82	$ 22,720	$ 8.95	$ 25,991	$ 3,271	14.40%
49	400 Watt MV	5	$ 13.92	$ 835	$ 16.40	$ 984	$ 149	17.79%
50	150 Watt SV	146	$ 7.55	$ 13,228	$ 8.60	$ 15,067	$ 1,839	13.90%
51	250 Watt SV	434	$ 10.93	$ 56,900	$ 12.50	$ 65,100	$ 8,200	14.41%
52	400 Watt MH	423	$ 16.40	$ 83,263	$ 18.88	$ 95,835	$ 12,572	15.10%
53	250 Watt MH	243	$ 13.24	$ 38,594	$ 14.81	$ 43,186	$ 4,592	11.90%
54	100 Watt SV TOB	2	$ 2.26	$ 54	$ 2.81	$ 67	$ 13	24.16%
55	150 Watt SV TOB	89	$ 3.19	$ 3,407	$ 4.24	$ 4,528	$ 1,121	32.90%
56	175 Watt MV TOB	301	$ 3.82	$ 13,811	$ 4.95	$ 17,879	$ 4,068	29.45%
57	250 Watt SV TOB	173	$ 5.49	$ 11,388	$ 7.06	$ 14,657	$ 3,269	28.71%
58	400 Watt MV TOB	11	$ 8.81	$ 1,163	$ 11.29	$ 1,490	$ 327	28.10%
59	400 Watt SV TOB	429	$ 8.81	$ 45,371	$ 11.29	$ 58,121	$ 12,750	28.10%
60	750 Watt SV TOB	3	$ 16.54	$ 595	$ 21.18	$ 762	$ 167	28.07%
61	*PPA Charge*							
62	175 Watt MV		$ 1.13	$ 3,271	$ -	$ -	$ (3,271)	-100.00%
63	400 Watt MV		$ 2.48	$ 149	$ -	$ -	$ (149)	-100.00%
64	150 Watt SV		$ 1.05	$ 1,839	$ -	$ -	$ (1,839)	-100.00%
65	250 Watt SV		$ 1.57	$ 8,200	$ -	$ -	$ (8,200)	-100.00%
66	400 Watt MH		$ 2.48	$ 12,572	$ -	$ -	$ (12,572)	-100.00%
67	250 Watt MH		$ 1.57	$ 4,592	$ -	$ -	$ (4,592)	-100.00%
68	100 Watt SV TOB		$ 0.55	$ 13	$ -	$ -	$ (13)	-100.00%
69	150 Watt SV TOB		$ 1.05	$ 1,121	$ -	$ -	$ (1,121)	-100.00%
70	175 Watt MV TOB		$ 1.13	$ 4,068	$ -	$ -	$ (4,068)	-100.00%
71	250 Watt SV TOB		$ 1.57	$ 3,269	$ -	$ -	$ (3,269)	-100.00%
72	400 Watt MV TOB		$ 2.48	$ 327	$ -	$ -	$ (327)	-100.00%
73	400 Watt SV TOB		$ 2.48	$ 12,750	$ -	$ -	$ (12,750)	-100.00%
74	750 Watt SV TOB		$ 4.64	$ 167	$ -	$ -	$ (167)	-100.00%
75	*Total Charge*							
76	175 Watt MV		$ 8.95	$ 25,991	$ 8.95	$ 25,991	$ -	0.00%

Assumptions for Master Meter Structure:
1. The **Distribution Facilities Charge** recovers all fixed customer and distribution facility costs associated with ASU.
2. The **Demand and Energy Charges** recover all purchased power related costs associated with ASU.

Classification	COS Target Cost	Unit Cost	% Change
Customer Related	$ 1,406,443	$ 18.94	
Demand Related	$ 3,420,736		
Energy Related	$ 1,289,237	$ 0.088417	
Total	$ 6,116,417		19.15%
Customer Related	$ 381,488	$ 21.28	
Demand Related	$ 1,381,628		
Energy Related	$ 575,945	$ 0.082260	
Total	$ 2,339,061		9.92%
Customer Related	$ 311,867	$ 103.75	
Demand Related	$ 3,125,037	$ 17.29	
Energy Related	$ 1,302,702	$ 0.024202	
Total	$ 4,739,606		15.21%
Customer Related	$ 69,384	$ 324.22	
Demand Related	$ 836,686	$ 22.79	
Energy Related	$ 477,580	$ 0.024202	
Total	$ 1,383,650		10.39%
Current Structure:			
Customer Related	$ 143,853	$ 111.77	
Demand Related	$ 2,502,642	$ 26.11	
Energy Related	$ 1,163,968	$ 0.024202	
Total	$ 3,810,463		-1.37%
Master Meter Structure:			
Customer Related	$ 143,853	$ 0.12	
Demand Related	$ 2,502,642	$ 25.04	
Energy Related	$ 1,163,968	$ 0.023203	
Total	$ 3,810,463		-1.37%
Purchased Power			
Demand Related	$ 1,750,674	$ 17.51	
Energy Related	$ 1,163,968	$ 0.023203	
Total	$ 2,914,642		
Facilities Related	$ 895,821	$ 8.96	
Customer Related	$ 98,781		

