SSL Postings

The 35 million streetlights in the U.S. – on every night – are one of the lighting applications attracting considerable interest for conversion to SSL products. These products can offer energy savings, reduced maintenance, and improved visibility - benefits that can tip the balance for cities concerned about the environment, safety, and the bottom line. This conversion is far from being a no-brainer, however. It requires careful product specification and evaluation. That's why a growing number of cities are evaluating LED street lighting products – and why, to help inform and harmonize their efforts, DOE last year launched the Municipal Solid-State Street Lighting Consortium, which has already grown to more than 300 primary members, including municipalities, utilities, and energy efficiency organizations.

To help those members, as well as other organizations interested in saving money and energy by switching to SSL, the Consortium has developed a <u>Model Specification for LED Roadway Luminaires</u>, which came out this week. The specification can be used to put together effective RFPs for LED street lighting products. It includes instructions to help make the necessary minor adjustments to fit local design criteria and other needs. That's especially important with a technology such as SSL, which has its own special characteristics and thus can't simply be substituted for existing lighting in "cut-and-paste" fashion, based on specs that were written for incumbent technologies. On November 15, DOE will host a 90-minute live <u>webcast</u> on the specification, beginning at 1:00 p.m. Eastern time.

The speed with which solid-state street lighting is evolving was evident in New Orleans last month at the Illuminating Engineering Society of North America's Street and Area Lighting Conference (SALC), where virtually all of the presentations at least mentioned SSL. The presentations showed advances in the products now available, as well as the growing number of available products. They also emphasized the relatively early stage of SSL, with much of its potential as yet untapped, relative to the largely matured incumbent technologies, where there's limited room for performance improvements. The presentations reflected substantial investment by manufacturers, which will continue to drive SSL innovation.

Top SSL discussion topics at this year's SALC were the potential energy savings, the savings that could come from the use of controls, and cost. In years past, the functionality of advanced control systems was generally restricted to simple monitoring of streetlight outages, but SSL's superior controllability has made it possible to incorporate dimming and more sophisticated control functionality. To that end, the Consortium is working on a specification for adaptive controls, which will help municipalities take full advantage of the energy-saving potential of SSL technology through dimming and scene setting for events and time of day, and is expected to be completed in draft form within the next few months.

Cost remains a critical issue. This is especially true for smaller municipalities that don't own their own streetlights but instead lease them from the utilities, whose leasing rates for SSL products at this stage of the game can sometimes be prohibitively high. By contrast, the numbers can come out in favor of SSL with large cities, which often own their streetlights and sometimes run the utilities as well. To help cities figure out the cost and impact of switching over to LED lighting, the Consortium has been working with the Clinton Climate Initiative to modify an existing workbook tool so that it can be easily used by municipalities and others without assistance. This modified tool should be available within the next few weeks. To learn more about the Consortium and its tools, visit <u>www.ssl.energy.gov/consortium.html</u>.

As always, if you have questions or comments, you can reach us at postings@lightingfacts.com.