

**West Penn Power Company**

**Cost Baseline for Savings as a Result of the Deployment of Smart Meters  
At December 31, 2017**

<u>Line No.</u>	<u>Description</u>	<u>West Penn</u>
1	Meter reading (Page 2)	\$ 8,157,704
2	Meter services (Page 4)	3,667,318
3	Back-office (Page 6)	838,758
4	Contact Center (Page 8)	2,575,228
5	Theft of service reduction	0
6	Revenue enhancement (Page 10)	500,000
7	Avoided capital costs (Page 10)	0
8	Distribution operations	0
9	Load research (Page 11)	<u>5,161</u>
10	Total	<u>\$ 15,744,168</u>

**Meter Reading  
Cost Baseline for Smart Meter Benefit  
For the Twelve Months Ending December 2017**

Line No.

<u>Total Meter Reading Costs</u>		Total
1	Met-Ed	\$ 7,187,146
2	Penelec	\$ 5,812,481
3	Penn Power	\$ 1,189,216
4	West Penn Power	\$ 8,157,704

<u>Labor Costs</u>		Headcount	Salary	Severance Costs
5	Met-Ed	79.0	\$ 6,697,022	\$
6	Penelec	64.5	\$ 4,850,440	\$
7	Penn Power	13.0	\$ 1,049,759	\$
8	West Penn Power	99.5	\$ 6,734,332	\$

<u>Meter Reader Reductions</u>		Attrition	Retirement
9	Met-Ed	\$	\$
10	Penelec	\$	\$
11	Penn Power	\$	\$
12	West Penn Power	\$	\$

<u>Uniforms/Supplies</u>		Uniforms/ Supplies Costs
13	Met-Ed	\$ 14,735
14	Penelec	\$ 37,673
15	Penn Power	\$ 60,653
16	West Penn Power	\$ 38,328

<u>Fleet Costs</u>		Fleet Costs	Personal Mileage
17	Met-Ed	\$ 475,388	
18	Penelec	\$ 924,368	
19	Penn Power	\$ 78,804	
20	West Penn Power	\$ 1,385,044	

<u>Handheld Costs</u>		Replacement Costs	Maintenance Costs
21	Met-Ed	\$	\$
22	Penelec	\$	\$
23	Penn Power	\$	\$
24	West Penn Power	\$	\$

<u>Claims</u>		Claims Costs
25	Met-Ed	\$
26	Penelec	\$
27	Penn Power	\$
28	West Penn Power	\$

<b>Meter Reading</b> <b>Cost Baseline for Smart Meter Benefit by FERC Accounts</b> <b>For the Twelve Months Ending December 2017</b>
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Line No.

