Work Paper SCE17LG118

**Revision 0**

**Short Form**

**Southern California Edison**

**LED Ambient Commercial Fixtures and Retrofit Kits**

**Introduction**

This short form workpaper documents (WP) the values adopted from PGE’s WP entitled “PGECOLTG179 R5 - LED Ambient Commercial Fixtures and Retrofit Kits”. SCE adopts all the methodology in PGECOLTG179 R5 - LED Ambient Commercial Fixtures and Retrofit Kits with the exceptions noted below.

1. Two different calculation templates for Multifamily Common Area and Non-Res were developed using SCE’s 2017 calculation template. The different applications have independent SCE solution codes and cost-effectiveness assumptions associated with them to avoid confusion. The NTG values and other cost effectiveness assumptions were chosen according to the delivery method.
2. Common Areas were added for the Multifamily (MFm) Building Type. Common Areas used operating hours of 4,340 for savings calculations, consistent with ” 2015\_Lighting\_Retrofit\_Guidance\_memo\_FINAL” CPUC memo. For Non-Res building types, SCE calculates savings based on climate zone specific Interactive Effects (IE) and Coincident Demand Factors (CDF) to calculate savings.

# Document Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev** | **Date** | **Author** | **Summary of Changes** |
| 0 | 11/02/2017 | Ajay Wadhera/SCE | 1. Calculation templates were developed based on PGE’s template “PGECOLTG179 R5-9-11-2015F”. |

**Measure Summary**

Table : Measure Summary Table

| **Section** | **Value** |
| --- | --- |
| **Summary & Purpose** | This short form work paper documents ex-ante load impacts and cost-effectiveness values for LED Ambient Commercial Fixtures and Retrofit Kits. |
| **1.1 Measure & Baseline** | No difference |
| **1.2 Technical Description** |  |
| **Measures** | No difference |
| **Code for All Measures** | SCE Specific solution codes (See Attachment 1 for more details). |
| **Requirements** | No differences except customers are SCE territory wide. |
| **1.3 Installation Type and Delivery Mechanisms** |  |
| **Installation Type** | No difference |
| **Delivery Mechanisms** | Non-Residential:   * Down-Stream Incentive – Deemed * Mid-Stream Incentive * Direct install   Residential:   * Down-Stream Incentive – Deemed * Direct install |
| **1.4.1 DEER Data** |  |
| **Net-Gross-Ratio** | No difference  Agricultural: Agric-Default>2yrs – 0.6  Industrial: Ind-Default>2yrs – 0.6  Commercial: Com-Default>2yrs – 0.6  Residential: Res-Default>2yrs – 0.55 |
| **Effective and Remaining Useful Life** | No difference |
| **Section 2. Calculation Methodology** |  |
| **Energy savings/Peak Demand Reduction – All Measures** | No difference in delta watt calculation except SCE uses climate zone specific IE and CDF values to calculate kWh and kW savings. |
| **Section 3. Load Shapes** | DEER:Indoor\_Non-CFL\_Ltg |
| **Section 4. Costs** | No difference |
| **Section 4.1 Base and Measure Costs** | Measure Cost - No difference  Base Case Cost – No difference |

**Attachments**

1. A1 SCE17LG118.0 – Calculation Templates\_Final.zip