## Local Government Partnerships

#### New for the 2013-2015 Cycle

In 2015, this chapter was reformatted to become a LGP (local government partnerships) –only document. The State Partnerships are now covered within the Commercial chapter and a new chapter was created for the REN (Regional Energy Networks) –CCA (Community Choice Aggregators) evaluation plans.

In 2014, the Energy Division (ED) introduced a new forum, the Stakeholder Advisory Group (StAG), to provide local governments and their partnership implementers a greater voice in matters pertaining to the local government sector’s evaluation, measurement, and verification (EM&V) programming and project management decisions. In addition to local governments and partnership implementers, the StAG also includes the seven State energy efficiency (EE) program administrators. Together with other experts and advocates, the StAG engages in consensus-building discussions of local government-related EM&V projects via conference call six times per year.

The StAG is a new addition to the existing PCG for IOU LGPs. The PCG is an approximately monthly forum for the investor-owned utilities (IOUs) – who oversee administration of the State’s more than fifty Local Government Partnerships (LGPs) – to engage with ED and consultant staff on EM&V planning and programming decisions.

Additionally, the IOUs host various PCG-like working groups to address LGP study progress, thereby offering additional ED-IOU coordination opportunities.

### Background

The origins of local government partnerships date to 2002. In 2002-2003, the CPUC approved local government programs for IOU contract, and some local governments (LGs) operated building retrofit programs using other public funds. In 2003-2005, the CPUC expanded funding of local governments across the four IOUs (Pacific Gas & Electric (PG&E), Southern California Edison (SCE), Southern California Gas (SoCalGas), and San Diego Gas & Electric (SDG&E)). This approval represented a major expansion in the number of LGPs and resources directed to LG-derived EE solutions.

LGPs are structured variously within the energy efficiency portfolio as city, county, and regional government-led partnerships. Also not uncommon is a private or non-profit implementer arrangement. Implementers typically handle IOU contracting issues, assist with goal setting and achievement, disburse funds to the partner LGs, and serve as the face of the partnership to the CPUC and other entities.

In addition, since 2012, the IOU local government partnerships’ capacities and coverage have incrementally expanded in response to local government requests, demonstrated increased capacity, and the regional-solutions-based REN model. In PG&E’s territory, this has translated to enhancing LGP decision-making latitude to further drive direct install (DI) projects under a regional LGP-implementer model. For SDG&E’s part, the IOU has initiated a Regional Energy Partnership structure within its territory that promotes information sharing and knowledge transfer among local government partners. SCE and SoCalGas have introduced to their LGPs new project management services, which include engineering and contracting expertise and have closely coordinated to more seamlessly integrate their partnership portfolios.

The local government partnerships are not Statewide programs and thus the IOUs are afforded a degree of latitude in how they administer their LGP portfolios. The four IOUs operate their LGPs on a spectrum of resource to non-resource weighting. The spectrum has PG&E at the most resource-based end, with SoCalGas and SDG&E at the other end as entirely non-resource programs. In the middle is SCE, which treats efforts to address public buildings as resource programs. All four IOUs have some non-resource programs that address State Strategic Plan goals.

The IOU LGPs are expected to address some combination of the four program areas below. Generally the IOUs participating in the four program areas are noted in parentheses within the list below.

LGP program areas:

1. Public agency building retrofits, (all IOUs)[[1]](#footnote-1)
2. Small commercial direct-install (PG&E),
3. Promotion of IOU core programs through marketing and outreach, (all IOUs) and
4. Policy and compliance activities that support the State EE Strategic Plan, which include code compliance, reach code adoption, climate action planning, general plan energy policy, etc. (all IOUs)

The result of the flexibility afforded the IOUs is four partnership models with relatively large variation that reflect the strengths of each IOU, its territory, and its business plan. For example, in 2013-2014 PG&E consolidated its third-party (3P) and LGP management sections into a single branch with the intent of allowing the LGPs to better inform and drive savings attributed to small commercial direct install projects. PG&E seeks to further improve its LGPs by more practically defining the geographic borders for its various third-party DI implementers’ service areas.

SCE’s Energy Leader Model places emphasis on demand response (DR) capacity commitments, public building upgrades, and recognition of local officials who champion EE. SoCalGas LGPs more or less mirror those of SCE and the two IOUs share partnership implementers and coordinate compliance filings and project opportunities to achieve deeper EE savings and capture synergies. SDG&E emphasizes solutions based around policy, codes, and carbon-reduction strategies in coordination with the local business community.

Highlights from the 2015 program year include the introduction of three new LGPs in the southern part of the State. Two are joint SCE-SoCalGas LGPs, North Orange County and SANBAG[[2]](#footnote-2); and the SCE-only High Desert LGP serves communities including and around Barstow and Victorville. In addition, three County partnerships with SCE, formerly within the State Partnerships grouping, were moved to LGPs: County of Los Angeles, County of Riverside, and County of San Bernardino. As a result, the three counties are now treated consistently as LGPs by both SoCalGas and SCE.

In 2015, the ED also directed the completion of the LGP PY 2013-2014 Value and Effectiveness Study Report.

In addition, LGP stakeholders participated in a number of collaborative CPUC-sponsored meetings and workshops in 2014 and 2015 to provide feedback and guidance for this and other LG-related studies.

Table 1 presents the 2013-2015 projected savings goals and budgets for the local government partnerships and for overarching programs in support of the partnerships.