	<b><u>Salary</u></b>			
	<b><i>Met-Ed</i></b>			
1	FERC Account	593	Maintenance Overhead Lines	\$ -
2	FERC Account	902	Meter Reading Expense	\$ 5,322,853
3	FERC Account	408.1	Taxes Other than Income Taxes	\$ 410,550
4	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 963,620
5			Total	<b>\$ 6,697,022</b>
6	<b><i>Penelec</i></b>			
7	FERC Account	593	Maintenance Overhead Lines	\$ -
8	FERC Account	902	Meter Reading Expense	\$ 3,811,777
9	FERC Account	408.1	Taxes Other than Income Taxes	\$ 293,193
10	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 745,470
11			Total	<b>\$ 4,850,440</b>
12	<b><i>Penn Power</i></b>			
13	FERC Account	593	Maintenance Overhead Lines	\$ -
14	FERC Account	902	Meter Reading Expense	\$ 825,293
15	FERC Account	408.1	Taxes Other than Income Taxes	\$ 63,463
16	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 161,004
17			Total	<b>\$ 1,049,759</b>
18	<b><i>West Penn Power</i></b>			
19	FERC Account	593	Maintenance Overhead Lines	\$ (682,347)
20	FERC Account	902	Meter Reading Expense	\$ 5,966,688
21	FERC Account	408.1	Taxes Other than Income Taxes	\$ 406,339
22	FERC Account	926	A&G-Employee Pensions & Benefits	\$ 1,043,651
23			Total	<b>\$ 6,734,332</b>
	<b><u>Uniform/Supplies Costs</u></b>			
	<b><i>Met-Ed</i></b>			
24	FERC Account	902	Meter Reading Expense	\$ 14,735
	<b><i>Penelec</i></b>			
25	FERC Account	902	Meter Reading Expense	\$ 37,673
	<b><i>Penn Power</i></b>			
26	FERC Account	902	Meter Reading Expense	\$ 60,653
	<b><i>West Penn Power</i></b>			
27	FERC Account	902	Meter Reading Expense	\$ 38,328
	<b><u>Fleet Costs</u></b>			
	<b><i>Met-Ed</i></b>			
28	FERC Account	593	Maintenance Overhead Lines	\$ -
29	FERC Account	902	Meter Reading Expense	\$ 475,388
30			Total	<b>\$ 475,388</b>
	<b><i>Penelec</i></b>			
31	FERC Account	593	Maintenance Overhead Lines	\$ -
32	FERC Account	902	Meter Reading Expense	\$ 924,368
33			Total	<b>\$ 924,368</b>
	<b><i>Penn Power</i></b>			
34	FERC Account	593	Maintenance Overhead Lines	\$ -
35	FERC Account	902	Meter Reading Expense	\$ 78,804
36			Total	<b>\$ 78,804</b>
	<b><i>West Penn Power</i></b>			
37	FERC Account	593	Maintenance Overhead Lines	\$ -
38	FERC Account	902	Meter Reading Expense	\$ 1,385,044
39			Total	<b>\$ 1,385,044</b>

**Meter Services**  
**Cost Baseline for Smart Meter Benefit**  
**For the Twelve Months Ending December 2017**

Line No.

		Total Headcount	Total
<u>Total Meter Services Costs</u>			
1	Met-Ed	37	\$ 3,584,282
2	Penelec	38	\$ 3,552,696
3	Penn Power	9	\$ 766,727
4	West Penn Power	41	\$ 3,667,318

		Headcount	Salary	Severance Costs
<u>Labor Costs - Original Roles</u>				
5	Met-Ed	37	\$ 3,237,739	\$ _____
6	Penelec	38	\$ 3,207,037	\$ _____
7	Penn Power	9	\$ 760,729	\$ _____
8	West Penn Power	41	\$ 3,099,129	\$ _____

		Uniforms/ Supplies Cost
<u>Uniforms/Supplies</u>		
9	Met-Ed	\$ 106,868
10	Penelec	\$ 150,021
11	Penn Power	\$ 5,998
12	West Penn Power	\$ 117,252

		Fleet Costs
<u>Fleet Costs</u>		
13	Met-Ed	\$ 239,675
14	Penelec	\$ 195,639
15	Penn Power	\$ -
16	West Penn Power	\$ 450,937

		Replacement Costs	Maintenance Costs
<u>Original Tablet Costs</u>			
17	Met-Ed	\$ _____	\$ _____
18	Penelec	\$ _____	\$ _____
19	Penn Power	\$ _____	\$ _____
20	West Penn Power	\$ _____	\$ _____

		Costs
<u>New Device Costs</u>		
21	Met-Ed	\$ _____
22	Penelec	\$ _____
23	Penn Power	\$ _____
24	West Penn Power	\$ _____

		Cost
<u>Staff Retraining Costs</u>		
25	Met-Ed	\$ _____
26	Penelec	\$ _____
27	Penn Power	\$ _____
28	West Penn Power	\$ _____

		Headcount	Salary
<u>Labor Costs - New Roles</u>			
29	Met-Ed	_____	\$ _____
30	Penelec	_____	\$ _____
31	Penn Power	_____	\$ _____
32	West Penn Power	_____	\$ _____

**Meter Services**  
**Cost Baseline for Smart Meter Benefit by FERC Accounts**  
**For the Twelve Months Ending December 2017**

