SSL Postings

On August 25-26, the U.S. Department of Energy (DOE) Municipal Solid-State Street Lighting Consortium will host the last of a series of regional workshops, in San Jose, CA. These workshops began about a year ago, designed to help cities, utilities, and other purchasers make informed decisions about LED street lighting.

Each workshop includes a core set of educational topics – such as understanding LM-79 and LM-80 or calculating light loss factors – plus updates on Consortium tools and resources in development.

But attendees often tell us the most valuable part of the workshop is the opportunity to hear first-hand from peers about their experiences with LED street lighting.

When we started this series of regional workshops, the idea was to choose convenient locations throughout the U.S. so that no one had to travel more than 500 miles to attend. That idea paid off – a few organizations even rented a van to drive to a nearby workshop, to ensure that their entire team could participate and learn. We also saw plenty of attendees who traveled considerable distances to attend a Consortium workshop – another indicator of the tremendous need for information exchange and education. Attendance has been excellent, with the number of participants totaling about 360 so far.

We started in Los Angeles in September 2010, where Ed Ebrahimian and Orlando Nova from the City of Los Angeles shared their experience with a large-scale street lighting project, and specifically their LED roadway luminaire specification. This discussion emphasized the need for model specifications that could be customized by each municipality or utility to meet their own

unique requirements, and shortly after, the Consortium developed a draft <u>Performance Specification for LED Roadway Lighting</u>, which was shared at subsequent workshops.

Demonstrations and local tours were also important components of the regional workshops. In February 2011, at the Southeast region workshop in Tampa, we were welcomed by Irvin Lee from the City of Tampa and Scott Smith of Tampa Electric, who hosted a bus tour to an LED lighting installation at a Manatee Viewing Center. At the North Central region workshop in March, Mahmoud Hadjian from Kansas City, MO, detailed their pilot demonstration project to evaluate LED luminaires and controls from multiple manufacturers, and later led a bus tour to the residential and commercial sites.

Using the Consortium draft specification for product selection and DOE GATEWAY demonstration program methodology for site measurement and evaluation, the Kansas City pilot will provide a valuable model for others to replicate.

In May, Stephen Buckley from the City of Philadelphia shared details on their pilot project involving 13 locations. He described the city's financial analysis of LED street lighting (factoring capital, power, and maintenance costs) and discussed variables such as the power price structure and rate, and the expected lifetime of the LED luminaire. At the Detroit workshop in June, Ed Henderson from DTE Energy and James Leidel from Oakland University detailed their joint pilot project on the university campus, involving a mix of high intensity discharge (HID), LED, and other technologies, represented by multiple manufacturers. Attendees in Detroit were also able to experience a vendor show and bus tour of the Oakland campus.

In July, at the Northwest region workshop in Seattle, Edward Smalley from Seattle City Light and Lok Chan from DKS Associates offered a detailed look at Seattle's pilot projects – from the site and luminaire selection process, to photometric and field testing, to economic analysis and user feedback. And like previous workshops,

a bus tour of the pilot installations enabled attendees to see the LED street lights in person, ask questions, and learn more.

In San Jose, attendees will hear about that city's street lighting program, California's adaptive lighting streetlight tariff pilot, and a draft report from an LED streetlight controls study prepared by Northwest Energy Efficiency Alliance (NEEA). They will learn how to prepare a successful Request for Proposals (RFP), and how to use cost benefit analysis tools. And they will tour the nearby Philips Lumileds' plant as well as street lighting installations. If you are interested in attending, visit the Consortium website to learn more.

The Consortium exists to share knowledge and experience about LED street lighting, and to build a repository of expertise, contacts, tools, and resources. All the presentations from previous regional workshops are <u>available online</u>, and the final reports on the pilot projects in Seattle, Philadelphia, Sacramento, and Kansas City will be posted as they are completed.

This Fall, the Consortium expects to publish the final Performance Specification for LED Roadway Lighting, and a draft specification for Remote Monitoring and Controls will be posted for public review and comment. In addition, the Consortium is working with the Clinton Climate Initiative (CCI) to modify CCI's financial tool that determines the cost and impact of switching to LED street lighting. The modified version of CCI's workbook will be posted on the Consortium website, so that it can be used by municipalities or others on their own. We'll keep you posted as these tools – and more – become available.

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