Table 1. 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
|
| **Local Government Partnerships** |
| PGE | PGE211009 | East Bay | 44,131,041 | 5,141 | 91,421 | $19,456,758  | 18,259,652 | 2,083 | 46,271 | $9,262,008  |
| PGE | PGE211024 | San Francisco | 28,495,260 | 3,717 | 29,809 | $16,490,324  | 10,540,727 | 1,155 | 26,812 | $7,832,558  |
| PGE | PGE211023 | Silicon Valley | 11,352,877 | 1,491 | -18,092 | $8,219,790  | 5,032,799 | 551 | 12,766 | $4,074,436  |
| PGE | PGE211010 | Fresno | 9,045,015 | 1,160 | 13,843 | $7,755,090  | 4,294,406 | 470 | 10,893 | $3,846,492  |
| PGE | PGE211007 | Association of Monterey Bay Area Governments (AMBAG) | 10,632,068 | 1,356 | 18,499 | $7,227,269  | 4,660,021 | 535 | 15,481 | $3,581,301  |
| PGE | PGE211011 | Kern | 7,617,718 | 986 | 8,460 | $6,432,391  | 3,474,566 | 380 | 8,814 | $3,194,412  |
| PGE | PGE211021 | Sierra Nevada | 7,213,980 | 844 | 6,016 | $4,515,785  | 4,058,037 | 444 | 10,294 | $2,560,460  |
| PGE | PGE211019 | San Mateo County | 5,242,541 | 676 | 6,425 | $3,516,790  | 2,437,076 | 267 | 6,182 | $1,744,567  |
| PGE | PGE211022 | Sonoma County | 4,458,682 | 568 | 9,357 | $3,436,276  | 2,098,403 | 230 | 5,323 | $1,709,718  |
| PGE | PGE211016 | Redwood Coast | 4,334,230 | 566 | 4,356 | $3,107,211  | 1,815,363 | 199 | 4,605 | $1,556,910  |
| PGE | PGE211013 | Marin County | 3,965,103 | 509 | 8,097 | $2,873,510  | 1,266,902 | 139 | 3,214 | $1,334,743  |
| PGE | PGE211020 | Santa Barbara | 3,097,117 | 301 | 1,801 | $2,392,726  | 1,584,050 | 173 | 4,018 | $1,184,837  |
| PGE | PGE211018 | San Luis Obispo Co. | 2,039,814 | 266 | 1,265 | $1,864,617  | 938,913 | 103 | 2,382 | $936,840  |
| PGE | PGE211015 | Napa County | 1,516,974 | 197 | 981 | $1,063,347  | 788,263 | 86 | 2,000 | $549,632  |
| PGE | PGE211012 | Madera | 1,025,222 | 135 | -790 | $886,821  | 359,486 | 39 | 912 | $445,314  |
| PGE | PGE211014 | Mendocino County | 651,031 | 85 | 133 | $638,186  | 304,512 | 33 | 772 | $322,506  |
| SCE | SCE-13-L-002G | Community Energy Leader Partnership | 7,979,871 | 2,004 | 0 | $3,187,506  | 3,720,972 | 236 | 0 | $1,838,227  |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SCE | SCE-13-L-002L | Orange County Cities Energy Leader Partnership | 4,602,923 | 129 | 0 | $2,195,768  | 2,605,538 | 21 | 0 | $1,115,409  |
| SCE | SCE-13-L-003C | County of Los Angeles Energy Efficiency Partnership | 4,043,562 | 638 | 0 | $2,157,985  | 2,155,500 | 215 | 0 | $974,519  |
| SCE | SCE-13-L-002N | San Joaquin Valley Energy Leader Partnership | 4,912,040 | 1,351 | 0 | $2,234,312  | 1,782,304 | 264 | 0 | $894,159  |
| SCE | SCE-13-L-002O | South Bay Energy Leader Partnership | 3,420,003 | 659 | 0 | $1,901,476  | 1,597,503 | 398 | 0 | $1,112,391  |
| SCE | SCE-13-L-002Q | Ventura County Energy Leader Partnership | 1,113,139 | 291 | 0 | $1,324,706  | 1,732,500 | 197 | 0 | $893,279  |
| SCE | SCE-13-L-002F | Gateway Cities Energy Leader Partnership | 2,192,740 | 137 | 0 | $1,145,487  | 1,611,555 | 153 | 0 | $676,543  |
| SCE | SCE-13-L-002M | San Gabriel Valley Energy Leader Partnership | 3,550,121 | 12 | 0 | $1,188,936  | 1,099,917 | 48 | 0 | $583,199  |
| SCE | SCE-13-L-003E | County of San Bernardino Energy Efficiency Partnership | 1,906,777 | 436 | 0 | $983,953  | 927,511 | 127 | 0 | $570,078  |
| SCE | SCE-13-L-003D | County of Riverside Energy Efficiency Partnership | 1,906,777 | 320 | 0 | $1,013,954  | 927,000 | 167 | 0 | $448,865  |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SCE | SCE-13-L-002J | Desert Cities Energy Leader Partnership | 1,189,079 | 215 | 0 | $878,747  | 694,533 | 177 | 0 | $441,977  |
| SCE | SCE-13-L-002R | Western Riverside Energy Leader Partnership | 1,350,000 | 195 | 0 | $863,163  | 774,000 | 126 | 0 | $447,518  |
| SCE | SCE-13-L-002P | South Santa Barbara County Energy Leader Partnership | 1,429,737 | 380 | 0 | $810,580  | 494,770 | 62 | 0 | $362,010  |
| SCE | SCE-13-L-002D | City of Santa Ana Energy Leader Partnership | 1,257,033 | 314 | 0 | $632,199  | 1,572,769 | 162 | 0 | $529,884  |
| SCE | SCE-13-L-002B | City of Long Beach Energy Leader Partnership | 1,476,000 | 254 | 0 | $544,043  | 1,026,000 | 151 | 0 | $282,379  |
| SCE | SCE-13-L-002C | City of Redlands Energy Leader Partnership | 1,620,000 | 284 | 0 | $547,819  | 306,000 | 66 | 0 | $173,306  |
| SCE | SCE-13-L-002T | West Side Energy Leader Partnership | 563,356 | 94 | 0 | $405,647  | 379,180 | 57 | 0 | $249,222  |
| SCE | SCE-13-L-002K | Kern County Energy Leader Partnership | 135,000 | 25 | 0 | $468,659  | 19,717 | 3 | 0 | $183,071  |
| SCE | SCE-13-L-002H | Eastern Sierra Energy Leader Partnership | 55,445 | 3 | 0 | $335,038  | 80,100 | 17 | 0 | $160,326  |
| SCE | SCE-13-L-002S | City of Adelanto Energy Leader Partnership | 694,922 | 111 | 0 | $309,963  | 233,894 | 1 | 0 | $141,699  |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SCE | SCE-13-L-002A | City of Beaumont Energy Leader Partnership | 180,000 | 41 | 0 | $188,982  | 139,500 | 20 | 0 | $104,193  |
| SCE | SCE-13-L-002E | City of Simi Valley Energy Leader Partnership | 104,494 | 25 | 0 | $163,970  | 162,484 | 9 | 0 | $126,492  |
| SCG | SCG3777 | LGP-San Gabriel Valley COG Partnership | 0  | 0  | 0  | $480,505  | 0  | 0  | 0  | $249,015  |
| SCG | SCG3742 | LGP-LA Co Partnership | 0  | 0  | 0  | $433,946  | 0  | 0  | 0  | $227,492  |
| SCG | SCG3783 | LGP-Western Riverside Energy Partnership | 0  | 0  | 0  | $391,255  | 0  | 0  | 0  | $195,427  |
| SCG | SCG3754 | LGP-Ventura County Partnership | 0  | 0  | 0  | $336,161  | 0  | 0  | 0  | $171,544  |
| SCG | SCG3776 | LGP-Gateway Cities Partnership | 0  | 0  | 0  | $326,123  | 0  | 0  | 0  | $174,765  |
| SCG | SCG3747 | LGP-South Bay Cities Partnership | 0  | 0  | 0  | $307,932  | 0  | 0  | 0  | $156,042  |
| SCG | SCG3744 | LGP-Riverside Co Partnership | 0  | 0  | 0  | $294,117  | 0  | 0  | 0  | $141,676  |
| SCG | SCG3745 | LGP-San Bernardino Co Partnership | 0  | 0  | 0  | $289,717  | 0  | 0  | 0  | $142,985  |
| SCG | SCG3750 | LGP-Orange Co Partnership | 0  | 0  | 0  | $271,938  | 0  | 0  | 0  | $153,703  |
| SCG | SCG3752 | LGP-Community Energy Partnership | 0  | 0  | 0  | $252,647  | 0  | 0  | 0  | $139,684  |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SCG | SCG3746 | LGP-Santa Barbara Co Partnership | 0  | 0  | 0  | $229,294  | 0  | 0  | 0  | $123,769  |
| SCG | SCG3748 | LGP-San Luis Obispo Co Partnership | 0  | 0  | 0  | $214,563  | 0  | 0  | 0  | $102,309  |
| SCG | SCG3743 | LGP-Kern Co Partnership | 0  | 0  | 0  | $208,464  | 0  | 0  | 0  | $104,789  |
| SCG | SCG3749 | LGP-San Joaquin Valley Partnership | 0  | 0  | 0  | $194,289  | 0  | 0  | 0  | $115,285  |
| SCG | SCG3778 | LGP-City of Santa Ana Partnership | 0  | 0  | 0  | $143,792  | 0  | 0  | 0  | $79,437  |
| SCG | SCG3781 | LGP-City of Redlands Pilots | 0  | 0  | 0  | $120,067  | 0  | 0  | 0  | $61,966  |
| SCG | SCG3782 | LGP-City of Beaumont Programs | 0  | 0  | 0  | $102,645  | 0  | 0  | 0  | $53,770  |
| SCG | SCG3780 | LGP-City of Simi Valley Partnership | 0  | 0  | 0  | $98,508  | 0  | 0  | 0  | $48,213  |
| SCG | SCG3779 | LGP-West Side Cities Partnership | 0  | 0  | 0  | $98,133  | 0  | 0  | 0  | $47,822  |
| SCG | SCG3753 | LGP-Desert Cities Partnership | 0  | 0  | 0  | $50,600  | 0  | 0  | 0  | $18,034  |
| SDGE | SDGE3272 | LGP- City of Chula Vista Partnership | 0 | 0 | 0 | $3,564,404 | 0 | 0 | 0 | $1,776,753 |
| SDGE | SDGE3273 | LGP- City of San Diego Partnership | 0 | 0 | 0 | $2,978,647 | 0 | 0 | 0 | $1,479,552 |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SDGE | SDGE3274 | LGP- County of San Diego Partnership | 0 | 0 | 0 | $2,458,250 | 0 | 0 | 0 | $1,224,966 |
| SDGE | SDGE3275 | LGP- Port of San Diego Partnership | 0 | 0 | 0 | $1,730,215 | 0 | 0 | 0 | $862,180 |
| SDGE | SDGE3276 | LGP- SANDAG Partnership | 0 | 0 | 0 | $1,531,845 | 0 | 0 | 0 | $763,331 |
| **Local Government Partnership Subtotal** | **190,501,692** | **25,914** | **181,582** | **$130,467,843** | **85,956,424** | **9,565** | **160,739** | **$65,059,987** |
| **Programs Supporting Partnerships** |  |  |  |  |  |  |  |  |
| PGE | PGE2110051 | Local Government Energy Action Resources (LGEAR) | 11,207,818 | 1,421 | 20,800 | $11,069,691  | 6,660,902 | 763 | 22,004 | $5,500,535  |
| PGE | PGE2110052 | Strategic Energy Resources | 0 | 0 | 0 | $5,474,467  | 0 | 0 | 0 | $2,764,003  |
| SCE | SCE-13-L-002U | Local Government Strategic Planning Pilot Program | 0 | 0 | 0 | $7,528,395  | 0  | 0  | 0  | $0  |
| SCE | SCE-13-L-002Rollup | Energy Leader Partnership Program | 2,471,914 | 434 | 0 | $1,246,707  | 0  | 0  | 0  | $0  |
| SCE | SCE-13-L-002I | Energy Leader Partnership Strategic Support | 0 | 0 | 0 | $957,085  | 0  | 0  | 0  | $450,115  |
| SCG | SCG3774 | LGP-LG Regional Resource Placeholder | 0  | 0  | 0  | $644,867  | 0  | 0  | 0  | $325,955  |

