Short Form Work Paper WPSDGENRAP0001

**Revision 0**

**San Diego Gas & Electric**

**Energy Efficiency Engineering**

**Gas Dryer Modulating Valve: Commercial and Multi-Family**

**April 1, 2019**

**SDG&E Non-Residential Gas Dryer Modulating Valve: Commercial and Multi-Family**

## Introduction

This short form workpaper documents the values adopted from SCG’s workpaper entitled “Gas Dryer Modulating Valve: Commercial and Multi-Family” (WPSCGNRAP170103 Revision 0). SDG&E adopts all the values in WPSCGNRAP170103 Revision 0, with the following exceptions:

1. Measure Application Type was adjusted to AOE from REA per E-4818.
2. SDG&E delivery mechanisms include Direct Install and Downstream Incentive.
3. SDG&E is in the process of simplifying its internal Ex Ante data and tracking data warehouse.   Part of that process requires that there be savings values for all potential climate zone and building type combinations. The savings are not climate zone dependent therefor no adjustment was required for climate zone. The SCG workpaper only included Com, Htl, MFm, Mtl, Nrs and COL building types. COL is coin operated laundry facilities which is not a DEER building type therefor the savings were mapped to small retail (Rts). The remaining commercial building types (Asm, Ecc, EPr, ERC, Ese, EUD, EUn, Gro, HGR, Hsp, OFL, OfS, RFF, RSD, Rt3, RtL, SCn, Sun and WRf) were mapped to the Com savings.

## Document Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev** | **Date** | **Author** | **Summary of Changes** |
| 0 | 04/1/19 | Keith Valenzuela (AESC) | * New short form workpaper. Adopted WPSCGNRAP170103 Revision 0 energy impacts and cost values. * The SCG workpaper only included Com, Htl, MFm, Mtl, Nrs and COL building types. COL is coin operated laundry facilities which is not a DEER building type therefor the savings were mapped to small retail (Rts). The remaining commercial building types (Asm, Ecc, EPr, ERC, Ese, EUD, EUn, Gro, HGR, Hsp, OFL, OfS, RFF, RSD, Rt3, RtL, SCn, Sun and WRf) were mapped to the Com savings. |
|  |  |  |  |
|  |  |  |  |

## Measure Summary

Table 1: Measure Summary Table

| **Section** | **Value** |
| --- | --- |
| **1.1 Measure & Baseline Data** | Please reference WPSCGNRAP170103 Revision 0 Section 1.1 Measure Description & Background. |
| **1.2 Technical Description** | Please reference WPSCGNRAP170103 Revision 0 Section 1.2 Technical Description |
| Measures | Measures and Codes   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Measure Codes** | | | | **Measure Name** | | SCG | SDG&E | SCE | PG&E | | 540455 | 466953  466954  466955  466956 | N/A | N/A | Modulating Gas Valve with hi/low fires for natural gas dryers for on-site commercial dryers up to 200 Lb. capacity | |
| Code for All Measures | Please reference WPSCGNRAP170103 Revision 0 Section 1.4.2 Codes and Standards Analysis |
| Requirements | Please reference WPSCGNRAP170103 Revision 0 Section 1.1 Measure Description & Background. |
| **1.3 Installation Type and Delivery Mechanisms** | |
| Installation Type | AOE |
| Delivery Mechanisms | Direct Install (DnDeemDI)  Downstream Incentive (DnDeemed) |
| **1.4 DEER Data** | |
| Net-to-Gross Ratio | Please reference WPSCGNRAP170103 Revision 0 Section 1.4.1 DEER Data  NTG ID = All-Default<=2yrs = 0.70 |
| Effective and Remaining Useful Life | Please reference WPSCGNRAP170103 Revision 0 Section 1.4.1 DEER Data  EUL ID = Appl-EffCD: 12 years  RUL ID: 4 years |
| GSIA | Please reference WPSCGNRAP170103 Revision 0 Section 1.4.1 DEER Data  GSIA ID = Def-GSIA |
| **Section 2. Calculation Methodology** | |
| Energy Savings/Peak Demand Reduction – All Measures | Please reference WPSCGNRAP170103 Revision 0 Section 2 Calculation Methodology |
| **Section 3. Load Shapes** | |
| Load Shape | Please reference WPSCGNRAP170103 Revision 0 Section 3 Load Shapes  ElecImpProfile: SDGE:N/A-Gas Only Measure  E3 Gas Profile: Annual |
| **Section 4. Cost** | |
| **Section 4.1 Base and Measure Costs** | |
| Base Cost | Please reference WPSCGNRAP170103 Revision 0 Section 4.1 Base Case Cost for details on how baseline cost estimates were determined.  SDG&E adopts all cost and created SDG&E measure cost IDs for reporting purposes. SDG&E measure cost IDs are included in Ex-Ante tables submission. |
| Measure Cost | Please reference WPSCGNRAP170103 Revision 0 Section 4.2 Measure Case Cost for details on how measure cost estimates were determined.  SDG&E adopts all cost and created SDG&E measure cost IDs for reporting purposes. SDG&E measure cost IDs are included in Ex-Ante tables submission. |