Line No.				
	<b>Salary</b>			
	<b>Met-Ed</b>			
1	FERC Account	586	Meter Expenses	\$ 1,303,867
2	FERC Account	593	Maintenance of Overhead Lines	-
3	FERC Account	597	Maintenance of Meters	1,303,867
4	FERC Account	408.1	Taxes Other than Income Taxes	189,124
5	FERC Account	920	Admin & Gen Salaries	-
6	FERC Account	926	A&G-Employee Pensions & Benefits	440,881
7			Total	<u>\$ 3,237,739</u>
	<b>Penelec</b>			
8	FERC Account	586	Meter Expenses	\$ 1,284,142
9	FERC Account	593	Maintenance of Overhead Lines	-
10	FERC Account	597	Maintenance of Meters	1,284,142
11	FERC Account	408.1	Taxes Other than Income Taxes	186,411
12	FERC Account	926	A&G-Employee Pensions & Benefits	452,341
13			Total	<u>\$ 3,207,037</u>
	<b>Penn Power</b>			
14	FERC Account	570	Maintenance of Station Equipment	\$ -
15	FERC Account	586	Meter Expenses	-
16	FERC Account	588	Misc Distribution Expenses	-
17	FERC Account	593	Maintenance of Overhead Lines	-
18	FERC Account	597	Maintenance of Meters	600,797
19	FERC Account	408.1	Taxes Other than Income Taxes	46,311
20	FERC Account	920	Admin & Gen Salaries	-
21	FERC Account	926	A&G-Employee Pensions & Benefits	113,621
22			Total	<u>\$ 760,729</u>
	<b>West Penn Power</b>			
23	FERC Account	586	Meter Expenses	\$ 2,414,387
24	FERC Account	593	Maintenance of Overhead Lines	-
25	FERC Account	597	Maintenance of Meters	-
26	FERC Account	408.1	Taxes Other than Income Taxes	193,757
27	FERC Account	926	A&G-Employee Pensions & Benefits	490,984
28			Total	<u>\$ 3,099,129</u>
	<b>Uniform/Supplies Costs</b>			
	<b>Met-Ed</b>			
29	FERC Account	586	Meter Expenses	\$ 53,434
30	FERC Account	597	Maintenance of Meters	53,434
31			Total	<u>\$ 106,868</u>
	<b>Penelec</b>			
32	FERC Account	586	Meter Expenses	\$ 75,010
33	FERC Account	597	Maintenance of Meters	75,011
34			Total	<u>\$ 150,021</u>
	<b>Penn Power</b>			
35	FERC Account	597	Maintenance of Meters	\$ 5,998
36			Total	<u>\$ 5,998</u>
	<b>West Penn Power</b>			
37	FERC Account	586	Meter Expenses	\$ 117,252
38			Total	<u>\$ 117,252</u>
	<b>Fleet Costs</b>			
	<b>Met-Ed</b>			
39	FERC Account	586	Meter Expenses	\$ -
40	FERC Account	593	Maintenance of Overhead Lines	-
41	FERC Account	597	Maintenance of Meters	239,675
42	FERC Account	920	Admin & Gen Salaries	-
43			Total	<u>\$ 239,675</u>
	<b>Penelec</b>			
44	FERC Account	586	Meter Expenses	\$ -
45	FERC Account	593	Maintenance of Overhead Lines	-
46	FERC Account	597	Maintenance of Meters	195,639
47			Total	<u>\$ 195,639</u>
	<b>Penn Power</b>			
48	FERC Account	570	Maintenance of Station Equipment	\$ -
49	FERC Account	588	Misc Distribution Expenses	-
50	FERC Account	593	Maintenance of Overhead Lines	-
51	FERC Account	597	Maintenance of Meters	-
52	FERC Account	920	Admin & Gen Salaries	-
53			Total	<u>\$ -</u>
	<b>West Penn Power</b>			
54	FERC Account	586	Meter Expenses	\$ -
55	FERC Account	593	Maintenance of Overhead Lines	-
56	FERC Account	597	Maintenance of Meters	450,937
57			Total	<u>\$ 450,937</u>

**Back Office**  
**Cost Baseline for Smart Meter Benefit**  
**For the Twelve Months Ending December 2017**

Line No.