Table 1 (Cont’d). 2013-2015 Local Government Partnerships and Overarching Programs in Support of Partnerships\* Projected Savings and Budgets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IOU** | **Program ID** | **Program Name** | **2013-2014 Program Cycle** | **2015 Program Cycle** |
| **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** | **Projected Energy Savings (kWh)** | **Projected Demand Reduction (kW)** | **Projected Gas Savings (Therm)** | **Projected Program Budget** |
| SCG | SCG3773 | LGP-New Partnership Programs | 0  | 0  | 0  | $596,871  | 0  | 0  | 0  | $299,443  |
| SCG | SCG3755 | LGP-Local Government Energy Efficiency Pilots | 0  | 0  | 0  | $430,000  | 0  | 0  | 0  | $215,000  |
| SCG | SCG3751 | LGP-SEEC Partnership | 0  | 0  | 0  | $295,394  | 0  | 0  | 0  | $147,698  |
| SDGE | SDGE3278 | LGP- Emerging Cities Partnership | 0 | 0 | 0 | $759,213 | 0 | 0 | 0 | $378,322 |
| SDGE | SDGE3277 | LGP- SEEC Partnership | 0 | 0 | 0 | $345,038 | 0 | 0 | 0 | $171,936 |
| **Programs Supporting Partnerships Subtotal** | **13,679,731** | **1,854** | **20,800** | **29,347,729** | **6,660,902** | **763** | **22,004** | **10,253,007** |
| **Total Local Government Partnerships (‘000s)** | **204,181** | **28** | **202** | **$159,816** | **92,617** | **10** | **183** | **$75,313** |
| **Total EE Portfolio (‘000s)** | **4,521,314** | **868** | **126,755** | **$2,650,178**  | **2,036,397** | **351** | **61,494** | **$1,334,194**  |
| **Percentage of Total EE Portfolio** | **5%** | **3%** | **0.2%** | **6%** | **5%** | **3%** | **0.3%** | **6%** |

**\***Data taken from the California Energy Efficiency Website, August 2015. http://eestats.cpuc.ca.gov/Views/EEDataPortal.aspx/

### Conditions Affecting Local Government Partnerships

With the U.S. economy earnestly recovering from the Great Recession, local agencies have begun to rebound from the staff layoffs that began in late 2008 and persisted until about mid-2013. The upshot of the improved economic outlook is that local agencies may be in a better position to elevate energy efficiency efforts as a priority and to put resources toward the State’s climate goals. Still, some local governments in California continue to struggle financially and their ability to deliver beyond core public health and safety services remains constrained. One example, the SCE-SoCalGas Lancaster LGP, dating to 2012, will be folding as of January 2016 due to acute budget issues at the city that have led to deep staff layoffs.

Challenges in obtaining quality and affordable program evaluations within the IOU LGP sector include the absence of Statewide program uniformity that results in four IOU models with different emphases and resource-to-non-resource treatment, subpar data collection and reporting, and a vast and diverse sector with approximately 55 LGPs spanning all 58 California counties (and many more cities) except for those few counties outside an IOU territory. Thus, a starting point for effective evaluation of this sector would be to recognize and comprehend each IOU’s approach to exercising its discretion in how to administer its LGP programs.

### 2013-2014 Local Government Partnerships EM&V Studies

Table 2 presents the EM&V studies and budgets funded through the 2013-2014 cycle.

Table 2. 2013-2014 Local Government Partnerships EM&V Studies, Budgets, and Expected Dates of Completion

| 2013-2014 Study Area/Title | Study Type | Study Manager (Energy Division/IOU) | Budget | Completion Date |
| --- | --- | --- | --- | --- |
| Studies Underway |
| Local Government Partnerships Value and Effectiveness Study  | Process | Energy Division | $250,000 | Q4 2015 |
| Targeted Process Evaluation of IOU Local Government Partnerships  | Process | IOU (SCE) | $490,000 | Q3 2016 |
| Process and Effectiveness Evaluation of SCE Energy Leader Model | Process | IOU (SCE) | $225,000 | Q2 2016 |
| Studies Budgeted and Scoped, but not yet Underway |
| Impact Assessment of LGPs | Impact | Energy Division | $150,000\* | Q2 2017 |

\*The budget allocated for this study is being combined with 2015 funds to complete a single 2013-2015 Impact Assessment of LGPs. For details, see the Post 2014 Local Government Partnerships EM&V Studies section below.

### 2013-2014 Local Government Partnerships EM&V Study Descriptions

This section provides short descriptions, objectives, and key research questions of each of the 2013-2014 studies.

|  |  |
| --- | --- |
| **Study Title:** Local Government Partnerships Value and Effectiveness Study  | **Budget:** $250,000 |
| **Completion Date:** Q4 2015 | **Study Manager:** Energy Division |
| **Description:** Evaluation study assessed the value and effectiveness of the LGPs’ Strategic Plan activities for 2013-2014.  |
| **Objective:** Understand the value and effectiveness of LGPs’ Strategic Plan projects through a targeted assessment of the Strategic Plan projects and a broader look at the IOU management of the LGPs with regard to the projects. |
| In the research questions listed below, Strategic Plan projects refer to the non-resource Strategic Plan projects funded outside of the main funding for the local government partnerships (LGP).**Key Research Questions:** The key research questions for this study are as follows:* What mechanisms do the IOUs use to determine eligibility for funding of Strategic Plan projects?
* How aligned are the Strategic Plan projects with the energy efficiency and climate change goals within the Strategic Plan?
* How much have the Strategic Plan projects contributed toward Strategic Plan goals?
* What have LGPs and Strategic Plan projects accomplished compared to the original scopes of work for these efforts?
* What barriers and challenges have the LGPs and Strategic Plan projects encountered in implementing their work scope?
* What factors and metrics led to perceived “successes” within the implementation of LGP and Strategic Plan projects?
* How do the IOUs administer the LGPs?
* How are the Strategic Plan projects managed?
* Should the CPUC use prior local governments’ EE program performance—such as an energy efficiency savings threshold, or the adoption of related enabling policy language—as a prerequisite to making Strategic Plan projects funds available to local governments, and how might such a reform support Strategic Plan goals?
* Can a predictive tool be developed to identify local governments that have the highest potential for success as sponsors of Strategic Plan goals? Are there correlates with effective implementation?
* Across California, how does IOU program administration of their LGP portfolios impact the local governments’ ability to meet Strategic Plan goals?
 |
| **EM&V Data Collection Methods:** The Consultant Team collected primary data from depth interviews and an internet survey. The Consultant Team also performed extensive secondary data collection to capture the specifics around each Strategic Plan project. |

|  |  |
| --- | --- |
| **Study Title:** Impact Assessment of LGPs | **Budget:** $150,000 (budget has not been spent and will be combined with 2015 budget of $280,000 for a 2013-2015 Impact Assessment of LGPs) |
| **Expected Completion Date:** Q2 2017 | **Study Manager:** Energy Division |
| **Description:** See Post-2014 Studies section for a description of a programmed LGP Impact study that would address PYs 2013 through 2015.  |

|  |  |
| --- | --- |
| **Study Title:** Rolling Targeted Process Evaluation of IOU Local Government Partnerships | **Budget:** $490,000 |
| **Expected Completion Date:** Q3 2016 and ongoing | **Study Manager:** IOU (SCE) |
| **Description:** PY 2013-2014 phase of ongoing process assessments of LGP activities, performance, and savings targets achievements. Budget includes both 2013-2014 funds ($365,000) and funds for a market assessment to aid post-2014 program design ($125,000). |
| **Objectives:** The IOUs have proposed to identify a set of high priority LGP activities that would undergo a process evaluation. This approach would identify a handful of LGPs to examine every year or two within a process study. It is expected that the process assessment scope would include municipal retrofits and Strategic Plan support activities, which have not yet been evaluated and which are non-duplicative with existing study efforts. |
| **Key Research Questions:*** How can LGPs be categorized to facilitate appropriate comparisons (“apples-to-apples”)?Would IOU program management benefit from a customization of these statewide standard categories? If so, in what way?
* At a high level, what have been LGPs’ primary achievements and challenges? How do achievements and challenges differ by LGP category?
* What are common LGP program processes? How do these practices differ by LGP category?
* What processes appear most effective? How do these practices differ by LGP category?
* What are opportunities for the IOUs to improve program outcomes? Do the individual IOUs need customized metrics and milestones?
* For each Strategic Plan menu item, why have the IOUs struggled with assessing program performance and reporting results? Would each IOU benefit from having a customized Strategic Plan menu?
* How can IOUs improve project performance reporting such as building type, building vintage, and building square footage to better inform the how the LGPs are contributing to State goals?
* How many local governments have some type of Energy Management System (EMS)? How have they been using them? What achievements have the use of an EMS enabled? How many local governments link EMS data to other databases?
* How have the LGs shared resources across areas and regions? Are significant LGP-to-LGP knowledge transfer lines of communication established?
* To what extent do ratepayer dollars fund local government staff positions? Are staff positions within joint powers authorities or councils of governments?
 |

