



*BPA Energy Efficiency:*  
**BPA E3T Technical Advisory Group: LED Lighting**

---

*February 24, 2012*

### **Purpose**

In 2008 the Bonneville Power Administration's (BPA) Office of Technology Innovation and Office of Energy Efficiency launched the Energy Efficiency Emerging Technology program (E3T) to increase the adoption of emerging energy-efficient electrical technologies in the Pacific Northwest. The goal for E3T is to establish an ongoing collaborative effort to "fill the pipeline" of new utility programs with innovative energy efficiency solutions and technologies that promise significant region-wide energy savings.

The process uses Technical Advisory Groups or TAGs to help scan, screen and select the most promising technologies for formal assessment by BPA for the benefit of its customers, publicly owned utilities throughout the northwest region. In the past two years, TAGs in the areas of lighting and HVAC have recommended measures for further consideration by BPA.

The LED Lighting Technical Advisory Group will be an on-going board that will:

- > Help identify and screen new and emerging LED technologies
- > Recommend a select number of technologies each year for BPA to consider for assessment
- > Advise BPA on technology assessment protocols
- > Recommend LED technologies for deployment in the Northwest that have been adequately assessed by other organizations and can be recommended to the Regional Technical Forum (RTF) and utilities for adoption and promotion.

Note: research to identify existing assessments has the potential to save costs. Some technologies may require a short study to determine Northwest viability based on differences in climate or market.

### **Logistics**

The LED Lighting TAG will be an on-going group composed of LED experts from across the Northwest, as well as selected experts from outside the region. The group will be comprised of fifteen to twenty-five members. The group will include experts from utilities, industry, and other key entities. TAG members' expertise may include LED applications, LED technologies, manufacturing, and codes, as well as market acceptance and electric utility conservation program issues, and will include lighting designers, contractors, distributors, researchers, utility program managers or engineers, and people from related organizations or fields. We expect a group of 18-26 people. The beginning list of LED technologies that we will consider is:

- LED Linear Commercial Office Lighting (including troffers and pendants)
- LED Interior High and Low Bay Lamps and Luminaires
- LED Area and Parking Lot Lighting
- LED Street Lighting
- LED Highway Lighting
- LED Outdoor Commercial Flood Lighting
- LED Parking Garage Lighting
- LED Outdoor Residential Lighting
- LED A-Lamp Replacement

Participation in the LED Lighting TAG is on a voluntary basis. That is, BPA will not provide monetary compensation for participation. We may arrange one meeting during the first year to be in person in order for group members to meet each other and to facilitate in-depth discussion and team-building. Most meetings, however, will be web-enabled conference calls. We anticipate a number of meetings – up to 14 mostly short meetings, starting in April, and ending before the end of July. Participants in the TAG will be expected to make a good-faith effort to participate in all meetings, and to contribute to documentation of new and emerging technologies. Overall time commitment from members is expected to be 20 to 30 hours over about a 5-month period.

The LED TAG will deliver final recommendations for FY 2013 technology assessments to BPA in early August 2012.

### Expected Benefits to the Northwest

These activities are expected to provide strategic guidance and detailed recommendations for BPA's investment in energy efficiency emerging technologies (ETs).

### Expected Benefits to Participants

The BPA E3T LED Lighting TAG provides a unique opportunity to collaborate with expert colleagues in the field of solid state lighting, to keep abreast of LED technology innovations, and to play a role in influencing the direction of solid state lighting in the Northwest.

Participants will be recognized on the BPA website, E3TConnect.org, and in the BPA Energy Efficiency *Customer News* newsletter. If we select you to participate in the E3T EM TAG, it is a reflection of the value and insight you bring to the E3T energy efficiency knowledge base as part of a group with a range of expertise and organizational representation. We appreciate your willingness to contribute to this important process.

### Anticipated TAG Timeline (meetings & interim work) for 2012

Approx. timeline	Length, Hrs.	Purpose
W/C April 2	2-4	<i>ID session</i> - Introductions to the program and to each other, ranking the list of LED ETs*, an forming working groups for the follow-on work in each of the top technologies
The next 4 weeks	TBA	Working Group meetings to flesh out each ET and draft recommendations
May	5x1	<i>Scoring session</i> - Presentations on and scoring of 4-6 top-ranked ETs; review and refine drafts of recommendations
Late June	2-3	<i>Recommendations Confirmation session</i> - Review and final comment on recommendations to BPA on the top 4-6 ETs
As needed	1-3	Suggestions for assessment protocols or other ad hoc calls for information or advice. We may also ask you for advice or information on selected technologies or strategies as the need arises.

\*ET = Emerging technology: defined broadly includes emerging products, technologies, and strategies

For more information, contact Jack Zeiger at (360) 956-2017, [zeigerj@energy.wsu.edu](mailto:zeigerj@energy.wsu.edu) or Alan Mountjoy-Venning (360) 956-2092, [mountjoyvenninga@energy.wsu.edu](mailto:mountjoyvenninga@energy.wsu.edu)