Final Report

Model Assessment and Process Evaluation of Southern California Edison's Energy Leader Partnership Model

January 18, 2017

Project Sponsor:

Southern California Edison with Oversight by the Energy Division

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Funded by the Ratepayers of California

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List of Acronyms

| FULL NAME | DESCRIPTION |
|-----------|---|
| AOG | Association of Governments |
| ARRA | American Recovery and Reinvestment Act |
| CCA | Community Choice Aggregation |
| CPUC | California Public Utilities Commission |
| COG | Council of Governments |
| ELP | Energy Leader Partnership |
| IOU | Investor-Owned utility |
| JPA | Joint Powers Authority |
| LEED | Leadership in Energy & Environmental Design |
| LED | Light-Emitting Diode |
| LG | Local Government |
| LGP | Local Government Partnership |
| PACE | Property-Assessed Clean Energy |
| SCE | Southern California Edison |
| SCG | Southern California Gas |
| VFD | Variable Frequency Drive |

Glossary

| FULL NAME | DESCRIPTION | |
|--|---|--|
| Association of Governments | A collection of public authorities, such as local governments or utility districts, that may jointly exercise any power(s) they share. | |
| Baseline | Energy consumption conditions that exist prior to energy efficiency interventions. | |
| Benchmarking | A process that compares the energy usage of a building to the energy usage of other similar buildings or industry best practices. It can also include documentation of building energy usage compared to a baseline. | |
| Building and Maintenance Fund | A special purpose fund used to finance the repair and maintenance of municipal facilities. | |
| California Energy Efficiency Strategic Plan | California's statewide plan for generating energy savings for all sectors, including local governments. | |
| California Public Utilities Commission (CPUC) | A California state agency that regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. | |
| Capacity | The capability of a local government to perform energy efficiency activities in-house or to access technical experts when expertise does not exist in-house. | |
| Capital Improvement Fund | A fund used to pay for municipal projects that involve the acquisition or improvement of infrastructure like buildings, water facilities, sewers, streets, or parks. | |
| Climate Action Plan | A plan developed by municipalities that includes a set of goals and strategies for how the municipality will mitigate climate change. This can include plans to reduce energy demand, develop sustainable infrastructure, reduce greenhouse gas emissions, or use less water. | |
| Core Program | Investor-owned utility (IOU)-offered energy efficiency programs, many of which are offered statewide. | |
| Core Program Coordination | Efforts to connect residents and businesses with core programs available to them. | |
| Council of Governments | A regional governing body comprised of governmental entities, such as cities and counties, within its service territory. | |
| Demand Response | A program where customers are encouraged to reduce their energy usage during times of peak demand. | |
| Energy Action Plan | A plan developed by municipalities that includes a set a goals and strategies for how the municipality will use energy more efficiently and, to the extent possible, reduce energy consumption. Energy Action Plans are often a component of Climate Action Plans, but can be developed without an associated Climate Action Plan. | |
| Energy Efficiency | Actions to reduce energy consumption while maintaining or increasing the service provided by the energy use (such as comfort, mechanical power, light) | |

| FULL NAME | DESCRIPTION | |
|--|---|--|
| Energy Leader Partnership (ELP) | SCE's term for its Local Government Partnerships (LGPs). LGPs are agreements between one or more IOUs and one or more local governments to engage in demand side management. The LGPs are tasked with addressing the three program goals of municipal retrofits, supporting the <i>California Energy Efficiency Strategic Plan</i> , and engaging in outreach in their communities to connect customers with core IOU programs. | |
| ELP Group All entities in the ELP, including the IOU partnership manager(s), the implormation, and the other member local governments. | | |
| General Fund | A local government fund that pays for any administrative and operating expenses that are not paid for out of a special purpose fund. | |
| Government Decision- Makers | Individuals or groups who hold leadership positions within the local government and make resource allocation decisions. These may include the city council, city manager, mayor, or a municipality's financing director. | |
| Greenhouse Gas | Gases that trap heat in the atmosphere and contribute to the greenhouse effect, causing global warming. | |
| IOU Partnership Manager | Sometimes referred to as "program staff." These staff work at SCE or SCG and are responsible for managing one or more ELPs. | |
| Job Order Contracting | Job Order Contracting is a procurement process that enables municipalities to select from a list of pre-approved contractors with the goal of expediting the procurement of construction services. | |
| Joint Powers Authority | An entity whereby two or more public authorities may jointly exercise any power(s) they share. | |
| Local Government (LG) | A city or county. (Special districts are also eligible for participation.) | |
| Member Government | A local government participating in a multi-government ELP. | |
| Municipal Retrofit | An energy efficiency upgrade to any structure or energy-using device owned and operated by a participating local government, which might include a city, a county, or a special district. | |
| Nonparticipants | Local governments in SCE's territory not enrolled in ELP | |
| Non-Resource | Program activities that do not generate claimed energy savings, though they may contribute to energy savings in the future. | |
| On-bill Financing | A financing mechanism, provided by the IOUs, where the municipalities receive a zero percent loan to cover their upfront retrofit costs and pay back the loan through savings on the energy bill. | |
| Partnership Implementing Organization | The contract holder for an LGP responsible for directing the partnership's ELP activities on behalf of the partnering member local governments. Commonly the partnership implementer is an Association of Governments/Council of Governments/Joint Powers Authority or third-party organization like a chamber of commerce, a sustainability-focused organization, or an energy-focused organization. In some instances, a partnership with multiple local governments does not include an outside organization acting as a partnership implementer and, in those situations, the cities use a technical assistance contractor as a "vendor implementer." | |
| Procurement Process | The process of obtaining contractor services or energy efficient equipment, subject to local government regulatory constraints. | |

| FULL NAME | DESCRIPTION |
|------------------------------------|---|
| Program Element | The three business lines of the ELP program: municipal retrofits, strategic plan activities, and core program coordination. |
| Regional Energy Network | Authorized by the CPUC, Regional Energy Networks manage, deliver, and oversee their own energy efficiency programs and support local governments as they engage in energy efficiency activities. |
| Representative | The government staff person with whom we spoke to collect information about a local government. |
| Request for Proposals | Issued as part of a procurement process, Requests for Proposals solicit competitive bids from contractors detailing the estimated time and cost to complete a project. |
| Resource | Resource activities are those in which energy savings are claimed, either by the partnership or by core IOU programs. |
| Strategic Plan Menu item | Strategies listed in the <i>California Energy Efficiency Strategic Plan</i> that local governments conduct to meet the goals identified in the plan. See Appendix A for a full list of strategic plan menu items. |
| Technical Assistance Contractor | SCE-contracted organizations that provide technical assistance to local governments and ELPs to support partnership activities. Also referred to as technical experts. |
| Tiers | The levels through which a local government participating in SCE's ELP program progresses as they complete tier advancement criteria. Ordered from lowest to highest as valued, silver, gold, and platinum. |
| Tier Advancement Criteria | The requirements a local government must complete before advancing to the next tier. The criteria relate to efficiency savings, demand response actions, Energy Action Plans, and community outreach. |
| Vendor Implementer | When a technical assistance contractor serves as the implementing organization for a multi-government partnership. |

Executive Summary

This report provides findings and recommendations from Research Into Action's 2016 model assessment and process evaluation of Southern California Edison's (SCE) Energy Leader Partnership (ELP) program. SCE, in collaboration with Southern California Gas Company (SCG), partners with local governments to engage them in demand side management and become energy efficiency leaders in their communities. The ELP program uses a tiered model to encourage local government energy efficiency action in the following areas, as described by SCE's 2013-2014 Customer Energy Efficiency and Solar Division Program Implementation Plans, Exhibit 4C:

- 1. **Government facilities:** Helps local governments identify and implement energy efficiency projects in their municipal facilities through retrofits and enrollment in demand response programs. (We refer to this program element as municipal retrofits.)
- 2. **Strategic support:** Assists local governments to incorporate energy efficiency into government planning documents (such as Energy Action Plans, codes, and permitting processes. These goals are congruent with the *California Energy Efficiency Strategic Plan*.
- 3. **Core program coordination:** Supports local governments as they conduct community outreach and education to connect residences and businesses with existing SCE and SCG programs, including direct install programs and Savings by Design.

Upon completing requirements related to each program element, a local government advances to the next tier and is eligible for enhanced incentives for their projects. The model assessment sought to gauge whether the ELP model effectively motivates and increases the capacity of local governments to perform energy efficiency activities. Specific components of the ELP model we investigated included the tiered structure and the provision of technical expert advising. We also conducted a process evaluation to identify typical program processes that are working well, as well as areas for improvement.

In conducting this evaluation, we followed the methodology described in our evaluation plan, *Process Evaluation and Model Assessment of Southern California Edison's Energy Leader Partnership Model* (September 30, 2015). We had previously finalized the plan responsive to comments received from SCE, the other investor-owned utilities (IOUs), representatives of the California Public Utilities Commission (CPUC), and the public.

We used a matched sampling approach to identify groups of similar local governments (based on publicly available data) that had varied in their program accomplishments. We reviewed relevant industry literature, spoke with key partnership managers at SCE and SCG, as well as with the SCE ELP partnership manager, to identify factors that would moderate a local government's performance in the program, such as population size or the extent to which leadership supported energy efficiency. Using the partnership manager input, we selected six groups of matched local governments. Each group contained one higher-tier ELP government (platinum or gold), one

lower-tier ELP government (silver or valued), and one nonparticipating government (government not enrolled in ELP).¹ We also conducted in-depth interviews with a total of ten program staff (eight IOU partnership managers at SCE and two at SCG) and one technical assistance contractor.

We organize our key findings from our interviews and analyses, paired with conclusions and recommendations, by study research question.

Research Questions: What are the value, merit, and effectiveness of SCE's ELP program in motivating achievements of, and building capacity within, local governments? What is the likelihood that the ELP model offers a viable strategy for increasing local government capacity? How do SCE-provided technical experts facilitate capacity and savings in local governments?

