

To help lower municipal energy usage and maintenance costs, Penn Power now offers LED street lighting.

LED streetlights provide many advantages over traditional lighting, including:

- Longer life span projected 50,000+ hours
- Greater energy efficiency
- Reduced maintenance costs
- Faster turn on and turn off

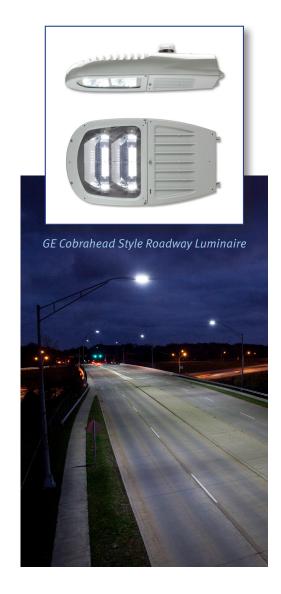
Currently, the approved manufacturer is General Electric. The initial term of the contract is 10 years and can be renewed annually thereafter. Each LED fixture will appear on the municipality's bill as a fixed monthly charge. The municipality's decision to install street lighting will not affect its ability to choose an alternate electricity supplier.

The costs shown below are for the installation of LED streetlights at new locations or replacement of existing streetlights. The monthly expense includes energy, labor and fixture costs associated with the installation of a new LED streetlight. (Some installation costs are not included – See FAQs.)

Watts/kWh per month	50/18	90/32	130/46	260/91
Lumens	4,000	7,000	11,000	22,000
Energy @ \$o.o8/kWh*	\$1.44	\$2.56	\$3.68	\$7.28
Fixture	\$7.32	\$8.78	\$9.78	\$15.12
Total Monthly Cost**	\$8.76	\$11.34	\$13.46	\$22.40

^{*} The costs shown are based on an average total price of \$0.08 per kWh. These costs could fluctuate depending on the actual rate, the current price-to-compare and if the customer chooses an alternate electricity supplier. For more information on customer choice, visit www.PAPowerSwitch.com.

^{**} In addition to Total Monthly Cost, the customer is responsible for additional rider charges per the streetlight tariff.



(over)



For a cost comparison, the chart below lists information about our other traditional streetlight option, high-pressure sodium (HPS) vapor.

Туре	HPS						
Watts/kWh per month	70/32	100/46	150/66	250/98	400/156		
Lumens	5,800	9,500	16,000	27,500	50,000		
Energy @ \$o.o8/kWh*	\$2.56	\$3.68	\$5.28	\$7.84	\$12.48		
Fixture	\$9.87	\$8.59	\$8.72	\$10.19	\$10.49		
Total Monthly Cost**	\$12.43	\$12.27	\$14.00	\$18.03	\$22.97		

^{*} The costs shown are based on an average total price of \$0.08 per kWh. These costs could fluctuate depending on the actual rate, the current price-to-compare and if the customer chooses an alternate electricity supplier. For more information on customer choice, visit www.PAPowerSwitch.com.

^{**} In addition to Total Monthly Cost, the customer is responsible for additional riders per the tariff.



What is not included in the installation costs?

Any equipment used to support or provide energy to the fixtures is not included in the monthly cost. These items may include mast arms, poles, transformers, brackets and supply lines to the lighting location. Many of these items are already found at existing locations and should not be needed for a conversion. For new locations, the cost of equipment will be calculated and charged in advance of construction. The cost of the actual LED light can be found in the tariff at www.firstenergycorp.com/pa-tariffs.

Is there a minimum order?

When replacing existing lighting, a minimum of 12 LED streetlights per customer per individual order is required. This restriction does not apply to a new installation.

How much energy will I save using LED lights compared to traditional street lighting?

Energy savings vary greatly depending on many variables, but LEDs can use about half as many watts to produce the same amount of light. You also could increase your savings by choosing smaller lights where appropriate.

Is an up-front payment required to replace existing streetlights?

If a customer requests removal of HPS street lights that were installed less than 20 years ago to install LED streetlights, the customer will pay removal costs and a remaining life charge.

Savings associated with converting to LED lighting will be reduced over time as Penn Power files rate cases and adjust LED rates to the cost of providing service. LEDs are currently priced below the cost of service in distribution rates and any savings will decline as Penn Power moves the streetlights to the full cost of service.