|  |  |
| --- | --- |
| **Study Title:** Process and Effectiveness Evaluation of SCE’s Energy Leader Model (SCE) | **Budget:** $225,000 |
| **Expected Completion Date:** Q2 2016 | **Study Manager:** IOU (SCE) |
| **Description:** Process Evaluation |
| **Objective:** Study would be the first broad evaluation of the SCE Energy Leader Program (ELP) model since it was introduced in 2008. SCE seeks to demonstrate that the ELP is well received by the partners and results in its intended effect of building capacity via gradually paying greater incentive levels based on certain LG accomplishments. The CPUC seeks to learn whether the ELP effectively administers opportunities as LGP success is demonstrated. CPUC seeks to understand whether some Statewide graduated LGP model is warranted.  |
| **Key Research Questions:** * What is the value, merit, and effectiveness of SCE’s ELP model in motivating achievements of, and building capacity within, LGs?
* What are the factors driving success? How can SCE build on its success to improve the program? What elements, if any, might be appropriate to extend statewide or, conversely, to discontinue?
* How do SCE-provided technical experts facilitate capacity and savings in LGs?
* What is current LG capacity? What is the likelihood that the ELP model offers a viable strategy for increasing that capacity? Are some LGs or types of LGs more likely to benefit from the ELP program model?[[3]](#footnote-3)
 |
|  **EM&V Methods:** * Review of program documents and records
* In-depth interviews with three to four key SCE and SCG program staff
* In-depth interviews with up to 20 program staff and contractors from SCE and SCG[[4]](#footnote-4)
* Interviews with contacts for up to 18 sampled LGs
 |

### Post-2014 Local Government Partnerships EM&V Studies

The CPUC has made funding available for supplementing PY 2013-2014 studies to address PY 2015 program activities as well as to undertake new studies. Table 3 shows the four proposed Energy Division-led studies and one proposed IOU-study that will rely on 2015 or later funds.

Table 3. Post-2014 Local Government Partnerships EM&V Studies, Budgets, and Expected Dates of Completion

| 2015 Study Area/Title | Study Type | Study Manager (Energy Division/IOU) | Budget | Completion Date |
| --- | --- | --- | --- | --- |
| Studies Proposed, but not yet Scoped  |
| Impact Evaluation of the LGPs | Impact | Energy Division | $280,000 | Q2 2017 |
| Local Government Partnerships Process Study: Assessing the LGP – DI Nexus | Process | Energy Division | $125,000 | Q1 2017 |
| Local Government Partnerships Process Study: Assessing Potential Organizational Reforms and Synergies | Process | Energy Division | $125,000 | Q4 2017 |
| Local Government Partnerships Process Study: Assessing Potential Structural, Regulatory, and Budgetary Reforms | Process | Energy Division | $125,000 | Q4 2017 |
| Local Government Partnerships Rolling Process Evaluations | Process | IOU | $295,000 | Q2 2016 |

### Post-2014 Local Government Partnerships EM&V Study Descriptions

This section provides short descriptions, objectives, and key research questions of each of the post-2014 Local Government Partnership EM&V studies.

|  |  |
| --- | --- |
| **Study Title:** Impact Evaluation of LGPs | **Budget:** $280,000 (combined with 2013-2014 budget of $150,000 for a total of $430,000 to fund a 2013-2015 Impact Evaluation of LGPs) |
| **Expected Completion Date:** Q2 2017 | **Study Manager:** Energy Division |
| **Description:** This study will develop ex post savings estimates of net and gross savings values for the LGP programs for the 2013-2015 period. The evaluation will focus on high uncertainty measures or key measure-parameters (e.g., operating hours for LED lamps) and rely on a combination of new data collection, and existing data from relevant 2010-12 and 2013-14 impact evaluations. The study team will combine a 2013-2014 impact evaluation with the 2015 impact evaluation of LGPs; however, interim results will be developed prior to the completion of this study to focus on 2013-14 participation. This study will be conducted under the LGP/REN Nonresidential Downstream Impact Evaluation Work Order.  |
| **Objectives:** * Estimate LGP program group-specific gross impact parameters for measures with high uncertainty that are significant contributors to the LGP programs.
* Estimate net-to-gross ratios (NTGRs) for the LGP programs as a whole and for key grouping of LGP programs (such as by program administrator, and/or by delivery mechanism [e.g., direct install versus non-direct install]).
* To increase the reliability of results, this evaluation will be combined with funding from the 2015 evaluation so the study will span 2013-2015 participants.
 |
| **Key Research Questions:** * What are the ex post gross savings values for LGP programs?
* What are the NTGRs for LGP programs?
 |
| **Potential EM&V Methods:** Telephone surveys to develop NTGRs, on-site verification, and monitoring to estimate key parameters for high uncertainty measures. |

|  |  |
| --- | --- |
| **Study Title:** Local Government Partnerships Process Study: Assessing the LGP-DI Nexus | **Budget:** $125,000 |
| **Expected Completion Date:** Q1 2017 | **Study Manager:** Energy Division |
| **Description:** An examination of how the IOUs deliver Direct Install (DI) within and outside of their LGPs, PG&E’s experience with regional DI and SCE’s experimentation with DI and if replicating either Statewide is appropriate. Assessing SDG&E LGP-DI model and its appropriateness. Examining potential for SCG to begin delivering DI. Additionally, the study will focus on a handful of DI programs that interface with LGPs such as those across the state in small commercial, residential, and public sectors, including statewide Middle Income Direct Install (MIDI), SCE manufactured homes, SCE municipal DI, and PG&E Lodging Savers.The study will examine various DI models in place at each IOU, the result of IOU trials and innovations such as required co-pays, and IOU-local government co-branding marketing efforts, all of which would provide the CPUC a better understanding of the ties and co-dependencies between DI and LGPs, and whether small commercial savings is an appropriate LGP requirement.  |
| **Objectives:** Improve CPUC understanding of DI and LGP coordination, potential, and opportunity.  |
| **Key Research Questions:** * What is the benefit and origin of the IOUs routing DI program savings and budgets through the LGPs?
* Do no-cost municipal DI offerings made available directly to LGs undermine the effectiveness of the LGPs who may have other ideas about savings and budget priorities and goals?
* Should LGPs have some say in the goals or hiring and firing of the 3P program DI providers given their budget and savings ties?
* Should there be an onramp period for advanced LGPs with DI implementation experience to have some first right of refusal?
* What is the track record of DI 3P implementers with accommodating LGPs in terms of responsiveness to LGP requests, sharing data, and program coordination?
* Is PG&E’s limited experience of allowing LGPs to conduct limited Direct Install oversight activities yielding intended benefits?
* Is PG&E’s recent reorganization to remove silos by organizing their LGPs and 3P programs under the same EE management team paying off in terms of improved coordination, EE savings, and LG buy in?
* Is PG&E’s recent move to eliminate no-cost DI in favor of a tiered copay arrangement yielding intended benefits??
* Is PG&E’s recent reform to divide its territory into sub regions with their own savings goals for their LGPs’ Regional Direct Install effort yielding intended benefits?
 |
| **Potential EM&V Methods:** Investigate through field visits, interviews, financial and data analysis, cause and effect. Interviews with all parties within the DI-LGP sphere. Data requests and review of public filings. |