Key findings: Local governments described how the tiered model motivated them to do energy efficiency projects and, through their project engagement, built their capacity to do future energy efficiency work. Key motivational components of the tiered model include the increased incentives available after tier advancement, the spurring of competition between local governments, and the public recognition of energy efficiency accomplishments. Once motivated, local governments conduct energy efficiency projects and build internal support and expertise, which translates into human and technical resources. Local governments receive support from program-provided technical experts and their ELP group, which comprises the IOU partnership manager(s), the partnership implementing organization (such as an Association of Governments), and member local governments.

- Conclusion: The ELP model is a viable strategy for increasing local government capacity for municipal retrofits actions and Energy Action Plan development. The tier model motivates local governments to do municipal retrofits projects and complete Energy Action Plans. By conducting these activities, local government staff gain in-house expertise and knowledge of efficiency opportunities and benefits, and learn how to access necessary support when needed expertise does not exist in-house. As discussed in a subsequent conclusion, the tier advancement requirements do not appear to motivate strategic plan activity beyond Energy Action Plans, nor to motivate core program coordination activity.
 - **Recommendation:** We recommend that SCE maintain the ELP model, refine it as suggested below, and reassess it periodically through subsequent evaluations. (R1)

¹ Our final representative sample included 17 local governments, as we were unable to reach a contact at one nonparticipating government.

Research Question: What are the opportunities to improve program processes?

Key findings: Interviews with local government representatives and IOU partnership managers provided little evidence that ELP motivates strategic plan activity beyond Energy Action Plans or motivates core program coordination activity. Some local governments reported some tier advancement requirements are unclear or seemingly unrealistic. IOU partnership managers noted that they are not allowed to use discretion in determining local government tier advancement and described inflexible criteria in a "one-size-fits-all" format. Having limited municipal facilities was a barrier to meeting tier requirements related to electricity savings, enrollment in demand response programs, and core program coordination activities. Local government funding was a barrier to Energy Action Plan implementation.

- Conclusion: The tier advancement requirements do not appear to motivate strategic plan activity beyond Energy Action Plans, nor to motivate core program coordination activity. In addition, governments' building stocks vary and thus local governments face differing opportunities for energy efficiency actions.
 - Recommendations:
 - If achieving strategic plan and core program coordination objectives is equally important to SCE as is achieving municipal retrofits objectives, consider revising tier advancement criteria to provide increased motivation for a broader set of strategic plan and core program coordination activities. (R2)
 - Consider allowing a local government with limited municipal facilities to leverage other energy efficiency actions for tier advancement, such as enhanced core program coordination efforts. Enable the IOU partnership managers to use discretion in tier advancement, supported by strong documentation of local government achievements garnering the advancement. (R3)
 - Work one-on-one with local governments to identify the facilities eligible to enroll in demand response programs and use discretion to decide whether it is feasible for the local government to ultimately enroll 50% of their eligible facilities in demand response programs. (R4)

Key findings: One area in which local governments reported challenges and lacked in-house capacity was in completing the paperwork required for rebate applications. Removal of measures from the eligible measures list also frustrated local government's invoicing process. Local governments rely on the assistance of IOU partnership managers, technical assistance contractors, and rebate program staff to ensure forms are filled out correctly. Both local government representatives and IOU partnership managers reported that measure incentives frequently change, a situation that is both challenging and frustrating to all parties.

> Conclusion: The rebate application paperwork taxes local government internal resources.

- Recommendations:
 - Assess rebate applications and supporting requirements to identify opportunities to make them more readily understood by local governments and easier to complete. (R5)
 - Encourage IOU partnership managers to offer local governments ongoing rebate application support with the goal of eliminating submission errors, which delay local governments' receipt of payments. (R6)
 - Improve the system notifying local governments and implementing organizations of changes to the measure eligibility list by notifying affected agencies as soon as the changes are finalized. (R7)

Research Questions: 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?

Key findings: Local governments described how ELP participation contributes to their development as energy efficiency leaders in their communities by rendering energy efficiency actions visible. Municipal retrofits projects display benefits of energy efficiency work to constituents, core program coordination efforts enable the local government to promote energy efficiency to the broader community, tier advancement celebrations recognize local government accomplishments, and alignment of ELP criteria with the Statewide Energy Efficiency Collaborative (SEEC) Beacon Award facilitates state-level recognition of local government accomplishments.

- Conclusion: The ELP tiered model makes local governments' energy efficiency actions visible to other local governments and to constituents, helping fulfill the "lead by example" goal of the ELP program. Public recognition and increased incentives are strong motivators for local governments.
- Conclusion: The ELP tiered model appears worthy of consideration by the other IOUs. The scope of this study did not include an examination of the other IOU program designs; thus we are unable to conclude whether the model is appropriate to extend statewide, but we did not find any evidence to the contrary. Nor did we find evidence suggesting any ELP program elements should be discontinued.
 - Recommendation: The other California IOUs should consider whether this study's findings suggest the tiered model offers elements appropriate for their programs. (R8)

Research Question: What is current local government capacity? What are the factors driving success? Are some local governments or types of local governments more likely to benefit from the ELP program model?

Key findings: Local governments reported having more internal capacity to perform core program coordination than they do municipal retrofits or strategic plan activities. Appropriately, local governments use technical experts most frequently for municipal retrofits projects,

sometimes for strategic plan projects, and apparently not at all for core program coordination projects. Participating local governments had more internal resources (staff) and external resources (available through the ELP program or from other organizations, such as regional energy networks) to draw on than nonparticipating local governments and among participants, higher-tier governments appeared to have more internal capacity for municipal retrofits projects than lower-tier governments.

Internal support for ELP activities, from both departmental staff and elected leaders, along with someone to serve as a liaison across multiple departments, is associated with local government success. Local governments with limited municipal facilities, budgets, staff and leadership commitment, and staff time are least able to complete activities and make use of program support, limiting their tier advancement and performance in the program.

Nonparticipating local governments reported undertaking energy efficiency activities, though typically to a lesser degree than most of the participating local governments. Program awareness varied among the nonparticipating local governments, with the most informed reportedly having investigated participation.

- Conclusions: Many local governments, both ELP participating and nonparticipating, appear to have the capacity to make use of program support and incentives to accomplish energy efficiency, though activity varies as they manage staff and financial resources. Local government organizational support is key to program accomplishments, while lack of such support, limited staff time, budget constraints, and limited eligible facilities undermines a local governments' ability to effectively participate. Interest in the program and energy efficiency activity exists among nonparticipating local governments.
 - Recommendation: Given finite program resources, we recommend SCE develop a process for removing inactive local governments from the program and using the freed-up resources to bring in new local governments. SCE should consider instating a probationary period for local governments for which program participation has gone stagnant. For example, if a local government has not conducted any municipal retrofits, strategic plan, or core program coordination activities ("activities" denoting any component of a project; not necessarily the entire project) for at least two quarterly reporting cycles, perhaps they should be placed on probationary status. If their inactivity persists for an additional two reporting cycles, perhaps they should be suspended from the partnership. Resources previously earmarked for, or used to follow up with, the stalled local governments could be dedicated to incorporating new local governments into the ELP program. (R9)

This recommendation is consistent with a practice common among custom incentive programs in which the utility commits to providing the incentive for the approved project on the condition that the project is completed within a specified period. Should SCE adopt this recommendation, it should ensure all local governments in the ELP program are aware of this change prior to its implementation.

While we believe that a probationary policy might make the best use of SCE's limited ELP resources, we recommend that SCE carefully design such a policy to best

support local governments and the aims of the ELP. For example, we would encourage program managers to confer with local governments during any probationary periods to identify whether additional program support, or the support of other organizations such as the regional energy network, might induce the governments to take actions. Such conversations should ensure that all local governments are treated fairly; this study notes that governments differ in their retrofit and demand response opportunities. Finally, it may be prudent to allow exceptions to any probationary policy for local governments in extenuating circumstances, such as significant financial hardship or other setbacks.

1. Introduction

This report provides findings from Research Into Action's 2016 model assessment and process evaluation of Southern California Edison's (SCE's) Energy Leader Partnership (ELP) program. SCE, in collaboration with Southern California Gas Company (SCG), partners with local governments to engage them in demand side management and become energy efficiency leaders in their communities. Using data from in-depth interviews with investor-owned utility (IOU) partnership managers and key representatives from ELP participating and nonparticipating local governments across California, we assessed:

- > The effectiveness of the ELP program model in light of the varying local government characteristics (model assessment)
- > Program goals and the activities and experiences of all involved parties, including partnership managers at SCE and, to a more limited extent, SCG, program-provided technical assistance contractors, and local government representatives (process evaluation)

1.1. The Energy Leader Partnership Program

ELPs are collaborative capacity-building public-private ventures to advance energy efficiency in public and private facilities. They are governed by formal agreements between SCE and one or more local governments to engage in demand side management. At the time of the interviews, some partnerships included a single city, and in these cases, SCE partnered directly with the local government (Figure 1-1), though it is the evaluation team's understanding that singlegovernment ELPs have been migrated into multi-government ELPs, according to SCE partnership managers' feedback in late 2016. When the partnership comprises multiple local governments, the partnership may include another entity acting as a "partnership implementer" that holds the contract for the partnership. These are often Councils of Government or non-profit organizations, though in a couple instances it is the technical assistance contractor performing this function and is referred to as a "vendor implementer." SCE offers many of its partnerships jointly with SCG – 16 of SCE's 19 partnerships (84%) also partner with SCG. Note that for those joint partnerships, SCG uses a different Local Government Partnership (LGP) model. In this report, we use the term "ELP group" to refer to the IOU partnership manager(s), the implementing organization (such as an Association of Governments [AOG]; see glossary), and the other member local governments in the ELP.



Figure 1-1: ELP Partnership Structures*

* AOG = Association of Governments, COG = Council of Governments, and JPA = Joint Powers Authority.