<u>Total Back Office Costs</u>		Headcount	Salary
1	<i>Met-Ed</i>	10	\$ 773,240
2	<i>Penelec</i>	10	\$ 812,509
3	<i>Penn Power</i>	3	\$ 180,709
4	<i>West Penn Power</i>	13	\$ 838,758

<u>Labor Costs</u>		Headcount	Salary	Severance Costs
5	<i>Met-Ed</i>	10	\$ 773,240	\$ -
6	<i>Penelec</i>	10	\$ 812,509	\$ -
7	<i>Penn Power</i>	3	\$ 180,709	\$ -
8	<i>West Penn Power</i>	13	\$ 838,758	\$ -

<u>Staffing Updates</u>		Headcount Reductions
9	<i>Met-Ed</i>	-
10	<i>Penelec</i>	-
11	<i>Penn Power</i>	-
12	<i>West Penn Power</i>	-

<b>Back Office</b> <b>Cost Baseline for Smart Meter Benefit by FERC Accounts</b> <b>For the Twelve Months Ending December 2017</b>
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<u>Line No.</u>		<u>FERC Account</u>	<u>Description</u>	<u>Amount</u>
	<b><u>Salary</u></b>			
	<b><i>Met-Ed</i></b>			
1	FERC Account	903	Cust Rcrd & Collect Exp	\$ 610,397
2	FERC Account	408.1	Taxes Other than Income Taxes	\$ 47,335
3	FERC Account	926	A&G-Employee Pensions & Benefits	<u>\$ 115,508</u>
4			Total	<b>\$ 773,240</b>
	<b><i>Penelec</i></b>			
5	FERC Account	903	Cust Rcrd & Collect Exp	\$ 641,397
6	FERC Account	408.1	Taxes Other than Income Taxes	\$ 49,739
7	FERC Account	926	A&G-Employee Pensions & Benefits	<u>\$ 121,374</u>
8			Total	<b>\$ 812,509</b>
	<b><i>Penn Power</i></b>			
9	FERC Account	902	Meter Reading Expense	\$ 99,988
10	FERC Account	903	Cust Rcrd & Collect Exp	\$ 42,852
11	FERC Account	408.1	Taxes Other than Income Taxes	10,560
12	FERC Account	926	A&G-Employee Pensions & Benefits	<u>\$ 27,309</u>
13			Total	<b>\$ 180,709</b>
	<b><i>West Penn Power</i></b>			
14	FERC Account	902	Meter Reading Expense	\$ -
15	FERC Account	923	Outside Svcx Employed	662,890
16	FERC Account	408.1	Taxes Other than Income Taxes	49,006
17	FERC Account	926	A&G-Employee Pensions & Benefits	<u>\$ 126,863</u>
18			Total	<b>\$ 838,758</b>

**Contact Center  
Cost Baseline for Smart Meter Benefit  
For the Twelve Months Ending December 2017**

Line No.	<u>Total Contact Center Costs</u>	<u>Headcount</u>	<u>Salary</u>	
1	<i>Met-Ed</i>	44	\$ 1,993,656	
2	<i>Penelec</i>	46	\$ 2,094,519	
3	<i>Penn Power</i>	13	\$ 581,572	
4	<i>West Penn Power</i>	57	\$ 2,575,228	
	<u>Labor Costs</u>	<u>Headcount</u>	<u>Salary</u>	<u>Severance Costs</u>
5	<i>Met-Ed</i>	44	\$ 1,993,656	\$ -
6	<i>Penelec</i>	46	\$ 2,094,519	\$ -
7	<i>Penn Power</i>	13	\$ 581,572	\$ -
8	<i>West Penn Power</i>	57	\$ 2,575,228	\$ -
	<u>Staffing Updates</u>	<u>Additions</u>	<u>Reductions</u>	
9	<i>Met-Ed</i>	-	-	
10	<i>Penelec</i>	-	-	
11	<i>Penn Power</i>	-	-	
12	<i>West Penn Power</i>	-	-	



