

Black Hills Power : Calculation of Revenue Requirement for LED Street Light Replacement of HPSV

Line			
No.	Street Lighting		
1			
2	Cost of Replacement 40W LED (100W Replacement)	\$ 198.87	Fixture Costs Only (Not including wire, pole, and additional material for complete new installation)
3	Labor	\$ 141.00	
4	Total Fixture Cost (Replacement + Labor)	\$ 339.87	
5	Less: Other Rate Base Reduction	\$ 113.51	Retirement of HPSV fixtures
6	Less: ADIT	\$ 1.53	
7	Total Rate Base	\$ 224.84	
8			
9	Depreciation Expense	\$ 9.71	
10	Less: HPSV Depreciation	\$ (9.88)	
11			
12	Interest Expense	\$ 6.42	Weighted Cost of Debt (Authorized)
13	Return on Equity	\$ 11.02	Weighted Cost of Capital (Authorized)
14			
15	Fed/State Income Tax	\$ 2.93	
16	Total Annual Revenue Requirement	\$ 20.21	
17	Incremental Monthly Charge	\$ 1.68	
18			

Black Hills Power: Company-Owned LED Street Light Incremental Rate

Line No.		100W/40W
1	Current HPSV Rate (100W)	\$ 10.74
2	Direct O&M Savings	\$ (0.33) Reduction in Direct O&M with LED
3	Incremental Revenue Requirement	\$ 1.68 See Revenue Requirement
4	40 W LED Rate	\$ 12.09
5		
6	Energy Usage Savings	\$ (1.16) Cost Adjustment Savings
7	Total Montly Bill (LED Rate + Energy Usage Savings)	\$ 10.93
8		
9	Total Bill Impact	\$ 0.19 (Total Monthly Bill - Current HPSV Rate)
10		