IOU partnership managers play an important role in guiding the partnerships and serving as a liaison between the partnerships and the utility. The IOU partnership managers work with the ELPs to set their annual goals and budgets. They meet with partnership staff to discuss partnership progress, address barriers that are hindering progress, discuss funding options like on-bill financing or rebate opportunities, assist with outreach events, and relay upcoming program opportunities that may be beneficial for the partnership. Local governments and partnership managers occasionally turn to their account executives or business customer division representatives for advice on matters that relate to their ELP activities.

The ELP program has three core elements, as described by SCE's 2013-2014 Customer Energy Efficiency and Solar Division Program Implementation Plans, Exhibit 4C:

- 1. **Government facilities:** Helps local governments identify and implement energy efficiency (EE) projects in their municipal facilities through retrofits and enrollment in demand response (DR) programs. (We refer to this element as municipal retrofits.)
- 2. **Strategic Support:** Assists local governments to incorporate energy efficiency into government planning documents, codes, and permitting processes. These goals are

congruent with the *California Energy Efficiency Strategic Plan*. Appendix A provides California's strategic plan goals.

3. **Core program coordination:** Supports local governments as they conduct community outreach and education to connect residences and businesses with existing SCE programs including direct install programs and Savings by Design.²

The design of SCE's ELP program differs from those of the other California IOUs' LGP programs in that it uses a tiered structure to encourage local government accomplishments. Local governments usually enter the program at the "valued partner" level and move through silver, gold, and platinum tiers as they meet energy savings, strategic planning, demand response, and core program coordination targets.³ As local governments move up the tiers, they receive higher incentives for energy savings and reportedly are eligible for greater support from SCE to pursue efficiency activities covered by the program. Figure 1-2 illustrates the tiered structure and requirements.

² See page 58 SCE Customer Energy Efficiency and Solar Division Program Implementation Plans, Exhibit 4C 2013-2104. Core Program Communication constitutes Element C of SCE's ELP program. According to the Implementation Plans: Through the Core Program Coordination element, LGPs coordinate with each other, with their participating local governments, with SCE, and with other implementers to support energy efficiency programs across the SCE portfolio with respect to outreach, education, direct installations for residential and small business customers, third party programs, and technical assistance. Local governments have multiple superior points of access and communications channels with their stakeholders and constituents. All of SCE's LGPs have committed to help SCE identify and enroll local participants in residential and small business direct install programs. Through the ELP, LGPs will also have the opportunity to help bring energy efficiency to moderate-income customers slightly above the Low-Income Energy Efficiency (LIEE) guidelines or to customers who are unable to produce the necessary LIEE documentation. The Core Program Coordination element comprises five subcomponents: C1 Community Outreach and Education, C2 Residential and Small Business Direct Install, C3 Third Party Program Coordination, C4 Retrofits for Just Above LIEE, and C5 Technical Assistance

³ Program documentation indicates that some local governments entered the ELP program at a tier higher than valued, reflecting energy efficiency accomplishments compared to a 2006 baseline. SCE launched the tiers in 2010.

Figure 1-2: ELP Tier Model and Requirements



1.2. Research Questions (Evaluation Objectives)

Table 1-1 identifies the evaluation's research questions and the associated report chapters.

Table 1-1: Research Questions and Associated Report Chapters

| RESEARCH QUESTION* | REPORT CHAPTER | |
|---|--|--|
| What are the value, merit, and effectiveness of SCE's ELP program in <i>motivating</i> achievements of, and building <i>capacity</i> within, local governments? | Chapter 3, Evidence of Effectiveness of Tiered ELP Model | |
| What are the factors driving success? | | |
| Are some local governments or types of local governments more likely to benefit from the ELP program model? | Chapter 4, Understanding Drivers, Barriers, and Current Local Government Capacity | |
| What is current local government capacity? | | |
| What are the opportunities to improve program processes? | Chapter 5. Accompany of ELD Program | |
| How do SCE-provided technical experts facilitate capacity and savings in local governments? | Chapter 5, Assessment of ELP Program Processes | |
| How can SCE build on its success to improve the program? | | |
| What is the likelihood that the ELP model offers a viable strategy for increasing local government capacity? | Chapter 6, Building on Success: Conclusions and Recommendations | |
| What elements, if any, might be appropriate to extend statewide or, conversely, to discontinue? | | |
| * Research Plan for the Process Evaluation and Model Assessment of Southern California Edison's Energy Leader Partnership Model. 2015. http://www.energydataweb.com/cpucFiles/pdaDocs/ | | |

1357/SCE%20Energy%20Leaders%20Partnership%20Process%20Eval_Research%20Plan_09.30.2015.docx

2. Evaluation Framework and Methods

2.1. Evaluation Framework

We initiated the project by preparing an evaluation plan responsive to SCE's request for proposal, *Work Specifications Documents, Process and Effectiveness Evaluation of SCE's Energy Leader Model,* December 2014. As a first step, we presented our proposed research to the SCE and the other IOUs in an August 3, 2015 webinar and solicited feedback.⁴ We next prepared a draft evaluation plan, sought feedback from SCE, the other IOUs, and the California Public Utilities Commission (CPUC), and received their feedback on or before August 28. We revised the plan per comments received, reissued it, and led a public webinar on September 16, publicized through the established CPUC communication channels, and solicited a final round of feedback. We issued the finalized evaluation plan, *Process Evaluation and Model Assessment of Southern California Edison's Energy Leader Partnership Model*, on September 30, 2015. Table 2-1 lists the research questions from SCE's *Work Specifications* and our phrasing of these research questions for this report.

| RESEARCH QUESTIONS FROM WORK SPECIFICATIONS | RESEARCH QUESTIONS AS PHRASED FOR THIS REPORT |
|--|---|
| What is the effectiveness of the SCE Energy Leader Model's tiered incentive system on motivating LGP achievements? What is the effectiveness of the SCE Energy Leader Model's efforts to build capacity? What are the merits of SCE's ELP? Specifically, what value does the tiered partnership approach provide? | What are the value, merit, and effectiveness of SCE's ELP program in motivating achievements of, and building capacity within, local governments? |
| What is the current level of capacity within LGP's? | What is current local government capacity? |
| What is the likelihood of being able to increase or build new capacity within the LGP's? | What is the likelihood that the ELP model offers a viable strategy for increasing local government capacity? |
| What are the driving factors underlying SCE LGP's achievements in building capacity? And should the tiered model go further by limiting opportunities to new partnership entrants to allow for gradual capacity building and to ration scarce resources? | What are the factors driving success? Are some local governments or types of local governments more likely to benefit from the ELP program model? |
| What can be improved? | What are the opportunities to improve program processes? How can SCE build on its success to improve the program? |
| What successful elements of ELP might be considered for deployment on a statewide-level? What elements of ELP should be discontinued? | What elements, if any, might be appropriate to extend statewide or, conversely, to discontinue? |
| How do SCE provided technical experts facilitate capacity or savings in local governments? | How do SCE-provided technical experts facilitate capacity and savings in local governments? |

Table 2-1: Research Questions as Phrased in the Evaluation Solicitation and this Report

⁴ Representatives of the CPUC's Energy Division declined our invitation to participate.

Per our evaluation plan, our research followed a two-phase approach. In Phase 1, we created preliminary profiles of local governments and constructed a sampling plan to select matched triads of local governments that vary in how much support they have received through ELP, but are matched along other government and ELP characteristics. The triads comprised local governments that received a great deal of ELP support (higher-tier ELP participants – platinum and gold), local governments that have received some ELP support (lower-tier ELP participants – silver and valued), and local governments that have received no ELP support (nonparticipants; those local governments not enrolled in the program).⁵ The comparison of higher- and lower-tier ELP participants enabled us to investigate the value, merit and effectiveness of the tier model, and other research questions. The comparison of ELP participants and nonparticipants enabled us to investigate the topics.

In Phase 2, we conducted interviews with SCE and SCG managers and a technical assistance contractor to gain data for the evaluation process and to finalize selection of the local government sample. Next, we conducted interviews with the key contacts from the selected local governments. Analysis of all interview data informed both the process evaluation and the qualitative tiered model assessment.

Our interviews with local government representatives addressed the topics shown in Table 2-2.

| TOPIC | ELP PARTICIPANTS | ELP NONPARTICIPANTS | |
|---|--|---|--|
| Awareness and understanding | Understanding of program goals | Awareness of program and understanding of goals | |
| ELP role | Their role in ELP for their organization | | |
| Interactions with SCE partnership managers | Typical interactions and activities with SCE ELP managers | Typical interactions with SCE partnership managers | |
| Partners | Perceptions of partners' roles and responsibilities | | |
| Audits | Experiences receiving electric and gas audits for facilities, including differences between integrated and separate audits | | |
| Gas retrofits | Experiences including gas measures in facility retrofits | | |
| ELP support | Support they received from ELP | | |
| ELP incentive structure | Decisions made as a result of ELP's tiered incentives | | |
| ELP activities | Successes in their ELP activities, including their assessment of program influence | | |
| Challenges and opportunities | Challenges in their ELP activities, opportunities to enhance ELP, challenges and opportunities relating to tiered incentives | | |

Table 2-2: Interview Topics for Local Government Representatives

⁵ Secondary research we conducted suggests that SCE serves about half of targeted local governments through its ELP program; thus, about half of the targeted population are nonparticipants.

| TOPIC | ELP PARTICIPANTS | ELP NONPARTICIPANTS | | | | |
|---|--|---|--|--|--|--|
| Organizational commitment to energy efficiency | Commitment from the top (concomitants of assignment of responsibility, accountability, resources, quantitative goals, and timeline) | | | | | |
| Organizational energy efficiency knowledge | Knowledge of what to do and how to do it (e.g., benchmarking of facilities, audits, participation in energy efficiency and demand response programs) and who is involved in these activities | | | | | |
| Internal barriers | Internal barriers (e.g., complexity of organizatio | Internal barriers (e.g., complexity of organization, decision criteria and authority) | | | | |
| External barriers | External barriers (e.g., competing objectives, constituent demands) | | | | | |
| Unsuccessful efforts | Any unsuccessful efforts, reasons why the plans did not materialize, marketplace challenges they have faced or face, other barriers | | | | | |
| Program experiences | Experiences in efforts to obtain programmatic (ELP, other) support, successes, disappointments | | | | | |
| Relationships within other municipalities | Their relationship with their ELP and their ELP contacts, frequency of contact, and the nature of that contact | Relationship with other municipalities on energy efficiency efforts | | | | |
| Feedback on ELP | Feedback on their ELP, its cohesion, and potential champions within the ELP | Feedback on ELP | | | | |

2.2. Local Government Interview Sample

Local government and ELP partnership characteristics that may influence local governments' accomplishments, such as population, budgets, leadership support for energy efficiency, or ELP size (the number of local governments in a multi-government partnership), have the potential to obscure our assessment of ELP model effectiveness and merit.⁶ Thus, we used a matched sampling approach for local governments with similar characteristics. We worked with key ELP program model across local government sets comprising one higher-tier government (platinum or gold), one lower-tier government (silver or valued partner), and one nonparticipating government that all have similar characteristics.