|  |  |
| --- | --- |
| **Study Title:** Local Government Partnerships Process Study: Assessing Potential Organizational Reforms and Synergies | **Budget:** $125,000 |
| **Expected Completion Date:** Q4 2017 | **Study Manager:** Energy Division |
| **Description:** Not Yet Scoped. |
| * **Objective:** Are there correlations between certain LG characteristics (such as size, geography, staff experience, etc.) and likelihood of successful achievement of Strategic Plan goals?
* How does it work out to have multiple LGPs within a single county? Are there natural LGP territories? Is a single local government LGP structure efficient and practical?
* Should local government agencies have a first right of refusal as LGP implementers?
* Do third-party implementers staffing levels respond more easily to adding new LGP ratepayer funded staff positions than public agencies?
* Across California, how does IOU program administration of their LGP portfolios affect the LGs’ ability to meet Strategic Plan goals?
* How frequent is the use of Strategic Plan funding to backfill local agency staff time and materials, and is this an appropriate use of these funds?
* To what extent are LGPs pursuing initiatives that are similar to those being delivered at larger geographic scales (such as via third party or statewide programs)?
* For areas of program overlap, what are the merits of program delivery at each scale, and what criteria could be used to determine which scale is most appropriate?
* What benefit would there be to a tiered, graduated approach to LGPs statewide?
 |
| **Key Research Questions:** TBD |
| **EM&V Data Collection Methods:** TBD |

|  |  |
| --- | --- |
| **Study Title:** Local Government Partnerships and Local Government Affairs Process Study: Assessing Potential Structural, Regulatory, and Budgetary Reforms | **Budget:** $125,000 |
| **Expected Completion Date:** Q4 2017 | **Study Manager:** Energy Division |
| **Description:** Not Yet Scoped |
| **Objective:** Improve Energy Division’s understanding of LGP implementer importance and value in serving as a conduit for IOU communication and directives to partner local governments. * Improve Energy Division’s understanding of IOU communication with local government officials and how such engagement impacts ability of LGPs to deliver cost-effective EE.
* Improve Energy Division’s understanding of the effects of IOU staff serving as local government officials and whether some restrictions are warranted.
* Examine whether limitations on certain communications or required disclosures are appropriate for IOU communication local government elected leaders and high-level public agency staff.
 |
| **Key Research Questions:** TBD |
| **EM&V Data Collection Methods:** TBD |

|  |  |
| --- | --- |
| **Study Title:** Local Government Partnerships Rolling Targeted Process Evaluations | **Budget:** $295,000 |
| **Expected Completion Date:** Q2 2016 | **Study Manager:** IOU |
| **Description:** Each IOU will conduct comprehensive process evaluations on several of its LGPs each year, which it is thought would add some depth to an evaluation. By rotating to a new IOU each year, it is thought that each LGP in an IOU service territory will receive a comprehensive process evaluation every four or five years. Each IOU will oversee the evaluations for its own LGPs. One common scope of work would be used for all individual process evaluations of LGPs so that findings can be compared year after year. The specific number of LGPs to be evaluated in each year will depend on the available budget each year. To avoid duplication with existing studies, at the start of each process evaluation, the IOUs will research and disclose those issues addressed by other LGP evaluation studies either planned or in progress.*For 2015, the number of LGPs to be evaluated is yet to be determined but shall specifically include the Los Angeles County Partnership, the Riverside County Partnership, and the San Bernardino County Partnership as per the direction of the Energy Division on May 20, 2015.*  |
| **Objectives**: 1) Provide full documentation of each LGP’s suite of activities at the time of the evaluation; 2) Provide customized recommendations to each LGP on how they can improve their progress towards their filed program objectives, taking into account the unique nature of each local government; 3) Gauge and track customer satisfaction with each evaluated LGP; 4) Document how each LGP has adopted and implemented the recommendations from the previous process evaluation. |
| **Key Research Questions:** Based upon study areas described in the California Evaluation Framework (2004**)** the following will be examined * How well does each partner (IOU, implementer, local government) understand its respective roles and responsibilities? How can they better collaborate together?
* Program design, goal setting, common vision, and the improvement process,
* Program staffing, staff skills, training, management and operations, institutional set-up,
* Program information and information support systems,
* Program targeting, marketing, and outreach efforts,
* Program theories, theory assumptions, and key theory relationships – especially their causal relationships,
* Program timing and timelines,
* Participant satisfaction (both overall and individual components that interact with the participant in order for these to be assessed),
* Quality control procedures and processes,
* Reasons for unexpected low (or high) participation rates,
* Reasons for overly high free riders, or too low a level of market effects, free- drivers or spillover,
* Use of new practices or best practices, and intended or unanticipated market effects, among others.
* And additional local research issues to be determined at the time of the project initiation meeting.
 |
| **EM&V Data Collection Methods:** TBD but will conform to process evaluation methods per the California Evaluation Framework (2004) |

#### Statement of Ex Ante Update Acknowledgment and Compliance

Programs and activities in this sector use ex ante savings estimates and should be aware of updates to these estimates and studies needed to improve the savings estimates. However, a section on ex ante updates is not included in this chapter. The studies planned in this sector will not likely be designed to directly inform updates to ex ante savings estimates. Please see the customer specific research plans for discussion of updates to ex ante savings estimates.

### Other EM&V Studies that Touch on Local Government Partnerships

There are over 150 EM&V studies planned or ongoing and more than the current studies included in this specific roadmap may touch the local governments. The table below lists the other studies that may be of interest to local governments. To find out more about these studies, go to the specific roadmap shown in the table and look in the study description area by funding cycle.

Table 4. Other Studies that Relate to or Cover Local Government and IOU LGP Program Activities

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **N** | **Funding Cycle** | **Roadmap** | **Study Name** | **Study Type** | **Study Lead** | **Study Budget** | **Estimated Completion Dates** | **Notes on Study Relevant to LGPs** |
| 1 | 2013-2014 | Finance | Impact Evaluation #1 – Cross-Cutting Background and Attribution Research | Impact | Energy Division | $350,000 | Various | Will consider the attribution analysis method for local finance programs  |
| 2 | 2013-2014 | Finance | Process Evaluation #2A – HERO Loan Program | Process | IOU | $200,000 | Q2 2015 | Expects to look at the role of local governments in this program |
| 3 | 2013-2014 | HVAC | Market Assessment to Identify Baselines and Barriers for Existing HVAFC Conditions, Building Permit and Title 24 Compliance | Market | Energy Division | $1,450,000 | Q1 2016 | Evaluators may phone or go onsite to local government permit departments to pull permits |
| 4 | 2015 | HVAC | HVAC Permit Database | Process | IOU (SCG) | $135,000 | Q3 2016 | Look at whether IOUs could perform outreach to municipalities through LGPs for better permitting system |
| 5 | 2015 | Residential | 12 – EUC-HU Process Evaluation Phase 2 | Process | IOU (PG&E) | $150,000 | Q3 2016 | Plans to interview local governments involved in the home retrofit and renovation marketplace |
| 6 | 2013-2014 | Commercial | 2013-2014 Impact Evaluation of Deemed, Direct Installation and Third Party Programs | Impact | Energy Division | $500,000 | Q2 2017 | Impacts will include some measures installed within areas covered by the LGPs, although not specific to LGPs |
| 7 | 2013-2014 | Commercial | Direct Install Process Evaluation | Process | Energy Division | $270,000 | Q2 2016 | Expected to be rolled into a single study using both 2013-2014 and 2015 funds.  |
| 8 | 2013-2014 | Commercial | 3P Program Value and Effectiveness Study | Process | Energy Division | $700,000 | Q4 2015 | Study may cover third-party programs who service LGPs. |
| 9 | 2015 | Commercial | 2015 Impact Evaluation of Deemed, Direct Installation and Third Party Programs | Impact | Energy Division | $300,000 | Q2 2017 | Impacts will include some measures installed within areas covered by the LGPs, although not specific to LGPs |
| 10 | 2015 | Commercial | 2015 Direct Install Process Evaluation | Process | Energy Division | $290,000 | Q2 2016 | Rolled into a single study using both 2013-2014 and 2015 funds.. Goal is to characterize DI programs. The LGP survey collected some information regarding DI during the recent Internet survey with local governments. The overlap between LGPs and 3Ps and how they work together are of particular interest in this evaluation and will include examining the overall benefits of offering DI through the LGPs and 3Ps. |

### Remaining Research Questions for Post 2015

Besides noting the challenges in evaluating LGPs described above, the proposed studies described within this Roadmap document call for careful consideration of the differences in size, available resources, and level of experience among local governments as well as their geographic, socioeconomic, and political variations.

The LGP PY 2013-2014 Value and Effectiveness Study Report (completed in 2015) left some core study questions unaddressed. Specifically, the Value and Effectiveness Study did not fully address two prescribed research questions due to, in part, small sample sizes. A more ambitious future evaluation study might, therefore, be able to resolve these remaining research questions:

* Can a predictive tool be developed to identify LGs that have the highest potential for success as sponsors of Strategic Plan goals? Does this correlate with effective implementation?
* Across California, how does the IOUs’ program administration of their LGP portfolios affect the LGs’ ability to meet Strategic Plan goals?

