



May 4, 2009

**Position Statement regarding House Resolution 1732 “Outdoor Lighting Efficiency Act”
And Senate “Standards for Energy Efficient Outdoor Lighting**

The Illuminating Engineering Society (IES) provides the following statement regarding the US House and Senate proposals on Outdoor Lighting. While we applaud the move toward energy efficiency, we believe that legislation that is technology limiting is neither the best way to provide current energy reductions nor to stimulate future energy savings. There are serious problems with the proposed resolutions.

The Illuminating Engineering Society was founded in 1906 with the purpose of bringing engineers, architects, designers and end users of lighting into an organization devoted to research, application and education. This non-profit, volunteer membership organization has since provided research/consensus based documents such as recommended practices, design guides, research technical memoranda, and educational materials. The Society also publishes engineering journals and application studies for lighting, vision, and design criteria for all aspects of lighting including energy controls and recommended energy limits. While the IES membership stands at close to 10,000, including lighting designers, researchers, engineers, educators, vision scientists, manufacturers, distributors, contractors, architects, and end users working on a wide array of lighting related issues through committees and research groups its outreach directly impacts millions through nationally recognized codes and standards such as ANSI/ASHRAE/IESNA 90.1.

The current House and Senate bills, as written, have several serious issues which must be corrected before being considered for implementation. These issues are:

- The recommendations are not consensus based and have not been presented for review and rebuttal by the various organizations involved in lighting or lighting related issues.
- The IES technical documents referred to are not consistent with the technology being legislated. In particular, IES LM-79, “Electrical and Photometric Testing Procedures for Solid State Lighting (LED)”, is referred to as the test method for evaluating outdoor luminaires. This document applies only to solid state lighting products and not to all outdoor lighting system luminaires.
- The use of system lumens per watt rating of luminaires is not endorsed by the IES and does not achieve the goals of energy reduction. The use of an energy standard to control lighting system efficiency is far more effective and will allow a designer to implement the requirements of the design without a limitation on technology.

It is the position of the IES that:

- These bills not be forwarded to the House and Senate but that the DOE be tasked to work with energy and lighting organizations such as the IES, ASHRAE, IALD, IDA, in a true consensus manner to return an effective design based recommendation that has defensible research as its base.
- The outdoor lighting limits in ANSI/ASHRAE/IESNA Standard 90.1-2007 become the basis for outdoor lighting energy policy since these have demonstrated since the 2004 version of Standard 90.1 the best method for reducing outdoor lighting power and curbing light pollution.
- The use of lighting controls, which has proved to be the biggest energy efficiency measure employed, be the mainstay of energy policy.
- There be no limits on light sources and luminaires but that correct measures in design and control be utilized instead.

The lighting industry, in concert with associated organizations involved in energy use have, in a consensus manner since the 1970's, consistently developed new and emerging technologies to mitigate energy consumption while meeting the needs of the public, government, and industry. Technologies such as compact fluorescent lamps, Ceramic Metal Halide, T8 and T5 fluorescent, as well as LEDs, have allowed greater flexibility in the options available to reduce energy consumption and maintenance requirements. In addition, the industry has provided a significant choice of luminaires that are both efficient and effective with more technologies on the horizon. The driving force has been a design based energy policy, which the IES whole-heartedly endorses, not the technology limitation suggested by the proposals before the House and Senate.