We asked SCE's ELP program manager to provide feedback on what types of matched local government groups would be most useful to include in this evaluation. Next, we asked partnership managers to complete a short web survey to provide us with information on the local governments they work with. Specifically, we asked partnership managers to provide information on each local government regarding characteristics we identified as being relevant to a local government's ability to complete energy efficiency activities. See Appendix B for the characteristics asked in the web survey.

⁶ These factors moderate the influence of program support on achievements, otherwise known moderating variables.

⁷ We include in this term the ELP program manager.

We created a database with eight characteristics to create our matched samples. These characteristics were:

- > Local Government-level Characteristics
 - Size as measured by population, according to the US Census Bureau.
 - Political affiliation of residents, including proportion of Green Party affiliation, as obtained from the California Secretary of State.
 - Whether the local government has adopted a Climate Action Plan or Energy Action Plan, as indicated by the list of California jurisdictions addressing climate change published by the State of California Governor's Office of Planning and Research in June 2014.
 - Whether local government has political leadership on energy efficiency issues, as indicated by whether the mayor has signed the US Conference of Mayor's Climate Protection Agreement.
 - Whether local government has been recognized as a Top Ten Southern California Climate Planning Leader.⁸

> ELP-level Characteristics

- Organization of local government's ELP (single-government or multi-government ELP).⁹
- Size of local government's ELP (number of local governments in ELP).
- Whether local government's ELP implementer is an Association of Governments (AOG)/Council of Governments (COG)/Joint Powers Authority (JPA), a non-profit organization, or a vendor implementer.

Based on the partnership managers' feedback, we selected six groups identified as valuable to the evaluation. Because population size appears to be an important predictor of both opportunity and ability to achieve energy savings, we made an effort to choose local governments for each group that have similar population sizes. In some instances, a selected local government was in a state of flux and no staff were available to speak with the evaluation team. In each case, we replaced that local government with another local government with similar characteristics. Table 2-3 provides the final sample.

⁸ We used recognition as a Top Ten Southern California Climate Planning Leader as a proxy for prior commitment to energy efficiency. http://innovation.luskin.ucla.edu/sites/default/files/Luskin%20Climate%20Report.pdf

At the time of the interviews, some local governments were in an ELP without other member local governments. It is the evaluation team's understanding that single-city ELPs have been migrated into multi-local government partnerships, according to program staff feedback in late 2016.

| GROUP CHARACTERISTICS | | HIGHER-TIER LOCAL GOVERNMENT | LOWER-TIER LOCAL GOVERNMENT | NONPARTICIPANT LOCAL GOVERNMENT |
|---|------|------------------------------------|-----------------------------------|---------------------------------------|
| Single City ELP, member | LG | Santa Ana | Long Beach | |
| government implementer, has | Tier | Gold | Valued | Palmdale |
| Climate Action Plan | ELP | City of Santa Ana | City of Long Beach | |
| In largest ELP (29 LGs), large | LG | West Covina | Montebello | |
| city (population of 63,000- 108,000), Council of | Tier | Platinum | Valued | Mission Viejo |
| Governments implementer, no Climate Action Plan | ELP | San Gabriel Valley | San Gabriel Valley | |
| Far away from SCE | LG | Tulare | Hanford | |
| headquarters, non-profit | Tier | Gold | Valued | |
| implementer | ELP | San Joaquin Valley | San Joaquin Valley | |
| Multiple-LG ELP, small ELP size | LG | Huntington Beach | Norwalk | |
| (4-5 LGs), multiple member | Tier | Platinum | Silver | Lancaster |
| governments as implementer | ELP | Orange County Cities | Gateway Cities | |
| | LG | Ventura County | Mono County | |
| Counties, small to medium ELP size (4-10 LGs) | Tier | Gold | Valued | Orange County |
| | ELP | Ventura County | Eastern Sierra | |
| Recognized Top 10 Southern | LG | Santa Monica | Apple Valley | |
| California Climate Planning | Tier | Gold | Valued | Ontario |
| Leader, has Climate Action Plan | ELP | Community | High Desert Regional | |

Table 2-3: Final Local Government (LG) Sample (n = 17)*

* We were unable to reach someone at the nonparticipating local government for the group that includes Tulare and Hanford, resulting in a sample of 17 local governments.

We conducted interviews in August and September 2016 with representatives from ELP participating local governments that ranged from 30 to 75 minutes in length. Interviews with representatives of nonparticipating local governments were shorter, lasting 20 to 30 minutes. The representatives we spoke with worked in a variety of government departments (Table 2-4).

| Table 2-4: Departments of Interviewed Local Government Representatives (n = | = 17 |) |
|---|------|---|
|---|------|---|

| GOVERNMENT DEPARTMENT | NUMBER OF REPRESENTATIVES |
|---|---------------------------|
| Public Works | 9* |
| Office of Sustainability or Environment | 4 |
| City Manager's Office | 3 |
| [City name] Choice Energy Department | 1 |

* Includes one local government representative who reported his title to be "Deputy Building Official" but did not clarify his department

In addition to interviews with key IOU partnership managers to finalize the groups, we conducted in-depth interviews with additional partnership managers for the model assessment and process evaluation. We conducted interviews lasting about an hour with ten partnership managers; eight at SCE (including the ELP program manager) and two at SCG. We also spoke with a representative of a technical assistance contractor. We conducted these interviews in January and February 2016. When discussing findings from partnership manager interviews, we include both SCE and SCG staff perspectives. We call out the technical assistance contractor separately from partnership managers. Table 2-5 identifies how long interviewed partnership managers had been working in the ELP program.

| LENGTH OF TIME | NUMBER OF MANAGERS |
|---------------------------|--------------------|
| Two, three, or four years | 3 |
| Five or six years | 3 |
| Seven or eight years | 5 |

Table 2-5: IOU Partnership Manager Time in Role (n = 11)*

* This includes the technical assistance contractor.

While our conversations with partnership managers discussed all three program elements in roughly equal proportion, our conversations with participating local government representatives were dominated by the municipal retrofits program element in spite of an interview guide that sought balanced information. Representatives typically mentioned aspects of the strategic plan or core program coordination program elements only when prompted by the interviewer, who sought to explore all three program elements. We suspect three factors as having led representatives to discuss municipal retrofits projects more than other program activities:

- > **The interviewee's government department and duties**: Half the sample (9 of 17) of representatives came from the public works department, which is directly responsible for the maintenance and improvement of municipal facilities.
- > Local governments need more support to conduct municipal retrofits activities: When interviewees discussed ELP support, they tended to talk about municipal retrofits because this is the area for which they receive and need the most support to complete energy efficiency projects. Representatives tend to view core program coordination as a less challenging endeavor and provided little elaboration as to how the program assists them with it.
- > **Tiered model emphasizes municipal retrofits**: The most easily understood tier advancement requirements relate to municipal energy savings; some local governments reportedly focus on municipal retrofits activities to the relative neglect of strategic plan and core program coordination activities.

2.3. Limitations of the Study

We interviewed 12 of roughly 122 local governments, a relatively small sample, although one that was carefully constructed to address the research questions.¹⁰ As with all interview research, there was some variation across interview questions in the number of local governments responding, as representatives at times indicated that a question was not relevant to their partnership or that they were unable to provide an informed answer to a question. As typical with the administration of lengthy interview guides to contacts with competing demands on their time and no direct incentive to participate in the interview, we occasionally omitted questions to accommodate a representative's time limitations. In addition, answers varied in the amount of detail included in the response. For all these reasons, the number of local governments' representatives providing answers to a given question varies slightly.

A very few interview questions directly asked yes/no questions, for which the frequency of yes responses can be interpreted as our best estimate of the tally had the question been posed in a survey. In contrast, a large majority of the interview questions elicited, as intended, open-ended responses in which each representative provided what are essentially top-of-mind responses. Representatives varied in how much they reflected on the question and endeavored to provide all relevant thoughts.

In short, with interview data, the absence of a finding does not confirm a finding of its absence. The actual, unobserved incidence is a number at least as high as the incidence we report, and possibly considerably higher.

The study scope did not include an exploration or assessment of local government characteristics prior to program participation. Further, most of the interviewed representatives were not involved in the early stages of their municipality's program participation. Thus, our study does not provide a "pre/post" assessment of program influence. To assess program influence, our method compares higher- and lower-tier governments with each other and with nonparticipants.

While we provide the results of the comparison groups, we note that the small sample sizes limit what one can definitively conclude about the tier model. Nonetheless, we find patterns among the data that suggest that the tier model may be effective in encouraging some types of program activity (as described in Chapter 3, *Evidence of Effectiveness of Tiered ELP Model*), especially among local governments having characteristics that we explore in Chapter 4, *Understanding Drivers, Barriers, and Current Local Government Capacity*.

