

Report - Public Services Committee

Motion on LED Street Lighting

Therefore, be it resolved that the Arlington County Civic Federation urges the County, as part of the Community Energy and Sustainability (CES) effort, to examine the feasibility of accelerating conversion of Arlington's street lights to LED units. This process could concentrate first on street lights owned by the County, followed by conversion of those owned by Dominion Virginia Power. The goal would be to convert all Arlington street lights as soon as possible.

The motion was introduced by Joe Pelton (Chain Bridge Forest) at the June 1, 2010, Civic Federation meeting. The motion was referred to the Public Services Committee. The committee studied the motion under the *public utilities* portion of its jurisdiction. **The committee has begun its study of the issue but recommends that the Civic Federation postpone consideration of the motion until October 5, 2010.** By this time Civic Federation member organizations will have had more time to consider the issue and the committee will have completed its analysis and developed a recommended policy position. Preliminary information established by the committee is listed below.

The issue the motion raises is whether the county should accelerate current funding to transition public lighting to LED lighting. The committee found that the issue is driven by the following facts:

- Dominion Electric owns the majority (approximately 12,000 of 16,000) of street lights in Arlington and the cost of electricity to run the lights is paid as a flat rate annual fee versus a metered service. This impacts the cost savings of implementing energy saving LED lights because energy savings (metered cost) is unrealized in the current Dominion model.
- Return on investment is driven by higher initial installation costs and lower energy costs and a longer street light useful life.
- Arlington County "owns" approximately 3,700 street lights and PAYGO funds have been designated to upgrade them to LED lights over time.

The Committee received significant input from the Civic Federation's Revenues and Expenditures and Environmental Affairs committees and from county professional staff regarding return on investment for replacing a street light with an LED light. The return on investment comprises factors such as initial installation cost and maintenance costs among other factors provided below:

- Once the streetlights program is fully deployed, savings up to 70% in current electric charges are expected and 30 to 40% reduction in current maintenance charges.
- The cost to retrofit existing Carlyles with LEDs is \$650 per light. LED replacement for Cobras is \$920 per light. With additional costs to meter the light plus other replacement and maintenance costs; the blended cost of replacing a Carlyle-style light is \$1,100. The cost to convert Arlington's 16,000 streetlights would be approximately \$16,000,000.

- The expected payback on LED lighting in terms of energy savings versus installation and maintenance costs is 6 years. The current LED light vendor warrants for 7 years.
- Other municipalities have conducted field trials of LED lighting but none have converted as many lights as Arlington or as quickly as Arlington. Other municipalities that have conducted pilots which the committee reviewed included Oakland, CA; Boston, MA; and Raleigh, NC.
- There is an ongoing 10 light demonstration program in Charlottesville, VA in which the city and Dominion Resources are examining the costs and customer response to LED lighting in public places.

Sal D'Itri, Chair (Arlington Forest), Robert Atkins (Arlington County Taxpayers Association), Stan Karson (Radnor/Ft. Myer Heights), Amy Levin (Aurora Highlands), Larry Mayer (Lyon Park), Jim Pebley (Waycroft-Woodlawn), Jackie Snelling (Lyon Village), and Eileen Williams (League of Women Voters)

Motion for Resolution on Converting to LED Street Lighting

Introduced June 1, 2010, by Joe Pelton (Chain Bridge Forest)

Whereas, converting the County's street lights to LED units would result in substantial savings in energy consumption; and

Whereas, the much longer life and extended warranties for LED street lights would significantly reduce maintenance and service costs; and

Whereas, conversion to LED street lighting would significantly reduce the emission of greenhouse gases; and

Whereas, modern "dark sky" LED units are better focused and produce less light pollution yet preserve illumination comparable to current lighting systems.

Therefore, be it resolved that the Arlington County Civic Federation urges the County, as part of the Community Energy and Sustainability (CES) effort, to examine the feasibility of accelerating conversion of Arlington's street lights to LED units. This process could concentrate first on street lights owned by the County, followed by conversion of those owned by Dominion Virginia Power. The goal would be to convert all Arlington street lights as soon as possible; and be it

Further resolved, that the Arlington County Civic Federation recognizes that it would be highly desirable for the Arlington County Government to explore the feasibility of a jointly funded or cooperative pilot demonstration program with Dominion Electric to convert Dominion-owned street lights to a more efficient lighting technology that might be offered to Arlington on a metered, rather than on a fixed annual rate basis.