Additionally, the LGP PY 2013-2014 Value and Effectiveness Study Report identified new research questions that could be future topics for investigation within future program evaluations. These potential new future study questions include:

* What are the consequences or penalties for Strategic Plan project failure by the LGPs?
* How are the IOUs encouraging LGPs to follow through on their completed Climate Action Plans to ensure they are adopted and implemented? What has been the effect of these incentives on the LGPs?
* What local agency contribution might be appropriate to fund Strategic Plan projects?
* Is a change to the LG Strategic Plan program model warranted such that routine Climate Action Plans could be funded via a “small grant” program while more ambitious project proposals with the potential for replicability, knowledge transfer, and innovation would be treated as Strategic Plan pilots and reserved for qualified and experienced LGPs?
* If changes to the LG Strategic Plan program model as described above are warranted, what competency requirements should be demonstrated by LGPs to graduate from “small grant” program eligibility to qualifying to apply for a Strategic Plan pilot project?
* What criteria do the IOUs employ in ranking and selecting Strategic Plan projects and is the process impartial and defensible?
* Are non-resource program efforts, which include the LG Strategic Plan projects (addressing GHG reduction, climate change, reach codes, and data management, among others) as important as or subordinate to achieving direct energy savings?
* Do those IOUs that treat their LGPs as non-resource programs (e.g., SDG&E and SoCalGas) enjoy any competitive advantage to advancing and funding Strategic Plan Projects? Should there be any cause for concern at the CPUC that this has resulted in an uneven playing field when the overall Statewide Strategic Plan budget is allocated?

The Energy Division has a special interest in better understanding how LGP Marketing, Education & Outreach (ME&O) efforts function both as Strategic Plan efforts and as outreach activities to promote resource programs. ED counts two categories of ME&O here, which are in addition to Statewide ME&O efforts. How are these efforts coordinated to ensure a consistent, non-duplicative message? Does any double counting of benefit occur? Another theme for possible exploration within future LGP studies would be to assess the overall effectiveness of the IOU marketing and outreach strategies that leverage LGP community networks to promote energy efficiency to their constituents. Research to date has not fully explored the effectiveness of these marketing and outreach activities, how these activities are being deployed, and what if any duplication exists with Statewide ME&O efforts. Research questions that could contribute to a frame a future LGP study are:

* How do the LGPs serve as the marketing arm of the DI, 3P, and IOU core programs? What would be the impact if LGP marketing of these programs were eliminated? What is the extent of duplication between these efforts and statewide ME&O efforts?
* What types of marketing and outreach activities are presently undertaken by LGPs and to what degree do the program designs originate with the IOUs?
* What has been the overall community engagement and uptake rates, referrals to DI/3P/core programs, and resulting savings?
* How do these marketing and outreach activities vary by IOU or LGP implementer?
* What types of marketing methods and strategies have been the most and least effective? Do these results vary by sector or program model?
* How are marketing and outreach activities tracked within this sector? What additional ME&O data should be tracked, in order to inform future evaluations and decision-making?
* What are the awareness levels of these activities?
* What are the engagement points, and is there effective follow-up to encourage project completion?

## Regional Energy Networks and Community Choice Aggregators EM&V Roadmap

### Background

The 2015 update of the EM&V Roadmap provided for this new chapter presents the State’s efforts to track and evaluate Regional Energy Network (REN) pilots and Community Choice Aggregators (CCAs). This chapter update represents the first revision of this new chapter since it was initiated in Q2 2015. These two programs represent an increasingly important position within the EE portfolio and are generally viewed as innovation drivers, targeting hard-to-reach niche markets and other untapped opportunities. As of December 2015, this chapter covers EE programs administered by the Bay Area Regional Energy Network, the Southern California Regional Energy Network, and Marin Clean Energy. These three non-IOU program administrators (PAs) have representation within the Commission’s EM&V programming and policy-making group via the REN-CCA PCG-2, established in 2014. Establishment of the new PCG-2 and the introduction the RENs-CCAs chapter of the EM&V Roadmap are Energy Division efforts to accommodate the RENs and CCAs apart from the IOU LGP PCG-2 and to grant the non-IOU PAs their own EM&V programming forum.

In addition, all seven of the state’s Program Administrators (PAs) share in the composition and discussion of Local Government-related EE EM&V projects via the Energy Division’s Stakeholder Advisory Group (StAG) a stakeholder group of experts and advocates who meet by conference call six times per year.

#### RENs Background

In Guidance Decision 12-05-015, the CPUC requested that proposed REN pilots demonstrate in the applications the extent to which their activities:

1. Leverage additional state and federal resources so that energy efficiency programs are offered at lower costs to ratepayers,
2. Address the water/energy nexus,
3. Develop and deploy new and existing technologies,
4. Address workforce training issues, and
5. Address hard-to-reach customer segments such as low to moderate residential households and small- to medium-sized businesses.[[5]](#footnote-5)

In Decision D.12-11-015 (November 2012), the CPUC evaluated the RENs proposals according to three criteria:

1. Provide activities that utilities cannot or do not intend to undertake,
2. Pilot activities where there is no current utility program offering, and where there is potential for scalability to a broader geographic reach, if successful, and
3. Pilot activities in hard-to-reach markets, whether or not there is a current utility program that may overlap.[[6]](#footnote-6)

The CPUC approved both the Bay Area Regional Energy Network (BayREN), encompassing the nine Bay Area counties, and the Southern California Regional Energy Network (SoCalREN), which serves the counties of Los Angeles, San Bernardino, Riverside, Ventura, Inyo, Imperial, and Mono, as well as portions of Orange, Kern, Tulare, Santa Barbara and Kings. The Decision also outlined the relationship between the RENs and the IOUs. Specifically, RENs are reliant on the IOUs for program spending reimbursement, but are independent of IOUs for program design and delivery. The RENs as pilots are at present ineligible to direct their own ratepayer-funded EM&V work. Described below is an in-progress EM&V study that assesses the RENs’ value and effectiveness and that is being overseen by the Energy Division. A companion Energy Division-led RENs impact assessment is also near completion. Combined, these two REN studies cover and inform PY 2013-2014 program activities. RENs.

#### CCA Background

Marin Clean Energy (MCE) also is newly authorized to administer ratepayer-funded EE programs as a Program Administrator. As the first CCA in California to undertake energy efficiency efforts, MCE is eligible but has so far not initiated an EM&V study. However, MCE has indicated that in 2016 it intends to undertake an EM&V process study covering the program years 2013-2015. (At present, Energy Division staff constraints and two in-progress Energy Division-led value and effectiveness studies, and an impact assessment prohibit Energy Division from undertaking an Energy Division-led EM&V study of MCE.)

Since the CPUC first authorized MCE in 2012 to administer EE programs, it has enjoyed healthy growth, and has annexed new service territory (the City of Richmond and Unincorporated Napa County) into the CCA. Table 5 presents the projected savings and budgets of the RENs and MCE for 2013-2015.

Table 5. 2013-2015 Regional Energy Networks and Community Choice Aggregator\* Projected Savings and Budgets

|  |  |  |
| --- | --- | --- |
| Program Administrator | 2013-2014 Program Cycle | 2015 Program Cycle |
| Projected Energy Savings Goals (MWh) | Projected Demand Savings Goals (MW) | Projected Gas Savings Goals (Mtherms) | Projected Program Budget ($000's) | Projected Energy Savings Goals (MWh) | Projected Demand Savings Goals (MW) | Projected Gas Savings Goals (Mtherms) | Projected Program Budget ($000's) |
| Bay Area Regional Energy Network (BayREN) | 13,249 | 9 | 931 | $26,568  | 1,747 | 4 | 223 | $13,181  |
| Marin Clean Energy (MCE) | 8,185 | 3 | 732 | $4,015  | 1,541 | 0 | 39 | $1,220  |
| Southern California Regional Energy Network (SoCalREN) | 27,206 | 6 | 405 | $44,119  | 9,461 | 2 | 201 | $20,299  |
| **RENs and MCE Total** | 48,640 | 18 | 2,068 | $74,702 | 12,749 | 7 | 463 | $34,700 |
| **Total EE Portfolio**  | 4,521,314 | 868 | 126,755 | $2,650,178 | 2,036,397 | 351 | 61,494 | $1,334,194 |
| **Percentage of Total EE Portfolio** | 1% | 2% | 2% | 3% | 1% | 2% | 1% | 3% |

**\***Data taken from the California Energy Efficiency Website, August 2015. http://eestats.cpuc.ca.gov/Views/EEDataPortal.aspx/

#### Considerations for Regional Local Government EE Coordination in 2013-2015

The emergence of the semi-autonomous REN pilots (see D. 12-11-015 for details) and the Marin Clean Energy CCA programs calls for careful coordination between the IOUs and these new PA portfolios to avoid customer confusion and program redundancy.[[7]](#footnote-7) In addition, since 2012, the IOU local government partnerships’ capacities and coverage have incrementally expanded in response to local government requests, demonstrated increased capacity, and the regional-solutions-based REN model. In PG&E’s territory, this has translated to enhancing LGP decision-making latitude to further drive direct install projects under a regional LGP-implementer model. For SDG&E’s part, the IOU has initiated a Regional Energy Partnership structure within San Diego County that promotes information sharing and knowledge transfer among local government partners. SCE and SoCalGas have introduced to their LGPs new project management services, which include engineering and contracting expertise and have closely coordinated to more seamlessly integrate their partnership portfolios.