¹⁰ We say "roughly" 122 local governments because the number of local governments participating in the ELP program at any given time is in flux due to new governments joining and some governments leaving the program. We arrived at the number 122 by counting the number of participating local governments, excluding those in institutional partnerships or partnerships in the formative stage at the time of sample development (North Orange County Cities and San Bernardino Associated Governments [SANBAG]).

3. Evidence of Effectiveness of Tiered ELP Model

This chapter presents findings from interviews conducted with IOU partnership managers, the technical assistance contractor representative, and participating local government representatives, along with review of ELP tier data. Using program data, we identified the paths that our interviewed participating local governments took through the tiers since the inception of the tiered structure in 2008.¹¹ Of the 12 local governments we interviewed, eight have made at least once tier advancement, including the two most recent local governments to join a partnership; four have not moved from their initial tier despite being a partner for more than seven years (Table 3-1).

| PARTNER SINCE | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | NUMBER OF TIER ADVANCEMENTS |
|------------------|------|------|------|------|------|------|------|--------------------------------|
| 2006 | V | V | V | V | V | V | V | 0 |
| 2009 | V | V | V | V | V | V | V | 0 |
| 2009 | V | V | V | V | V | V | V | 0 |
| 2006 | V | V | V | V | V | V | V | 0 |
| 2012 | | | V | V | S | S | S | 1 |
| 2014 | | | | | V | V | S | 1 |
| 2008 | V | V | S | G | G | G | G | 2 |
| 2007 | V | V | V | S | G | G | G | 2 |
| 2009 | V | S | S | G | G | G | G | 2 |
| 2006 | V | S | S | S | S | G | G | 2 |
| 2009 | S | G | G | G | Р | Р | Р | 2 |
| 2006 | G | G | Р | Р | Р | Р | Р | 1 |

Table 3-1: Progression Through Tiers for Interviewed Local Governments*

* V= Valued, S=Silver, G=Gold, P=Platinum

This analysis suggests that some local governments are able to progress through the tiered structure while others stagnate at the valued tier. To better understand how (and the extent to which) the tiers motivate local governments to take action and how the tiers develop the capacity of local governments to perform energy efficiency work, we asked ELP partnership managers and participating local government representatives to reflect on the influence of the tiered structure.

¹¹ The program data supplied to us did not contain tier levels for years 2008 and 2009.

Below, we begin with a discussion of findings regarding how the tiered advancement structure motivated local governments to take efficiency actions and how the tiers increased the capacity of local governments to take future energy efficient actions. Then we discuss ways in which the tiered model has not been especially effective at motivating local governments and one apparent unintended consequence of the increasing incentives that accompany tier advancement.

3.1. Tiered Advancement Model Appears to Motivate and Build Capacity for Municipal Retrofits

IOU partnership managers and local government representatives largely agreed that tiers encourage energy efficiency activity. As described below, similar numbers of partnership managers and government representatives mentioned the same aspects of the tiers as being effective at encouraging energy efficiency activity. However, the two groups differed in the frequency with which they reported public recognition as important. Eight of 11 representatives reported the tiers provide a platform for public recognition of a local government's energy efficiency accomplishment, while only 3 of 11 IOU managers mentioned this element as encouraging energy efficiency activity. This finding suggests that public recognition of local government energy efficiency activity motivates the local governments more than the IOU partnership managers realize.

3.1.1. IOU managers view the tiers as driving motivation, which in turn can contribute to increased local government capacity

IOU partnership managers viewed the tiers as effective at encouraging local governments to take efficiency actions. All 10 interviewed IOU partnership managers and the technical assistance contractor noted at least one example of how tiers motivated local governments to take actions (Table 3-2).

| TIER ASPECT | NUMBER OF MANAGERS |
|---|--------------------|
| Increased incentives | 10 |
| Competition | 5 |
| Public recognition | 3 |
| Motivate strategic plan activities | 2 |
| Motivate core program coordination activities | 1 |
| Increase Capacity | 6 |

Table 3-2: IOU Manager Views on Tier Motivation and Capacity Building (n=11)

Nine partnership managers and the technical assistance contractor reported the increased incentives for municipal retrofits projects available at higher tiers encourage local governments to take more energy efficiency actions. For example, one IOU partnership manager reported a recent conversation he had with a local government representative about increasing savings so they could advance to the next tier and take advantage of greater incentives. Another IOU partnership manager noted that the tiered model enables cities that traditionally struggle with completing efficiency projects to take a bit more risk to do an energy efficiency project because they will be rewarded later with higher incentives.

Four SCE partnership managers and the technical assistance contractor noted the tiered model spurs competition among the local governments that drives all of them to take more energy efficiency actions. According to one IOU partnership manager, "cities are naturally competitive" with one another.

A different partnership manager noted the local governments "always want to outdo the city next to them" because they do not want to be seen as falling behind their peers. A third IOU manager stated the tiers and the competition provide local governments with a sense of accomplishment and pride.

- Ywo IOU partnership managers and the technical assistance contractor reported the tiers provide local governments a way to publicize energy efficiency achievements and receive recognition for their accomplishments. One partnership manager described how, when a city moves up a tier level, SCE will have a recognition event at a city council meeting for the local government to celebrate. In some cases, this involves a photo-opportunity and presenting an oversized check. This event allows for the local government leaders to be more aware of the energy efficiency activity. Another partnership manager reported that SCE's tiered model closely matches the Statewide Energy Efficiency Collaborative (SEEC) Beacon Award criteria. If local government will be eligible for a Beacon Award and can be recognized at the state level for their energy efficiency achievements.
- > Two partnership managers noted the tiers help motivate strategic plan actions. These two partnership managers reported that because tier advancement requires developing an Energy Action Plan, more cities are completing Plans, which in turn drives future energy efficiency activity.
- > One partnership manager noted that the tiers "increase the local governments' ability to do outreach" regarding core program coordination, but did not specify how the tiers do this.

Six SCE partnership managers noted that the tiers and the program in general increase the capacity of local governments to do energy efficiency work by increasing the knowledge and experience of local government staff and elected leadership. Four of the six partnership managers provided specific examples about how the program enhances the capacity of local governments.

> Two IOU partnership managers specifically noted that the tiered advancement structure increases the capacity of local governments to complete energy efficiency activities due to the requirement to complete an Energy Action Plan. An Energy Action Plan provides local governments with a "roadmap" they can use to take energy efficiency actions that will advance them through the tiers. Without an energy efficiency plan that outlines energy saving opportunities, the local governments conduct incidental projects as they arise (one-offs) rather than projects identified through informed planning. Through the Energy Action Plan development process, local governments identify opportunities and increase awareness of energy efficiency benefits among city leaders, thus building the capacity of local governments to undertake future energy efficiency projects and advance through tiers.

- One partnership manager noted one city that had little experience doing energy efficiency projects prior to program participation now "doesn't do anything without calling Edison" to identify the best equipment and incentive amounts.
- > Another partnership manager noted how some cities have in-house energy efficiency expertise as a result of continued involvement in the program. Those local government staff understand audits, know how to complete the project applications, and understand what the next projects and opportunities are.

3.1.2. Local government representatives largely reported that tiers are effective at motivating energy efficiency actions and building local government capacity

Almost all local government representatives provided examples of the effectiveness of the tiered structure at either motivating their local government to take efficiency actions and/or increasing their capacity to take efficiency actions. Of the 12 representatives interviewed, 11 provided between one and five examples of how the tiers are effective at motivating them take energy efficiency actions and 9 provided examples of increased capacity (Table 3-3). One lower-tier representative indicated that she was unfamiliar with the tiered structure and is not included in the table.

| MOTIVATIONAL ASPECT | NUMBER OF REPRESENTATIVES |
|------------------------------------|---------------------------|
| Increased incentives | 10 |
| Public recognition | 8 |
| Competition | 2 |
| Motivate strategic plan activities | 2 |
| Increase Capacity | 9 |

| Table 3-3: Local Governmen | t Representatives' | Perspective of Tiers' | ' Motivational Aspects (n = 11)* | |
|----------------------------|--------------------|-----------------------|----------------------------------|--|
| | | | | |

* One of the 12 interviewed local governments provided no examples.

> Ten local government representatives mentioned that the increased incentives available at higher tiers motivated them to undertake municipal retrofits projects. One platinum-tier representative noted that the tiers encouraged them to "do a few more projects each year because we see the benefits, whether it's through our first cost savings or through our reduced gas and electricity bills." Another platinum representative noted how using the increased incentives available through the tiers helped them raise matching funds for

leveraging past federal funding to take efficiency actions. A silver-tier representative described her local government's interest in completing a specific project that would bump them into the gold tier, so that subsequent planned projects would qualify for higher incentives. A valued-tier representative mentioned that his primary motivation in moving up a tier is to harness the increased rebates available at higher levels.

- Eight local government representatives noted that tier advancement allows them to publicize their energy efficiency achievements to their constituents and, in particular, to local government leaders such as city councils and city managers. The celebrations of tier advancement are important in bringing energy efficiency achievements to the attention of city leaders so they will be encouraged to continue to support energy efficiency activities. One gold-tier representative said that the celebrations are a way to "get in front of council so they feel good about the way staff is managing energy performance" and another goldtier representative said that the celebrations are a way for city council to receive some credit for their role, because projects at her local government are done only through council approval.
- Y Two local government representatives, one platinum and one silver, noted that competition with neighboring local governments encourages them do more. The platinum-tier representative noted that his local government tries to "lead by example with other cities" and the silver-tier representative noted how advancing through the tiers plays into her "competitive nature" with other local governments. This silver-tier representative reported she is working on meeting requirements for platinum.
- Y Two local government representatives, one gold-tier and one valued-tier, noted how the tiers helped their local governments advance strategic planning related to energy efficiency. Specifically, the gold-tier representative noted how each tier gives him clear ideas about the type of energy efficiency planning he should be doing. The valued-tier representative noted that without the Energy Action Plan, his local government was "listlessly stumbling through the partnership year with whatever incidental projects came up."