From current PPA filed with NCUC January 25, 2017:
$ 0.014958 Increase in Base Rates for 2017 PPA
$ 0.014979 Increase in Base Rates for 2017 PPA adjusted for Reg. Fee
$ 0.010241 Current Base Rates PPA Factor Grossed up for Reg. Factor
$ 0.004738 Net Increase in PPA Factor Adjusted for Gross Receipts Tax and Regulatory Fee

Actual Watts	Hours Burned	Monthly kWh	Individual Mthly kWh
206	12	18,196	75.2
453	12	827	165.3
192	12	10,232	70.1
288	12	45,622	105.1
453	12	69,941	165.3
288	12	25,544	105.1
100	12	73	36.5
192	12	6,237	70.1
206	12	22,632	75.2
288	12	18,186	105.1
453	12	1,819	165.3
453	12	70,933	165.3
849	12	930	309.9
		291,171	

PPA / kWh	PPA Charge
$ 0.014979	$ 1.13
$ 0.014979	$ 2.48
$ 0.014979	$ 1.05
$ 0.014979	$ 1.57
$ 0.014979	$ 2.48
$ 0.014979	$ 1.57
$ 0.014979	$ 0.55
$ 0.014979	$ 1.05
$ 0.014979	$ 1.13
$ 0.014979	$ 1.57
$ 0.014979	$ 2.48
$ 0.014979	$ 2.48
$ 0.014979	$ 4.64

Docket No. E-34, Sub 46
Appalachian State University
d/b/a New River Light and Power Company
Current and Proposed Rate Design
For Twelve Months Ended December 31, 2016

Line	Description	Billing Determinants	Current Rates	Current Rate Revenues	Proposed Rates	Proposed Revenue	Increase (Decrease)	Percent Increase
77	400 Watt MV		$ 16.40	$ 984	$ 16.40	$ 984	$ -	0.00%
78	150 Watt SV		$ 8.60	$ 15,067	$ 8.60	$ 15,067	$ -	0.00%
79	250 Watt SV		$ 12.50	$ 65,100	$ 12.50	$ 65,100	$ -	0.00%
80	400 Watt MH		$ 18.88	$ 95,835	$ 18.88	$ 95,835	$ -	0.00%
81	250 Watt MH		$ 14.81	$ 43,186	$ 14.81	$ 43,186	$ -	0.00%
82	100 Watt SV TOB		$ 2.81	$ 67	$ 2.81	$ 67	$ -	0.00%
83	150 Watt SV TOB		$ 4.24	$ 4,528	$ 4.24	$ 4,528	$ -	0.00%
84	175 Watt MV TOB		$ 4.95	$ 17,879	$ 4.95	$ 17,879	$ -	0.00%
85	250 Watt SV TOB		$ 7.06	$ 14,657	$ 7.06	$ 14,657	$ -	0.00%
86	400 Watt MV TOB		$ 11.29	$ 1,490	$ 11.29	$ 1,490	$ -	0.00%
87	400 Watt SV TOB		$ 11.29	$ 58,121	$ 11.29	$ 58,121	$ -	0.00%
88	750 Watt SV TOB		$ 21.18	$ 762	$ 21.18	$ 762	$ -	0.00%
89	Estimated kWh Usage	3,494,053						
90	***Total Security Lighting***			***$ 343,668***		***$ 343,668***	***$ -***	**0.00%**
91	**Total System:**							
92	**Total Customers (Excluding Security Lighting)**	**8,058**						
93	**Total kWh Usage**	**202,215,273**						
94	**Total Base Revenues**			**$ 13,806,599**		**$ 18,732,860**	**$ 4,926,261**	**35.68%**
95	**Total PPA Revenues**			**$ 3,028,983**		**$ -**	**$ (3,028,983)**	**-100.00%**
96	**Total Revenues**			**$ 16,835,581**		**$ 18,732,860**	**$ 1,897,278**	**11.27%**
97	*Facilities Charge*			*$ 1,019,241*		*$ 2,560,582*	*$ 1,541,340*	*151.22%*
98	*Demand Charge*			*$ 1,798,571*		*$ 2,736,735*	*$ 938,164*	*52.16%*
99	*Energy Charge*			*$ 14,017,770*		*$ 13,435,543*	*$ (582,226)*	*-4.15%*

Classification	COS Target Cost	Unit Cost	% Change
Demand Related	$ 160,032		
Energy Related	$ 84,563		
Total	$ 343,376	Calculated	-0.09%
		Used	0.00%

