

# BGE Energy Solutions for Business

## LED Lighting Technical and Product Eligibility

To maximize the use and market acceptance of LED technologies and ensure savings persist over time, BGE has prepared technical and product eligibility criteria for LED technology and its use in the Energy Solutions for Business Program (ESFB).

As with any emerging technology, these standards are subject to revision. As new information and/or testing standards become available, BGE reserves the right to alter or change specifications or eligibility requirements without notice.

BGE offers a Prescriptive LED Lighting application; however, lighting projects with LED technologies not listed on the Prescriptive LED Lighting application require the use of the Custom application. The criteria below apply to both the Prescriptive LED Lighting and Custom application forms. Proposed products must comply with the eligibility criteria listed below.

### LED Product Eligibility Criteria

#### 1. LED Integral Replacement Lamps

a. Acceptable LED Replacement Lamp Types:

- Must be directional “point source” lamps such as type R, BR, MR and PAR.
- Omnidirectional, decorative, candelabra-based or linear fluorescent LED integral replacement lamps do not qualify for incentives at this time.

Note: BGE reserves the right to add or remove acceptable LED integral replacement lamp types at any time, without notice.

b. The ENERGY STAR qualified products list serves as a guide for program compliance and LED integral replacement lamp product selection. The qualified LED replacement lamp list is found at <http://www.energystar.gov>

c. **Interim Rule:** BGE recognizes that the ENERGY STAR qualified product list for LED integral replacement lamps is in its infancy and many otherwise qualified products are undergoing evaluation for listing. Therefore, BGE will accept LED integral replacement lamps that are not on the ENERGY STAR list, provided they meet the eligibility criteria below.

- Efficacy  $\geq 40$  system lumens per watt for MR16/PAR20;  $\geq 45$  lumens per watt for PAR30/38
- L70 lifetime of at least 25,000 hours
- Color temperature between 2700k and 4000k
- CRI (Color Rendering Index) of at least 80
- 3-year minimum product warranty
- Product is available on the commercial open market

### Submission Requirements:

- IESNA (Illuminating Engineering Society of North America) LM-79 and LM-80 test reports;
- or
- Lighting Facts Products Label (available at <http://www.lightingfacts.com>) and LM-80 test report

## 2. LED Luminaires

### a. Acceptable LED Luminaire Types:

- Outdoor pole, arm-mounted parking lot, roadway and decorative luminaires
- Outdoor wall pack luminaires
- Parking garage and gasoline canopy luminaires
- Recessed, surface and pendant down lights
- Wall-wash and cove luminaires and strips
- Integral track lighting luminaires
- Linear panels (2x2 troffers)
- High-bay Aisle lighting
- High-bay and Low-bay fixtures

Note: BGE reserves the right to add or remove acceptable LED luminaire types at any time, without notice.

### b. Two qualified product lists serve as a guide for program compliance and LED luminaire product selection. Products contained on one or both of the lists are considered acceptable, provided they are acceptable luminaire types. Note that these lists change frequently and that BGE will enforce the eligible fixtures in place at time of application.

- The ENERGY STAR qualified LED luminaire product list is found at [http://www.energystar.gov/index.cfm?c=ssl\\_res.pt\\_ssl](http://www.energystar.gov/index.cfm?c=ssl_res.pt_ssl)
- The DesignLights™ Consortium qualified product list is found at [http://designlights.org/solidstate.about.QualifiedProductsList\\_Publicv2.php](http://designlights.org/solidstate.about.QualifiedProductsList_Publicv2.php)