As noted above, almost all (11 of 12) participating representatives noted the tiers in some way motivate them to take energy efficiency actions. Additionally, there is evidence that this motivation of local governments in turn increases the energy efficiency capacity of local governments by increasing their knowledge of and experience with energy efficiency. As seen in Table 3-3, nine of the 11 representatives, representing all tier levels, noted that the program has increased their experience and knowledge of energy efficiency, and this in turn has increased their ability to identify and complete projects. We provide an example from each tier level of how representatives reported that their capacity to do energy efficiency increased as a result of program participation.

A valued-tier representative stated that since joining the partnership his local government "is more cognizant of what we can do with our funding. Instead of throwing money towards something that will provide 10% energy efficiency, we can do things that will improve energy efficiency by 20%. We better prioritize projects from the guidance we have gotten from Edison."

- > A silver-tier representative noted that prior to the program, the local government did not have much energy efficiency experience. Since joining the partnership, the local government has done more energy efficiency projects, which in turn developed their experience, making it easier to seek funding for energy efficiency from the city council.
- > A gold-tier representative remarked how the strategic plan program element meshes well with the municipal retrofits element. He described how Energy Action Plan development helps the government to better identify energy saving opportunities.
- > A platinum-tier representative credited the program with "helping to create a mindset here in the community about the importance of energy efficiency."

Not all local government representatives agreed that the tiered model is effective at motivating local governments to do energy efficiency activities. Two representatives reported that the tiers did not motivate them to do municipal retrofit projects. One of these representatives, a valued-tier representative, suggested that the increased tier amount was not enough to be motivating. A gold-tier representative stated their tier status "does not matter to us" because they always pursue energy conservation measures and typically recoup their costs in five to seven years.

3.2. Tiered Model Appears to Motivate and Build Capacity for Energy Action Plans, but not Remaining Strategic Plan or Core Program Coordination Activities

The tiered model advancement criteria define increasing thresholds for electricity savings and Energy Action Plan development and implementation. The requirements are less ambitious for the core program coordination program element, as a local government must simply do one activity to advance. As a consequence, the tiered model is less effective at motivating action for the core program coordination element and for the strategic plan element aside from the Energy Action Plan.

Local government representatives noted the following:

- Eight representatives, from valued, silver, and gold tiers, noted that the tiers do little to encourage core program coordination because local governments often do similar work without program support. When asked explicitly about how tiers encourage core program coordination activities, representatives made statements like we "do a lot of this [outreach] anyway" and "we have a lot of activities and community events throughout the year anyway, so it's easy for us to have an outreach effort during an event [that qualifies in the tiered model]."
- Six representatives noted the tiers do little to encourage strategic plan activities. For instance, one gold-tier representative described completing a Climate Action Plan but struggling with implementing it because the local government does not have enough money and the partnership does not provide funds for Plan implementation. Her local government would be more motivated to implement the Plan if the partnership provided her funds to do so. Two other gold-tier representatives did not understand what was

meant by strategic plan activities or the *California Energy Efficiency Strategic Plan.*¹² Another representative implied the tiers do little to motivate strategic plan activities and that his local government focuses their attention on municipal retrofits activities.

While a subset of our interviewed representatives indicated that the tiers do not motivate them to do strategic plan or core program coordination activities, this lack of motivation indicates tier ineffectiveness and does not suggest a negative consequence of tiers. We describe such a consequence next.

3.3. One Unintended Consequence Apparent

Our research noted only one way in which the tiered model negatively impacts local governments' energy-saving activities. The negative effect is relatively limited in magnitude compared to the motivational and capacity building functions the tiers provide. Three representatives (one valued, one silver, and one gold) suggested that the tiered incentive structure postpones large energy saving projects because local governments are reluctant to start a large project until they move up a tier level so they can get the larger incentives. One valued representative noted that his local government is first going to complete a small project that will bump them into the next tier before embarking on a large streetlight project because the local government wants the larger incentives for the streetlight upgrade. A silver-tier representative calculated that she should complete an outdoor lighting "park project" before completing other work so that her local government could get the gold-tier incentives for subsequent projects.

¹² A reviewer of the draft report suggested that this lack of understanding may have resulted from a pause in strategic plan activities "for a long period of time."

4. Understanding Drivers, Barriers, and Current Local Government Capacity

This chapter presents findings from IOU partnership manager and local government representative interviews, both participating and nonparticipating, to understand the factors driving local government energy efficiency success and barriers preventing success. We summarize the discussion by describing which types of local governments are more likely to benefit from the ELP model and be successful in the program. We finish with a discussion of current local government capacity for energy efficiency action as it relates to the use of in-house expertise or program-provided support and expertise.

4.1. Drivers of and Barriers to Success

To assess the factors that drive success in the ELP program, we examined factors internal to the local government, partnership-level factors, and factors external to the local government and ELP. We selected factors for which there were minimal missing data. For this reason, we excluded selected factors when more than three representatives did not know or did not comment on that factor, as indicated by the label "insufficient data." Table 4-1 presents the factors we explored and whether we included them in the final analysis.

| FACTOR LEVEL | FACTORS | INCLUDED | WHY EXCLUDED |
|--------------------|---|--------------|---|
| | Energy efficiency knowledge among staff | | Insufficient local government data |
| | Elected leadership support | \checkmark | |
| Internal to local | Government budget | \checkmark | |
| government | Staff time | \checkmark | |
| | Energy efficiency opportunity* | | Insufficient local government data |
| | Organizational barriers | \checkmark | |
| | Frequency of communication with IOU partnership manager | | No difference between tier groups and not applicable to nonparticipants |
| Partnership-level | Use of on-bill financing or supplemental financing | | Insufficient local government data |
| | Use of technical assistance | \checkmark | |
| | ELP group** | | Not applicable to nonparticipants |
| External to local | Constituent Support | ✓ | |
| government and ELP | Marketplace barriers*** | | No difference between tier groups |

Table 4-1: Success Factors Examined

* Partnership managers discussed energy efficiency opportunity, as we present below, but we were unable to score it as we did for the other factors.

** We discuss benefits of the ELP group in Section 5.1.4.

*** No local government representative reported marketplace barriers to sourcing energy-efficient equipment or locating trained contractors.

We ranked each local government on the factors included in analysis, using a negative three to positive three scale for five factors; positive numbers indicate the factor helps the local government accomplish energy efficiency actions through the ELP program whereas negative numbers indicate the factor hindered local government progress. We use a zero to three scale for one factor – use of technical assistance – the absence of which is merely neutral and not a hindrance. We briefly describe how the scoring system was operationalized at the outset of each section below.

While the group's total average score of all factors follows a gradient, at the same time, we found substantial variation within each group (Table 4-2). In our discussion below, we elaborate on factors more common among the higher-tier group that appear to be driving success.

| | AVERAGE SUCCESS FACTOR SCORE | SCORE RANGE |
|-------------------|------------------------------|-------------|
| Higher-tier group | 8.92 | 3.5 to 14 |
| Lower-tier group | 2.75 | -7 to 16 |
| Nonparticipants | 2.38 | -4 to 8 |

Table 4-2: Averaged Success Factor Score and Range by Group

Table 4-3 presents the average scores for each success factor. The two factors that stand out among the higher-tier group are few organizational barriers and the ability of local government staff to focus on energy efficiency activities. The higher-tier group also reported more support by elected leadership and constituents for energy efficiency activities as well as higher use of technical assistance and fewer budget constraints. Gray cells in the table indicate meaningful differences between the higher-tier and lower-tier groups.¹³ We describe each factor, its scoring, and its role in local government success in detail below.

| | ORGANIZATIONAL BARRIERS | STAFF TIME | ELECTED LEADERSHIP SUPPORT | BUDGET | CONSTITUENT SUPPORT | USE OF TECHNICAL EXPERTS |
|----------------------------|----------------------------|---------------|----------------------------------|---------|------------------------|--------------------------------|
| Factor scale | -3 to 3 | -3 to 3 | -3 to 3 | -3 to 3 | -3 to 3 | 0 to 3 |
| Higher-tier group (n=6) | 2.83 | 0.67 | 1.83 | -0.08 | 1.58 | 2.08 |
| Lower-tier group (n=6) | 0.25 | -1.25 | 1.33 | -0.58 | 1.33 | 1.67 |
| Nonparticipants (n=4) | 0.37 | -1.13 | 2.13 | -0.75 | 0.63 | 1.13 |

Table 4-3: Average Group Score by Factor

¹³ Small sample sizes precluded the use of statistical tests of significance.

4.1.1. High-tier local governments appear more effective at reducing organization barriers by building internal staff

Higher-tier representatives described how they cultivated organizational support for energy efficiency work, in contrast to the responses given by the lower-tier governments in our sample. Local governments with high scores on this factor reported that they had no ongoing organizational barriers, there were clear lines of communication among municipal departments, and staff supported energy efficiency projects. Those receiving negative scores on this factor indicated staff resistance to energy efficiency actions, that staff were unwilling to "try" energy efficiency projects, or there were ineffective decision-making processes.

A local government that achieves the following organizational aspects will have an easier time pursuing energy efficiency projects:

- > **Supportive staff who understand energy efficiency benefits** and have bought into the ELP program's mission.
- > **Supportive elected leadership** such as the city council or the city manager.
- > A facilitator who bridges communication between multiple departments or parties.

Many of the energy efficiency projects conducted through the ELP program require involvement from government staff in multiple departments. For example, staff from the community development department engage in core program coordination while staff from the public works or facilities departments are highly involved in municipal retrofits projects. Further, for municipal retrofits projects, the staff in the department where the retrofit will occur are also involved. If ballfield lighting is being upgraded, the parks and recreation department will be involved or if it involves an upgrade at the police headquarters, the police department staff will be involved. Half the local governments (8 of 17; two higher-tier, four lower-tier, two nonparticipant) reported that the directors of multiple government departments are involved in decision-making for energy efficiency projects. The remaining local governments indicated that the director of at least one city department was involved in decision-making.