### 2013-2014 RENs and CCA EM&V Studies

Table 6 shows two Energy Division-led studies funded with 2013-2014 funds, which are both expected to be completed in 2015.

Table 6. 2013-2014 Regional Energy Networks and Community Choice Aggregator EM&V Studies, Budgets, and Expected Dates of Completion

| 2013-2014 Study Area/Title | Study Type | Study Manager (Energy Division/IOU) | Budget | Completion Date |
| --- | --- | --- | --- | --- |
| Studies Underway  |
| PY 2013-2014 RENs Value and Effectiveness Study | Process | Energy Division | $225,000 | Q4 2015 |
| Studies Budgeted and Scoped, but not yet Underway |
| PY 2013-2014 RENs and CCA Impact Assessment | Impact | Energy Division | $300,000 | Q4 2015 |

### 2013-2014 RENs and CCA EM&V Study Descriptions

This section provides short descriptions, objectives, and key research questions for each of the programmed 2013-2014 RENs and CCA EM&V studies.

|  |  |
| --- | --- |
| **Study Title:** PY2013-2014 RENs Value and Effectiveness Study | **Budget:** $225,000 |
| **Expected Completion Date:** Q4 2015 | **Study Manager:** Energy Division |
| **Description:** Process evaluation  |
| **Objective:** Understand the value and effectiveness of Regional Energy Network pilots.  |
| **Key Research Questions:** **Research Questions to Inform the Value of the RENs*** What overlap, if any, is occurring between the RENs program activities and IOU programs or activities?
* What are the goals of the programs or activities undertaken by the RENs?
* What is the history of the programs or activities?
* How are the programs or activities being implemented?
* How do the costs associated with the non-resource sub-pilots and activities compare to the overall RENs portfolio of sub-pilots?

**Research Questions to Inform the Effectiveness of the RENs*** What are the pros and cons of the two RENs' implementation models?
* How do the RENs manage their programs?

**Research Questions to Inform Policy*** Can or should the non-resource programs be scaled up or introduced to other areas of the state?
* Would allowing more duplication of programs among RENs and IOUs create healthy competition or would it lead to added consumer confusion, redundancy and waste?
 |
| **EM&V Data Collection Methods:** In depth interviews, secondary research, and an internet survey. |

|  |  |
| --- | --- |
| **Study Title:** PY2013-2014 RENs and CCA Impact Assessment | **Budget:** $300,000 |
| **Expected Completion Date:** Q4 2015 | **Study Manager:** Energy Division |
| **Description:** Goal of this study is to perform an impact assessment on specific measures offered by the RENs and CCA to develop more reliable estimates of program cost effectiveness. Study will update certain key impact parameters using primary data collection (for net-to-gross analysis) and results from recent gross ex post impact evaluations (for key nonresidential lighting measures). Furthermore, because most of the ex ante claimed savings are associated with measures that do not have recent impact evaluation findings that can be directly applied, a high level assessment of the ex ante savings assumptions, including a comparison between RENs/CCA and investor owned utility (IOU) ex ante impact assumptions, will be made to identify if there are any obvious over- or understatements of savings being claimed. In summary, study includes: a high level assessment of the gross ex ante savings values being used for all programs claiming ex ante savings; development of ex post net-to-gross ratios (NTGRs) for selected measures; and estimation of program cost effectiveness using the updated savings values developed in the gross impact assessment and NTGR analysis described above. This study is being conducted under the LGP/REN Nonresidential Downstream Impact Evaluation Work Order. |
| **Objectives:*** Estimate program-specific gross impact parameters for residential and nonresidential measures with high uncertainty that are significant contributors to the REN and CCA programs.
* Estimate NTGRs for each REN and CCA program for which sufficient data are available
* Estimate cost effectiveness metrics for each program
 |
| **Key Research Questions:** * What are the ex post gross savings values for each of the REN and CCA programs
* What are the NTGRs for each of the REN and CCA programs
 |
| **Potential EM&V Methods:** Phone surveys to develop NTGRs, on-site verification and monitoring to estimate key parameters for high uncertainty measures. |

### Post 2014 REN and CCA EM&V Studies

The CPUC has programmed funding to address evaluation needs for 2015 and post-2015 program activities. Table 7 shows the three proposed Energy Division-led studies and one proposed MCE-study that will use post-2014 funds.

Table 7. 2015 Regional Energy Networks and Community Choice Aggregator EM&V Studies, Budgets, andExpected Dates of Completion

| 2015 Study Area/Title | Study Type | Study Manager (Energy Division/IOU) | Budget | Completion Date |
| --- | --- | --- | --- | --- |
| Studies Proposed, but not yet Scoped  |
| Market Scalability Study of the RENs and MCE Multifamily Programs | Process | Energy Division | $150,000 | Q1 2017 |
| PY 2015 RENs Process Study: More Fully Assessing Program Efforts and Future Potential | Process | Energy Division | $120,000 | Q1 2017 |
| PY 2013-2015 RENs and CCA Impact Evaluation | Impact | Energy Division | $290,000 | Q2 2017 |
| PY 2013-2015 Process Study of Marin Clean Energy EE Programs | Process | MCE | $150,000 | Q4 2016 |

### 2015 RENs and CCA EM&V Study Descriptions

|  |  |
| --- | --- |
| **Study Title:** Market Scalability Study of the RENs and MCE Multifamily Programs | **Budget:** $150,000 |
| **Expected Completion Date**: Q1 2016 | **Study Manager:** Energy Division |
| **Description:** Conduct an evaluation on the REN and MCE multifamily (MF) programs to rank the effectiveness and scalability of each program design and implementation approach in light of best practices identified in previous research and other jurisdictions. |
| **Objective:** To improve program design, implementation and outreach activities/outputs and outcomes as they relate to savings, cost-effectiveness, etc. |
| **Key Research Questions:** (to be targeted to property owners and managers)* Does the program pursue any/all MF properties, or target certain specified segments?
* What are the measure, investment, and/or technical assistance needs of this market sector, by service territory?
* Does the program take a whole-building, building system, opportunistic/trigger-point, or low/no-cost approach to improvements?
* What is the program theory and implementation for these programs and how do they differ (if at all) across program administrators (including the IOUs)?
* How do these programs interact with the other IOU or PA programs, if at all?
* What is the size and distribution of eligible MF properties in each REN/CCA service territory?
* Is the program scalable? If so, what kinds of implementing organization(s) is/are needed to cover those portions of IOU service areas where there are significant numbers of MF properties?
* What are the estimated program, per building, and achieved savings costs exhibited by these programs? How do these costs vary if there are different types of program intervention strategies, or different target market segments required to meet program energy savings goals? By service territory, what are the projected costs of fully scaling this/these program(s) to meet market need?
* Can key program design elements/components or process changes improve program outputs and outcomes, including energy savings (kW/kWh & therms), investment levels (e.g., with workable financing)?
* Is the high number of MF dwelling units in the pipeline for BayREN because of close local government ties with BayREN? If so, why does this high number of retrofits not occur in SoCalREN?
 |
| **Potential EM&V Methods:** TBD |

|  |  |
| --- | --- |
| **Study Title:** PY2015 RENs Process Study: More Fully Assessing Program Efforts and Future Potential | **Budget:** $120,000 |
| **Expected Completion Date:** Q1 2017 | **Study Manager:** Energy Division |
| **Description:** Process evaluation  |
| **Objective:** Further enhance understanding of benefit of Regional Energy Network pilots. This study would answer remaining questions not addressed in the PY 2013-2014 study. The study would be meant to inform the appropriateness of REN next steps and program expansion to inform the CPUC’s direction on the issue, including whether continued probationary status is warranted, whether the RENs should be made permanent, and whether new REN applications would be invited. Proposed study would also address program areas that the PY 2013-2014 evaluation study did not cover including the Regional Energy Center pubic agency technical assistance, and Water-Energy Nexus efforts. . The study would consider how RENs may be driving innovation within EE in California and would attempt to characterize spillover benefit from this new program administrator. |
| **Key Research Questions:** * What is the long-term effectiveness and viability of the current REN program administrator models?
* How well and how equitable is the existing practice of crediting REN savings to the IOUs and would there be benefit to considering an incentive for savings arrangement?
* How equitable and effective is the existing IOU contracting requirement and would there be benefit to considering an arrangement closer to that for CCAs?
* Should the CPUC continue to allow RENs, CCAs, and LGPs to exist within the same markets and territories?
* Should the CPUC encourage more direct competition between RENs and IOU program activities?
* Have the IOUs imitated REN programs? Have the IOUs responded with changes in the way they engage the State’s local governments?
* How well does the Southern California Regional Energy Center (SoCalREC) leverage local government resources and what level of local government capacity building occurs due to SoCalREC activities?
* What should be the guidelines regarding the full regulatory processes by which any new proposed REN would be expect to adhere?
* How would new RENs be able to leverage and borrow from the experience, models, and lessons learned from the existing RENs?
* How would new RENs be funded and is there a fairness cost-barrier issue that the CPUC can reduce to ensure access to RENs by California governments of lesser means?
* What special challenges would RENs in rural areas encounter apart from higher travel and contracting costs?
 |
| **Potential EM&V Methods:** TBD |

