

SSL Postings

U.S. DEPARTMENT OF ENERGY

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The New NGL — Big Changes Ahead

In 2017, the [Next Generation Luminaires™ \(NGL\) design competition](#) will take a quantum leap forward and transition its focus from *luminaires* to Next Generation *Lighting Systems* (NGLS). The NGLS will feature multiple competitions, a tighter focus on specific lighting applications — and an expanded evaluation process that involves installations in real-world settings and greater interaction among entrants, judges, and host sites.



The first NGLS competition opens today and will focus exclusively on connected lighting systems for interior spaces. The new approach reflects the growing importance of easy-to-use luminaire-integrated control systems, especially for use in existing spaces, and the intense and widespread interest in learning more about the installation, economics, and operation of those systems.

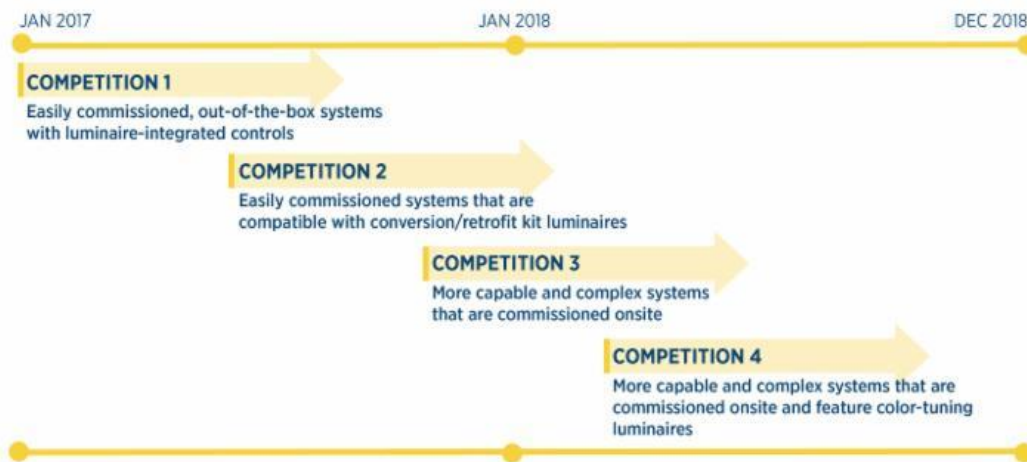
The potential benefits of connected, intelligent, networked lighting systems — and their role in the Internet of Things — is perhaps the hottest topic in lighting today. The lighting community envisions smart systems that respond and interact seamlessly with buildings, the environment, and people to provide unprecedented lighting performance plus useful data to improve business and safety and to enable other value-added outcomes. But how do we get from today's lighting infrastructure to that attractive vision? The devil being always in the details, the new NGLS aims to speed the learning, feedback, and technology improvement process and get past problems and obstacles more quickly.

The competition changes are substantial, so here's a quick overview of what's new (see nqldc.org for more details):

- **Entrants and entries.** Participating manufacturers will submit a complete system of luminaires, integrated controls, and supplemental equipment based on a specified room layout and design parameters. Single-manufacturer entrants as well as partnerships are allowed, and manufacturers are allowed to enter products that are not yet commercially available.
- **Permanent installations.** Systems will be permanently installed in accessible working spaces at Parsons School of Design, The New School in New York City, with each system lighting and controlling its own space — providing manufacturers with a “living lab” to observe and improve their products. The NGLS indoor installations will remain in place at Parsons, for practical use and ongoing evaluation. With its highly regarded master's degree program in lighting, as well as

New York’s large lighting community, Parsons is well situated to provide wide access and high visibility to this type of advanced lighting system, both to students and faculty and to lighting practitioners.

- **Process and evaluations.** The 2017 competition is comprised of four separate evaluations or competitions, beginning with easily commissioned “out-of-the-box” systems. For each competition, systems will be evaluated in a multiphase process that’s spread out over a two-year period and involves installation, commissioning, control operation, lighting quality, and user response. Manufacturers can submit entries in any single competition, or in multiple competitions, matching the capabilities of their systems to the appropriate competition.



Following documentary prequalification, manufacturers will submit a complete system of luminaires, integrated controls, and supplemental equipment, based on room layout (approximately 650 square feet) and design parameters. Each system will be installed and configured by a team of qualified electrical contractors in a series of similar working spaces, following the normal design, submittal, and construction process.

NGLS evaluators are drawn from a wide range of lighting practitioners, facilities professionals, and utility personnel. Following installation and configuration, systems will be evaluated for lighting quality and control operation, after which they’ll remain in operation to enable ongoing evaluation by Parsons lighting design students and faculty. Participating manufacturers will be able to observe the installation and commissioning phase, and to utilize their installations for further product development.

In addition to installation, configuration, and performance, NGLS will evaluate the specification process, including design and performance parameters, with the goal of simplifying the specification of connected lighting systems. Findings will be published as each phase is completed and will include such elements as the time required and challenges faced in design, installation, and configuration; the level of energy savings achieved; and user acceptance and satisfaction. NGLS will not select “winners”; rather, through this detailed, multiphase evaluation process, it will recognize superior performance and identify areas for improvement.

In developing the new competitions, NGLS is working with the DesignLights Consortium[®], the Northwest Energy Efficiency Association, and DOE's Better Buildings Alliance. Our joint goals are to identify systems that meet the diverse needs of the lighting and building communities, and to provide information that can inform efforts to support the deployment of lighting controls.

The 2017 Next Generation Lighting Systems indoor competition is just the beginning of the next phase of focused, application-oriented evaluations. The NGLS outdoor competition is expected to open at the end of the year. For more details, visit www.nglcdc.org.

Best regards,
Jim Brodrick

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