Getting staff in multiple departments to assist with energy efficiency activities takes time, effort, and encouragement; something higher-tier governments have been able to build over time. One higher-tier representative said that it has taken her about four years to build what she referred to as "internal support." The internal support is having staff in multiple departments "who want to participate because they see the benefit, but also because they get technical assistance accessed through the partnership to get the work done. That is why the partnership is so valuable." This local government's experience indicates that reducing the amount of work that individuals must perform increases their willingness to support program activities.

To contrast, a nonparticipant reported how gaining the support of departmental staff has been a challenge for her municipality. This representative explained,

"Our collaboration seems to be the hardest nut to crack because everyone's doing their own thing. Getting through that we're all on a team together has been a little challenging."
The "energy champion" at each local government, or the main ELP contact at the local government, can act as a bridge that facilitates communication between the various relevant departments and between line staff and government decision-makers and can help coordinate activities.¹⁴ Representatives from three of the six higher-tier governments spontaneously mentioned that this is a role they play at their local government. One higher-tier representative explained how it can be challenging when the public works staff does not participate in community engagement and the community engagement staff are not familiar with the municipal facilities, but he considers his local government "well-resourced" because he is there "to bridge both those worlds."

Another representative from a higher-tier government, situated in the city manager's office, explained how she is a liaison and communicates with the public works department. She said that she "works with them to understand the importance of maintaining platinum and having energy savings so we have more money in the general fund to provide services to our residents." She said that her role in facilitating inter-departmental communication to understand why it was important to pursue energy efficiency projects was integral to staying active in the program.

4.1.2. High-tier local governments appear able to dedicate more staff time for energy efficiency

The amount of time government staff can dedicate to partnership activities was a factor that limited a local government's ability to perform energy efficiency activities. The negative averaged score for each group indicates this factor hindered energy efficiency activities for all three groups, though it had the most influential effect among lower-tier governments. Cities to which we assigned the highest positive scores on this factor indicated that they have staff who have time to work on energy efficiency projects and understand the benefits to pursuing energy efficiency projects. Those receiving a negative three score indicated that staffing levels are a significant constraint while those receiving scores of negative one or two indicated that staffing levels or staff turnover were a barrier, but they still have some staff working on partnership activities.

Six IOU partnership managers (5 SCE and 1 SCG) said that a lack of staff time is a serious constraint preventing cities from doing more projects through the ELP program (Table 4-4).¹⁵ IOU partnership managers talked about how the limited staff at smaller cities must each attend to many duties, which restricts the amount of time they can focus on energy efficiency activities. IOU partnership managers linked limited staff to cities with smaller populations (5) and single-city partnerships (2) because multi-government partnerships tend to have implementing organizations that handle many administrative aspects of the partnership.¹⁶

¹⁴ Decision-makers include departmental managers and elected officials.

¹⁵ Four IOU partnership managers and one technical assistance contractor.

¹⁶ It is the evaluation team's understanding that single-city ELPs have been migrated into multi-local government partnerships, according to program staff feedback in late 2016.

Table 4-4: IOU Partnership Manager Views on Local Government Characteristics Hindering Program Participation (n = 8)*

| CHARACTERISTIC | NUMBER OF MANAGERS |
|--|--------------------|
| Limited staff (at small cities and single-government ELPs) | 7 |
| Limited government budgets | 3 |
| Limited knowledge of energy efficiency | 2 |

* Multiple responses allowed. One partnership manager did not comment on local government characteristics that hinder participation and one said she did not know.

One lower-tier representative commented on how staff constraints limit their ability to focus on energy efficiency:

"Another member local government in our ELP] has dedicated staff for energy conservation; we don't. They're more engaged because they have people and that's what their job is. For us, it's just one of our many tasks."

Another lower-tier representative mentioned how her municipality cannot have one person dedicated to energy efficiency:

"We're such a remote, rural jurisdiction. Most people (government staff) wear several hats. The idea of having a single champion for one area is difficult. Often we're championing may things."

A representative from a lower-tier government explained that a lack of staff time prevents them from identifying energy efficiency project opportunities, working on the projects, attending partnership meetings with their ELP group, and following up on information or opportunities presented at the ELP group meetings. The representative from this local government attributed a lack of staff time to conduct projects as one reason they have not progressed through the tiers.

Turnover among government staff also hinders program activity. Half of the lower-tier governments (3 of 6) mentioned, without prompting, that turnover limits their ability to generate internal support and progress with implementation of program activities. For example, one lower-tier government explained "[Our municipality] has gone through a lot of turnover, which is always difficult for decision making and consistency and for moving things from ideas to implementation."

Another representative of a lower-tier government said, "[there has been] lots of turnover in terms of public works management. There's probably some officials that aren't even aware of what [our ELP group] is all about." This quote illustrates that the representative recognizes the importance of ELP program awareness among government staff. If staff are unware of the partnership, they cannot support program activities by identifying energy efficiency opportunities and relaying those to the local government energy champion. Thus, this success factor relates to the factor of organizational barriers.

Moreover, a quarter of representatives (3 of 11; 27%) attributed reduced program participation to limited staff time to dedicate to partnership activities (Table 4-5). One higher-tier government described how his municipality's level of activity varies with staffing:

"When we have an energy manager on board, we find that we do a lot more energy projects because we have someone who can focus on them."

Another explained, "We started in 2013. Our activity ramped up a lot in the last year because I was finally understanding the entire process and looking for projects and got money put in the budget."

| Table 4-5: Local | Government | Views on | Factors | Hindering | Program | Participat | ion | (n = | :11 |)* |
|------------------|------------|----------|----------|------------|---------|---------------|-----|------|-----|----|
| | Oovernment | 1643 011 | 1 401013 | rinnaering | riogram | ι ι αιτισιραι | | (" – | | , |

| FACTOR | NUMBER OF LOCAL GOVERNMENTS |
|---|--------------------------------|
| Took time to learn program, build support, and build project pipeline | 4 |
| Limited staff time | 3 |
| Limited government budgets | 3 |

* One local government representative reported that his local government was more active now than in the past, but did not elaborate on what was causing increased recent activity.

All 12 interviewed participating local governments said their level of activity in the partnership varies over time with four citing the process of learning the program and building internal support as slowing activity and three citing local government funds as a reason. Of the three local governments that said government budgets influence their level of activity, two said they were able to do more in the past because of the availability of the American Recovery and Reinvestment Act (ARRA) funds. The third representative explained that they had acquired a large sum of money to conduct strategic plan activities, such as a Climate Action Plan, greenhouse gas inventory, and Leadership in Energy & Environmental Design (LEED) staff training. She said that she would like to implement the Climate Action Plan, but that she cannot locate funds to do such implementation. See Section 4.1.4 for more on how local government budgets influence program activity.

4.1.3. Local governments vary in elected leadership support

Most local government representatives reported that their elected leaders were supportive of energy efficiency activities (16 of 17), though six said that their leaders would only approve a project if there was a strong financial case to save the government money. Substantial score differences between the groups did not emerge for this factor, though nonparticipants had the

highest averaged score for elected leadership support among the three groups. This finding explains, perhaps, the interviewed nonparticipants' active engagement in energy efficiency.¹⁷

Local governments that received high scores on this factor reported that their leaders are "totally committed" to energy efficiency and encourage energy efficiency at their municipality. Those with moderate scores indicated their leaders are supportive only if sufficient resources exist or if there is a strong financial benefit to the city. The one local government that received a negative score indicated that his city council does not prioritize energy efficiency and reported that energy efficiency is "too mundane to get their attention." This valued-tier representative noted that his city's participation in the ELP program has not increased the capacity of his local government to undertake energy efficiency actions because his city leaders are uninterested in energy efficiency and hence are not motivated to set aside funds for energy efficiency projects.

This factor did not appear to be decisive in whether a city was able to complete energy efficiency activities or not, but supportive elected leadership facilitated energy efficiency actions, according to local government representatives. One platinum-tier representative partially credited his city council's support to his city reaching platinum so quickly. A nonparticipant said that the supportive leadership at his municipality has "enabled me to do my job," which involves improving energy efficiency in municipal facilities.

Half of interviewed representatives (8 of 17) reported that their leaders care about the financial aspects of a project and that influences their level of support. However, this consideration was not more prevalent among higher-tier governments. One representative from a lower-tier government noted that her municipal leaders "want to take advantage of everything we can to reduce energy costs." At the other end of the spectrum, a higher-tier representative said, "it's not like we're doing these projects to save the planet; we *must* realize cost savings."

Others said that their leaders care about payback and the benefits to operations and maintenance. For one interviewee, her government leaders have become more supportive since they have seen the benefits of program participation. This local government has used on-bill financing to accomplish several large municipal retrofit projects. She said, now that her leaders "understand we have a mechanism to do projects that achieve energy efficiency in a financially-efficient way, they're very supportive."

4.1.4. Local governments vary in municipal facility efficiency opportunities

While we did not collect systematic data from local government representatives on the level of energy efficiency "opportunity" and did not calculate scores for this factor, seven IOU

¹⁷ We had not anticipated the finding of highest elected leadership support among the nonparticipants. We suspect that the method for identifying the nonparticipant sample explains this leadership finding, as well as the finding of their active engagement in energy efficiency. About half of the local governments in SCE's territory participate in ELP. We asked the ELP partnership managers to identify local governments for our sample that matched the six sets of local governments we had developed for our higher- and lower-tier sampling, as described in Section 2.2. The managers identified local governments with which they have some familiarity. Among the 50% or so nonparticipating governments that they might have identified, it stands to reason that they are most familiar with those governments that have elected leadership support for energy efficiency. Further, a reviewer of the draft report noted that the regional energy network supports nonparticipating (non-ELP) governments with technical support to complete municipal retrofits. (The reader should note that the regional energy network also supports ELP participants, as we describe elsewhere.)

partnership managers noted governments with few energy saving opportunities are less able to complete the municipal energy savings required to advance through the tiered structure. For example, one representative reported that some smaller local governments with few facilities will do one large project as part of a bond measure and then they do not have additional projects they can realistically implement to advance them through the tiers. Local governments in this situation wind up going stagnant in terms of projects for a few years because there are not opportunities to conduct more municipal retrofits.