| **Study Title:** PY 2013-2015 RENs and CCA Programs Impact Evaluation  | **Budget:** $290,000 |
| --- | --- |
| **Expected Completion Date:** Q2 2017  | **Study Manager:** Energy Division |
| **Description:** This study will conduct an ex post analysis on the REN and CCA programs. The study will focus on the program-measure combinations that contribute the highest level of uncertainty in the lifecycle net savings values for the REN-CCA portfolio of programs. Likely activities include a billing analysis of any multifamily Whole Building program and a net-to-gross ratio (NTGR) analysis of any single-family Home Upgrade program. The final determination of program-measures to be evaluated will be based on cumulative participation from 2013-2015 and anticipated uncertainty surrounding the best available estimates of savings values. |
| **Objectives:** Estimate key impact parameters (e.g., NTGRs or gross realization rates) for program-measure combinations that contribute the highest level of uncertainty in the lifecycle net savings values for the REN-CCA portfolio of programs. |
| **Key Research Questions:** * What are the ex post gross savings values for high uncertainty measures?
* What are the NTGRs for high uncertainty measures?
 |
| **Potential EM&V Methods:** Telephone surveys to develop NTGRs, billing analysis to estimate gross savings values. |

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| **Study Title: PY 2012-2015** MCE Process Study of Marin Clean Energy EE Programs | **Budget:** $150,000 |
| **Expected Completion Date:** Q4 2016 | **Study Manager:** MCE |
| **Description:** Process Evaluation |
| **Objective:** The process study, to be led by Marin Clean Energy with oversight by Energy Division, would examine the existing and potential EE coordination activities within the MCE Service Territory for MCE’s 2013-2015 EE offerings. BayREN, MCE, and PG&E all offer EE programs within the MCE service territory and the study would examine how these implementers do or do not avoid duplication and optimize opportunities and coordination for customers. The study may include examination of one or more of MCE’s EE program offerings including but not limited to commercial and single family program components. |
| **Key Research Questions:** * What value do the multiple ratepayer-funded programs in Marin Clean Energy territory provide?
* How well do the implementation teams for the third-party provider (3PP) programs and the MCE programs interface? Could MCE make improvements that are beneficial to both parties?
 |
| **Potential EM&V Methods:** TBD |

#### Statement of Ex Ante Update Acknowledgment and Compliance

Programs and activities in this sector use ex ante savings estimates and should be aware of updates to these estimates and studies needed to improve the savings estimates. However, a section on ex ante updates is not included in this chapter. The studies planned in this sector will not likely be designed to directly inform updates to ex ante savings estimates. Please see the customer specific research plans for discussion of updates to ex ante savings estimates.

### Other EM&V Studies That Touch on RENs

There are over 150 EM&V studies planned or ongoing and more than the current studies included in this specific roadmap may touch the RENs or CCA. The table below lists the other studies that may be of interest to the RENs or CCA. To find out more about these studies, go to the specific roadmap shown in the table and look in the study description area by funding cycle.

Table 8. Other Studies that Relate to or Cover RENs and CCA Program Activities

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **N** | **Funding Cycle** | **Roadmap** | **Study Name** | **Study Type** | **Study Lead** | **Study Budget** | **Estimated Completion Date** | **Notes on Study Relevant to RENs or CCA** |
| 1 | 2013-2014 | Codes & Standards | Compliance Improvement Process Evaluation for IOU Statewide Program and BayREN Codes and Standards Program | Process | Energy Division | $180,000 | Q2 2015 | Assessment of the BayREN delivery of their compliance improvement activities |
| 2 | 2013-2014 | Finance | Impact Evaluation #1 – Cross-Cutting Background and Attribution Research | Impact | Energy Division | $350,000 | Various | Will consider the attribution analysis for local finance programs run by CCA and RENs |
| 3 | 2013-2014 | Finance | Impact Evaluation #3 – Annual Snapshot and Verification Study | Impact | Energy Division | $100,000 | Q3 2015 | Will provide a snapshot of participation within the local finance programs run by CCA and RENs |
| 4 | 2013-2014 | Finance | Impact Evaluation #4 – End of Cycle Studies; 1) ARRA-Originated and Regional Finance Pilots; 2) Statewide Pilots | Impact | Energy Division | $700,000 | Q4 2015 for 1) and TBD for 2) | Will determine changes to the market place due to these finance programs as well as energy savings |
| 5 | 2013-2014 | Marketing Education and Outreach (ME&O) | Cross-cutting Process Evaluation | Process | Energy Division | $900,000 | Q4 2015 | Plans to provide feedback on ME&O efforts conducted by CSE, the IOUs, and the RENs |
| 6 | 2013-2014 | Residential | 3A – Impact Evaluation of Home Energy Report Initiatives (includes Marin Clean Energy program) | Impact | Energy Division | $584,342 | 2014 and 2015 | Includes MCE comparative feedback programs |
| 7 | 2013-2014 | Residential | 6B – MF-EUD/MIDI & MFEER Focused Impact Evaluation | Impact | Energy Division | $200,000 | 2015 | Looks at data collection by RENs to support program impacts |
| 8 | 2013-2014 | Residential | 8B – Focused Impact Evaluation for SF-WH Home Upgrade Basic/Flex Program | Impact | Energy Division | $300,000 | 2015-2016 | Looks at data collection by RENs to support program impacts |
| 9 | 2013-2014 | Residential | 6A – MF-EUC/MIDI Pilots & MFEER Program Change Process Evaluation | Process | IOUs | $250,000 | 2014 | Looks at interactions with RENs |
| 10 | 2013-2014 | Residential | 8A – Focused Process Evaluations for SF WH Home Upgrade Program Change | Process | IOUs | $250,000 | 2014 | Looks at interactions with RENs |
| 11 | 2015 | Residential | 3A – Impact Evaluation of Home Energy Report Initiatives (includes Marin Clean Energy program) | Impact | Energy Division | $420,000 with a $75K budget for Marine Clean Energy | Q4 2016 | Includes MCE comparative feedback programs |
| 12 | 2015 | Residential | 8B – 2015 Residential Whole House Upgrade Impact Evaluation | Impact | Energy Division | $550,000 with $200K of this budget for RENs | Q3 2017 | Includes all REN Upgrade projects for both upgrade packages. |

### Remaining Research Questions for Post 2015

The PY 2013-2014 Value and Effectiveness Study of the RENs identified several areas for additional investigation in future studies. These questions have been incorporated into the proposed RENs study described above and titled *PY2015 RENs Process Study: More Fully Assessing Program Efforts and Future Potential.*

Additional potential future study questions for RENs that do not fit into a programmed study include:

* How valuable and easy to use do customers find the SoCalREN Enterprise Energy Management Information System (EEMIS) and Community Energy Efficiency Project Management System (CEEPMS) software?
* What would be the costs to scale up EEMIS training and support to a statewide level?
1. This is largely a new program area for PG&E and is in response to the Prop. 39 funding infusion for EE projects for grades K-12. Thus, the PG&E LGPs’ primary public building sphere is public schools. [↑](#footnote-ref-1)
2. San Bernardino Associated Governments [↑](#footnote-ref-2)
3. Excerpted from the RIA Research Plan, September 10, 2015, pp. 2-3. [↑](#footnote-ref-3)
4. A review of SCE and SCG program documents indicates that are nine staff members involved in managing SCE’s non-institutional partnerships and eight staff members involved in managing SCG’s partnerships. [↑](#footnote-ref-4)
5. D.12-05-015, page 149-150. [↑](#footnote-ref-5)
6. D.12-11-015, page 17. [↑](#footnote-ref-6)
7. Combined, the three PAs offer EE services to some seven million households, which is about 70 percent of the population serviced within the combined IOU service territory. [↑](#footnote-ref-7)