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Proposed Monthly Charges for New LED Lighting

Line	Light and Pole Costs	Cost			Life	ROR	Monthly Cost
		Material	Installation	Total			
1	Monthly Light Costs:						
2	100 Watt Yard Light	$ 133.44	$ 160.94	$ 294.38	20	6.97%	$2.28
3	150 Watt Flood Light	$ 571.59	$ 160.94	$ 732.53	20	6.97%	$5.66
4	266 Watt Flood Light	$ 806.80	$ 160.94	$ 967.74	20	6.97%	$7.48
5	162 Watt Cobra Head	$ 583.35	$ 160.94	$ 744.29	20	6.97%	$5.75
6	Monthly Pole Cost:						
7	30' Wood Pole	$ 122.38	$ 413.88	$ 536.26	30	6.97%	$3.56
8	Decorative Fiberglass Pole	$ 659.96	$ 413.88	$ 1,073.84	30	6.97%	$7.12

Line	O&M Costs	Watts	Daily Burn (Hrs)	Monthly kWh	O&M Cost / kWh	Monthly O&M Cost
9	Monthly O&M Costs:					
10	100 Watt Yard Light	100	12	37	$ 0.03026	$ 1.12
11	150 Watt Flood Light	150	12	55	$ 0.03026	$ 1.66
12	266 Watt Flood Light	266	12	97	$ 0.03026	$ 2.94
13	162 Watt Cobra Head	162	12	59	$ 0.03026	$ 1.79

Line	Purchased Power Costs	Watts	Daily Burn (Hrs)	Monthly kWh	PP Cost / kWh	Monthly PP Cost
14	Monthly Purchased Power Costs:					
15	100 Watt Yard Light	100	12	37	$ 0.05411	$ 2.00
16	150 Watt Flood Light	150	12	55	$ 0.05411	$ 2.98
17	266 Watt Flood Light	266	12	97	$ 0.05411	$ 5.25
18	162 Watt Cobra Head	162	12	59	$ 0.05411	$ 3.19

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	Monthly Light and Pole Charges	Monthly Charge	Costs Included			
			Light Cost	Pole Cost	O&M Cost	Purchased Power Cost
19	Metered Lighting Only:					
20	100 Watt Yard Light	$3.40	X		X	
21	150 Watt Flood Light	$7.33	X		X	
22	266 Watt Flood Light	$10.42	X		X	
23	162 Watt Cobra Head	$7.54	X		X	
24	Metered Lighting with Wood Pole:					
25	100 Watt Yard Light	$6.95	X	X	X	
26	150 Watt Flood Light	$10.88	X	X	X	
27	266 Watt Flood Light	$13.97	X	X	X	
28	162 Watt Cobra Head	$11.10	X	X	X	
29	Metered Lighting with Decorative Fiberglass Pole:					
30	100 Watt Yard Light	$10.51	X	X	X	
31	150 Watt Flood Light	$14.45	X	X	X	
32	266 Watt Flood Light	$17.54	X	X	X	
33	162 Watt Cobra Head	$14.66	X	X	X	
34	Unmetered Lighting Only:					
35	100 Watt Yard Light	$5.40	X		X	X
36	150 Watt Flood Light	$10.30	X		X	X
37	266 Watt Flood Light	$15.67	X		X	X
38	162 Watt Cobra Head	$10.73	X		X	X
39	Unmetered Lighting with Wood Pole:					
40	100 Watt Yard Light	$8.95	X	X	X	X
41	150 Watt Flood Light	$13.86	X	X	X	X
42	266 Watt Flood Light	$19.22	X	X	X	X
43	162 Watt Cobra Head	$14.29	X	X	X	X
44	Unmetered Lighting with Decorative Fiberglass Pole:					
45	100 Watt Yard Light	$12.52	X	X	X	X
46	150 Watt Flood Light	$17.42	X	X	X	X
47	266 Watt Flood Light	$22.79	X	X	X	X
48	162 Watt Cobra Head	$17.85	X	X	X	X

New River Light and Power Company
Rate of Return Determination

Capitalization Componants	Rates	D/E Ratio	Weighted
Current Structure			
Equity	9.70%	86%	8.37%
Debt [1]	2.52%	14%	0.34%
WACC			8.72%
Long-Term Liability: Notes Payable	$ 4,182,500		
Long-Term Interest Expense	$ 105,419		
Percent Interest Expense [1]	2.52%		
Proposd Structure:			
Equity	9.70%	50%	4.85%
Debt [2]	4.23%	50%	2.12%
WACC			**6.97%**
From Western Carolina University's 2016 Rate Case [2]	4.23%		

$ 26,393,915.76	86%
$ 4,182,500.00	14%
$ 30,576,415.76	