

Postings: from the desk of Jim Brodrick

It's been a while since I've written in these *Postings* about the [DOE Municipal Solid-State Street Lighting Consortium](#) (Consortium), so I thought I'd give you an update. You may recall that DOE launched the Consortium a year ago to leverage the efforts of the many cities that are pursuing evaluations of LED street lighting products.

Membership – which is limited to municipalities, utilities, and energy efficiency organizations – has grown tremendously, to more than 270 different primary member organizations.

As I mentioned before, the Consortium is putting on a series of [regional workshops](#) to educate attendees about solid-state street lighting, as well as to provide forums to address local and regional issues and to share knowledge and experience. The idea is to help members to make intelligent purchasing decisions. The workshops are spaced at convenient locations so that no one has to travel more than 500 miles to attend.

Three workshops have already been held – in [Los Angeles](#), [Tampa](#), and [Kansas City](#) – and there are five more planned: for the [Northeast Region](#) (May 19-20 in Philadelphia), the [North Central Region](#) (June 16-17 in Detroit), the Northwest Region (July in Seattle), the Southwest Region (August in San Jose), and the South Central Region (September, city and dates to be determined).

Attendance has been excellent, with the number of participants totaling about 250 so far. The topics covered run the gamut – from understanding LM-79 and LM-80, to calculating light-loss factors, to transient voltage and surge protection, to utility rates, to adaptive controls, to local and regional concerns.

Also covered at these workshops is the newly developed Solid-State Street Lighting Performance Specification for LED Roadway Lighting, which is [posted online](#) in draft form for public comment through May 2nd. The Performance Specification is available with two different user-selectable options to accommodate the different preferences commonly found between municipalities and utilities (i.e., System Specification and Material Specification). The System Specification is designed to maximize application efficiency, and characterizes luminaire performance by incorporating site characteristics such as mounting height, pole spacing, and number of lanes. The Material Specification emphasizes luminaire efficiency, which characterizes luminaire performance without consideration of site characteristics.

Comments on the draft Performance Specification are encouraged and welcomed from manufacturers as well as Consortium members, the idea being that the spec will help guide the industry and provide a common basis for manufacturers to design products that meet their customers' needs. Depending on the complexity of those comments, the Consortium may hold a manufacturers' workshop in June to further discuss and resolve them. When all is said and done and the review process has been completed (hopefully by the end of June), the final version of the spec will be posted – though as conditions change it will continue to be updated as necessary.

Members and nonmembers alike will be able to use the new Performance Specification to put together effective RFPs for street lighting products. It will include instructions to help them make minor adjustments to fit their local design criteria. LED lighting is not a "cut-and-paste" technology that can simply be substituted for existing lighting without taking its own special characteristics into account. So taking existing specs that are written for incumbent technologies, and merely replacing "high-pressure sodium" with "LED," for example, won't work – which hasn't stopped some people from using that approach, sometimes with less than satisfactory

results. That's why the Consortium has created a new specification designed specifically for LEDs.

In addition to the Performance Specification and the workshops, the Consortium is doing some other things, including working with the Clinton Climate Initiative (CCI) to modify a financial tool that may be posted on the Consortium website in the near term – a workbook for helping to figure out the cost and impact of switching over to LED street lighting. That information can be very useful when applying for financing, for example. The intent of the modified version of CCI's workbook is to provide a straightforward tool that can easily be used by municipalities or others on their own.

On another front, the Consortium's Remote Monitoring and Controls subcommittee has been hard at work reviewing existing technology and member needs to develop a specification for controls that will help in getting the most out of the investment in LED streetlights. The goal of this spec is to take full advantage of the energy-saving potential of the technology through dimming and scene setting for events and time of day. Utilities see huge potential for better lumen maintenance control using this technology. Look for a draft of this specification later in the year.

There's a great deal of interest in LED street lighting these days because of the potential to save energy – and money. There are 35 million street lights in this country alone, and they're on all night long, 365 days a year. That adds up to a lot of electricity.

Converting these to advanced technologies like SSL could reduce their use of electricity by a significant amount, while simultaneously improving their quality of illumination – but only if the right choices are made. The Consortium is working to help cities identify those right choices, so that the energy savings are maximized while illumination quality is maintained or even improved. To learn more about the Consortium, visit www.ssl.energy.gov/consortium.html.

As always, if you have questions or comments, you can reach me at

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