SSL Postings

Last week, the U.S. Department of Energy (DOE) announced its Round 8 solid-state lighting R&D funding opportunities in the areas of Core Technology and Product Development. Core Technology projects focus on applied research for technology development, with particular emphasis on meeting efficiency and performance targets, while Product Development projects focus on using the knowledge gained from basic or applied research to develop or improve commercially viable materials, devices, or systems.

These funding solicitations are guided by the DOE Solid-State Lighting R&D Multi-Year Program Plan (MYPP), which is updated each year to keep pace with the technology and marketplace. The updating process is done in partnership with industry and others, and starts with a series of roundtable discussions and conference calls that are held each fall for DOE to receive ideas on which R&D tasks are currently most needed to advance SSL. Those proposed tasks are then discussed at length at DOE's SSL R&D Workshops, which are held each winter – this year's took place in San Diego in February. Separate workshop breakout sessions for LEDs and OLEDs are held specifically to discuss these updates, and anyone in attendance can offer feedback. DOE makes the ultimate decisions, which take into consideration not only industry feedback, but also the scope of current DOE R&D portfolio projects, with the goal being to focus on addressing major technology gaps rather than areas already covered by ongoing research.

There have been several changes to DOE's SSL R&D solicitation process this year, due mainly to feedback from stakeholders and the

speed with which the technology is developing. For example, applicants have an extra month to respond to the solicitation, and the time it takes to receive a funding award has been shortened by anywhere from four to six months as compared to the last rounds. And for Core Technology projects, cost-sharing will no longer be required when the prime funding recipient is a federal research center or national laboratory. In addition, the funding areas of interest have been narrowed down to improve focus and make best use of available budget.

DOE's funding of SSL R&D is not limited to core technology and product development, but also extends to manufacturing. A DOE SSL manufacturing R&D funding opportunity will be announced in the next few months. The solicitation is part of a major initiative launched by DOE in 2009 to enhance the quality and lower the cost of SSL products through improvements in manufacturing equipment and processes, and to foster a significant manufacturing role in the U.S. That initiative is guided by DOE's SSL Manufacturing R&D Roadmap, which – like the MYPP – is updated every year based on industry feedback.

The three areas of SSL R&D that DOE funds – Core Technology, Product Development, and U.S. Manufacturing – are like the pieces of a jigsaw puzzle, in that they all fit together to form a coherent whole and work with each other synergistically. For example, improvements in efficacy, light output, and color quality won't do much good if the product cost is too high for consumers to purchase. Despite the progress SSL has made over the past few years, and the increasing number of good products coming onto the market, there's still a pressing need for R&D, and DOE will continue to fund it.

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