

**Public Works Committee
Streetlight Replacement Recommendation**

RECENT HISTORY:

At the Monday, 3 May 2010, meeting of the Public Works Committee (PWC), it was agreed that new sample bulbs should be installed in Village streetlights to receive Village resident comment.

Pepco installed five (5) sample streetlights near the Village Hall to aid the PWC's decision and to gather resident feedback:

- 3 – 70-watt high pressure sodium “cobra-head” styled lights (orange/pink colored light) along West Kirke Street
- 1 – 85-watt induction light in the “teardrop” style (white light) in the small park at the intersection of West Kirke Street and Laurel Parkway
- 1 – 55-watt induction light in the “cobra-head” style (white light) on Laurel Parkway near the intersection with West Kirke Street
- Although the locations of the three (3) sets of sample streetlights were published numerous times in the *Crier*, posted numerous times on the Village list serve and on the Village website, no non-committee resident comments were received.

Pepco has already installed high pressure sodium lights in The Town of Chevy Chase, along Connecticut Avenue north of Bradley Lane, and throughout most of unincorporated Montgomery County.

UPDATE:

On Monday, 28 June 2010, the Public Works Committee (PWC) continued its discussion of options for replacing or upgrading Village streetlights. At the May 3 meeting, the PWC members unanimously eliminated teardrop fixtures from consideration for financial and aesthetic reasons. The Committee received little additional public comment on the sample fixtures. The remaining options were:

- 1) Contracting with Pepco to replace existing fixtures with a “Cobra-Head” fixture using an induction (white light) bulb
- 2) Allowing Pepco to replace the current mercury vapor bulbs [the manufacturing of which has become illegal for environmental reasons] with High Pressure Sodium bulbs (orange/pink looking light) at no cost to the Village.
 - These fixtures will look the same as the current fixtures with one exception; the high pressure sodium fixtures will have a flat piece of glass for a lens instead of a dome like lens currently installed.

The PWC members considered the financial implications of each option: (note: There are 272 streetlights in the Village.)

- If the Village contracts with Pepco to replace existing fixtures with the “Cobra-Head” fixture using an induction (white light) bulb, it will cost \$600 per unit for either 55- or 85-watt lights.
 - Total Cost would be \$163,200.
 - Monthly Maintenance costs are estimated to be reduced by \$462.23, for a yearly savings of \$5,543.76.
- If the Village allows Pepco to install 70-watt high pressure sodium “Cobra Head” styled lights, there would be no cost.
 - Total Cost would be \$0.

- The 70-watt high-pressure sodium fixture exhibits an energy savings over mercury vapor but exhibits a drop in lumen output over time, approximately, three or four years in comparison with an induction fixture.
- Monthly Maintenance costs are estimated to be reduced by \$197.20 for a yearly savings of \$1,436.64.
- The PWC members compared existing options with future LED options:
 - The 2009 Resident Survey showed that a majority of residents prefer white light.
 - LED bulbs give off a white light.
 - LED fixtures represent a further 50% savings in energy over induction fixtures but have not been tested for a sufficient duration to compare their lives versus, for example, induction fixtures.
 - PEPCO and several other utility companies throughout the country are testing the use of LED for maximally energy efficient street lighting.
- PEPCO currently has some sample LED streetlights installed on Dorset Avenue (between Little Falls Parkway and Surrey Street) in the Town of Somerset.
- When Pepco's pilot program is completed, if all necessary requirements (such as durability, reliability and light spread) can be met, PEPCO will file for a rate tariff with the Maryland Public Service Commission to allow the installation and purchase of LED streetlight technology.
- PEPCO officials have indicated that a tariff might be available in about 4 years.

The PWC prefers to wait until LED streetlights become available as a viable option.

Should the Village contract with PEPCO to install additional high pressure sodium streetlights to fill dark spots estimated costs per new pole are between \$12,000 and \$20,000.

Based on the photometric survey conducted an estimated 20-25 dark spots currently exist along Village streets and right-of-ways.

COMMITTEE RECOMMENDATION:

Based on the preceding factors and notwithstanding last year's resident survey supporting induction fixtures, the PWC's recommendation to the Board is let PEPCO replace all existing fixtures with high-pressure sodium bulbs at no cost to the Village, on Pepco's timetable.

- The PWC recognizes that, based on the results of the 2009 Resident Survey, that majority of residents preferred a white light, in particular, the induction fixture. However, the PWC feels that instead of spending its *SafeSpeed* funds on a technology that may become obsolete in 4-5 years, the more appropriate course would be to wait until LED or comparable technology is available.

The PWC recommends that the Board request Mr. Younes to advise Pepco to schedule replacement of all existing fixtures with high-pressure sodium bulbs at no cost to the Village (instead of spending *SafeSpeed* funds on a technology that may become obsolete in 4-5 years).

The PWC will develop a prioritized list of projects, in addition to the already authorized sidewalk replacement program, that meet the requirements for safe speed funding. With Board permission, the PWC will present its list of projects for Board review at either the September or the October Board of Managers meeting.