<p><b>Contact Center</b></p> <p><b>Cost Baseline for Smart Meter Benefit by FERC Accounts</b></p> <p><b>For the Twelve Months Ending December 2017</b></p>
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<u>Line No.</u>	<u>FERC Account</u>	<u>Description</u>	<u>Amount</u>
<b>Salary</b>			
<i>Met-Ed</i>			
1	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
2	FERC Account 910	Misc Cust Svc & Info Exp	1,576,012
3	FERC Account 408.1	Taxes Other than Income Taxes	118,375
4	FERC Account 926	A&G-Employee Pensions & Benefits	299,268
5		Total	<u>\$ 1,993,656</u>
<i>Penelec</i>			
6	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
7	FERC Account 910	Misc Cust Svc & Info Exp	1,655,746
8	FERC Account 408.1	Taxes Other than Income Taxes	124,364
9	FERC Account 926	A&G-Employee Pensions & Benefits	314,409
10		Total	<u>\$ 2,094,519</u>
<i>Penn Power</i>			
11	FERC Account 903	Cust Rcrd & Collect Exp	\$ -
12	FERC Account 910	Misc Cust Svc & Info Exp	459,741
13	FERC Account 408.1	Taxes Other than Income Taxes	34,531
14	FERC Account 926	A&G-Employee Pensions & Benefits	87,300
15		Total	<u>\$ 581,572</u>
<i>West Penn Power</i>			
16	FERC Account 902	Meter Reading Expense	\$ -
17	FERC Account 903	Cust Rcrd & Collect Exp	-
18	FERC Account 910	Misc Cust Svc & Info Exp	2,035,753
19	FERC Account 408.1	Taxes Other than Income Taxes	152,907
20	FERC Account 926	A&G-Employee Pensions & Benefits	386,568
21		Total	<u>\$ 2,575,228</u>

**Revenue Enhancement and Avoided Capital Costs  
Cost Baseline for Smart Meter Benefit  
For the Twelve Months Ending December 2017**

**Revenue Enhancement -- Change 1.5 day lag in Cash Working Capital**

<b><u>Line No.</u></b>		<b><u>West Penn</u></b>
1	1.5 day lag for billing difference in CWC	\$ 3,384,000
2	Associated Rev Req	\$ 500,000

**Avoided Capital Costs -- Material and Supply Inventories at December 2017**

	<b><u>West Penn</u></b>
3 Legacy meters in inventory	\$ -
4 Handheld devices in inventory	<u>-</u>
5 Total inventory (Line 3 + Line 4)	\$ -
6 Revenue requirement	\$ -

**Load Research  
Cost Baseline for Smart Meter Benefit  
For the Twelve Months Ending December 2017**

<u>Line No</u>	<u>Description</u>	<u>West Penn</u>
1	Number of load research meters in field	238
2	Cost of load research meters	\$ 400
3	Cost of Normal meters	<u>50</u>
4	Net Cost of load research Meters (Line 2 - Line 3)	\$ 350
5	Capital Cost of load research Meters (line 1 X line 4)	\$ 83,300
6	Depreciation Reserve per meter	238
7	Accumulated Depreciation Reserve (Line 1 X Line 6)	<u>56,561</u>
8	Net load research Meters in Rate Base (Line 5 - Line 7)	\$ 26,739
9	Carrying Charge	<u>12.76%</u>
10	Revenue requirement for rate base (Line 8 X Line 9)	\$ 3,412
11	Depreciation Rate of meters	2.10%
12	Depreciation expense (Line 5 X Line 11)	<u>1,749</u>
13	Revenue requirement (Line 10 + Line 12)	<u>\$ 5,161</u>