4.1.5. High-tier local governments appear less constrained by municipal budgets

Local governments typically allocate funds from their general fund, capital improvement fund, and building and maintenance fund to cover the upfront costs associated with municipal retrofits projects.¹⁸ Thus, the ability of a local government to dedicate funds from their municipal budgets influences their ability to complete municipal retrofits projects, which are integral to generating the electricity savings that are a part of tier advancement criteria.

The local government to which we assigned the highest score on this factor indicated that his municipality earmarks \$500,000 for energy efficiency activities each year. Other local governments to which we gave positive, but lower scores, indicated that the local government provides funds, though there are competing priorities in the budget or that matching funds are necessary to use government funds. Local governments we assigned negative scores indicated that funding is a barrier to the completion of municipal retrofits activities, with scores commensurate to the reported level of constraint this issue presented.

Across all groups, we found that municipal budget constraints were negatively impacting energy efficiency activities. The higher-tier governments' score of -.08 was closest to zero, indicating that those local governments had more municipal funds to dedicate to partnership activities. Quotes from local governments with relatively ample municipal funds for energy efficiency activities include:

"I budget \$10,000 in a capital improvement project account, specifically for energy efficiency improvements in the buildings, could be windows, could be lighting. So we continue to do work, but on a smaller scale. We're not spending \$10 million, we're spending \$10,000."

"What we do is we'll put half a million dollars in our budget every year and then that half a million dollars is there to do energy efficiency throughout the year."

Four partnership managers and the technical assistance contractor noted that local governments with limited financial capacity struggle to move through the tiered structure. For example, one IOU partnership manager noted that a gold-tier government had been struggling to get to platinum because they cannot identify a project they can afford that generates enough savings to

¹⁸ The 2016 LGP Targeted Process Evaluation report found that 31 of 37 local governments (84%) allocated funds from these sources for the municipal retrofit projects.

get them to the next level. Another partnership manager echoed this sentiment, noting that it is one thing to identify projects but it is much harder to get funding to complete the project, even if incentives are available. Therefore, financially-strained local governments may be motivated to do more projects, but without earmarked energy efficiency funds, limited municipal budgets present a formidable barrier.

Like IOU partnership managers, some local government representatives noted how limited financial resources create a challenge to completing the energy efficiency projects required to progress through the tiers. Three representatives, two gold and one valued, noted that their local governments do not have the financial capacity to go beyond their current tier status even if they had the interest. In all three of these cases, the projects needed to get them to the next tier, such as large-scale streetlight or HVAC upgrades, are too expensive for the local governments.

Local governments reporting limited municipal budgets described how other local government services receive priority for local government funds over energy efficiency improvements. As one higher-tier representative described, "health and safety get prioritized in the budget." Two other representatives also said that safety issues receive funding before energy efficiency projects for their facilities. A lower-tier representative said that any municipal funds that could be channeled to energy efficiency go to "band aid fixes" of equipment instead of looking at the equipment troubles as an opportunity to invest in energy efficiency and generate savings through reduced operations and maintenance costs.

In fact, municipal budget constraints emerged as the most common barrier preventing a local government from completing a project it wanted to conduct (Table 4-6). Only five of the 17 interviewed local governments (two higher-tier, one lower-tier, and two nonparticipants) stated that they had not yet encountered a project they could not complete, though they were spread out across the groups.

| BARRIER TO COMPLETING PROJECT | NUMBER OF LOCAL GOVERNMENTS |
|--------------------------------------|-----------------------------|
| Financial | 11 |
| Internal staffing resources | 2 |
| Decision-making process | 2 |
| SCE project eligibility requirements | 1 |

* Multiple responses allowed.

Examples of projects local governments reported they could not complete due to limited available funds included installation of a variable frequency drive (VFD), a mini-split heat pump system, streetlight conversion to light-emitting diode (LED) lights, and implementation of activities outlined in a Climate Action Plan.¹⁹

¹⁹ According to comments on a draft version of this report, in 2016 SCE changed one criterion for strategic plan project funding to reduce the likelihood that local governments receive funding to write action plans without having implementation funds identified. Per the changed criterion, some types of proposed strategic plan projects receive additional scoring points when the local government has committed implementation funding from resources external to the program.

4.1.6. Constituents do not strongly influence energy efficiency activity

Constituents' attitudes toward energy efficiency did not emerge as a strong influence of program activity nor the amount of core program coordination the local government performed. Local governments we scored highly on this factor indicated in their interview responses that their constituents are both supportive of the local government conducting energy efficiency activities and desired information about how they improve energy efficiency in their residences and businesses. Local governments to which we gave lower, but positive scores, indicated the constituents are only supportive of energy efficiency activities if it will save them or their government money. We scored only one local government negatively, based on the representative's explanation that energy efficiency was not something constituents think about due to the mild climate (Table 4-7).

Table 4-7: Level of Constituent Support (n = 14)*

| LEVEL OF SUPPORT | NUMBER OF REPRESENTATIVES |
|--|---------------------------|
| Very supportive | 3 |
| Want information to save money | 6 |
| Supportive in general | 4 |
| Energy efficiency "not on their minds" | 1 |

* Three local government representatives said that they did not know the extent to which their municipality's constituents supported energy efficiency action.

Two higher-tier representatives indicated that their constituents were very supportive of energy efficiency action. One representative said, "I'm thankful to work in a city where we don't have to convince people" about the benefits of pursuing energy efficiency. Another credited the ELP program and the numerous projects they did through it as enhancing his constituents' support of energy efficiency. Both of these local governments also reported conducting activities such as tabling at community events and other locations as a way to promote energy efficiency in the community.

A lower-tier representative said that her constituents provided positive feedback on lighting retrofits at three municipal facilities. The positive feedback included noticing the "brighter and lighter" lighting in the senior center and the "beautiful" lights in the library as described by library patrons. The representative also noted how upgraded lighting in the city council chambers made the council members "look better" on camera. ²⁰ The feedback suggests that observable non-energy benefits increase constituent and elected leadership support for energy efficiency

²⁰ These finding on the positive feedback loop between municipal retrofits and constituent support for local government energy efficiency activity complements the findings presented in Section 3.1.2 that the program appears to motivate and build capacity. However, these findings on constituents' influence on energy efficiency activity do not appear to be related to the program's tier structure.

4.1.7. Local governments use ELP-provided technical experts primarily for the municipal retrofit program element

Technical assistance contractors – contractors engaged by SCE to provide engineering and related technical assistance to ELP participants – play an important role by providing expertise that IOU partnership managers and government staff often lack. The local governments rely on technical assistance contractors to assist with numerous aspects of the municipal retrofits process, some aspects of strategic plan activities, and reportedly no aspects of core program coordination.

Our scoring system for this factor (use of technical assistance) awarded high scores to local governments that reported they had used technical experts more than once and for activities relating to both municipal retrofits and strategic plan. Those local governments to which we assigned lower scores on this factor indicated that they had used technical assistance, but it was a long time ago or for only one activity, such as audits. We scored one local government with a zero on technical assistance use because the representative said that she "did not know there was an ability to access technical assistance through the ELP."

We found that program participants reported using technical assistance resources more often than nonparticipants and that higher-tier governments appear to use assistance more often and for more services than do lower-tier governments. The ability to acquire technical assistance helps local governments conduct advanced audits and identify opportunities for deeper savings. See Section 5.1.5 for more on how technical experts facilitate capacity and savings in participating local governments.

4.2. Intersection of Factors Makes Some Local Governments More Likely to Benefit from the ELP Program Model

Each local government is unique and their varying organizational structures and resources affect their ability to make use of program support and stay active in the ELP program. We find that three key – and closely intertwined – factors remain critical to the success of any local government: (1) staff buy-in, (2) staff availability, and (3) municipal budgets.

Governments that invested effort to educate staff and elected leaders on the benefits of energy efficiency projects and the financial and technical assistance available through the ELP program were able to generate internal staff support. The internal staff support facilitates identification of energy efficiency opportunities by departmental staff and the allocation of municipal funds by government leaders, which helps them complete municipal retrofits projects and generate energy savings, contributing to their advancement through the tiered structure. This type of support was particularly critical for local governments that do not earmark funds for energy efficiency activities. Some higher-tier representatives reported this internal support took them years to cultivate, but considered it a worthwhile investment and asset, once attained because it streamlines the municipal retrofits project identification and completion process.

Smaller local governments with a limited tax base to support municipal budgets and, consequently, more limited staff resources, appeared to have a harder time attending to ELP

activities and making use of program support. Local governments also described how staff turnover undermines their ability to develop internal support. The smaller local governments also tend to have fewer municipal buildings, limiting their ability to generate energy savings in municipal facilities, hindering their ability to advance through the tiered structure.

Governments with limited staff need their employees to attend to multiple duties, which limits the ability to communicate with their IOU partnership manager(s) and ELP group, as well as their ability to pursue opportunities, identify projects, and usher those projects through to completion. Having limited staff makes it more challenging for local governments to meet tier advancement requirements because staff resources are needed for directing Energy Action Plan development (typically conducted by a consultant to the local government) or conducting active demand response outreach in the community, for example. Staff turnover also negatively impacts the development of sufficient internal resources. Vacancies created by employee departures may not get filled, leaving a dearth of assigned staff. When vacancies are filled, persons new to the position need to be educated on the program and their role in it, yet few resources may be available to support their orientation.

4.3. Current Local Government Capacity

Our research has identified, as discussed in Chapter 3, ways in which the tiers motivate local governments to do energy efficiency projects and activities. By completing such projects, government staff gain knowledge and expertise needed to conduct energy efficiency projects, enhancing their capability to do these projects in the future. We define capacity as the capability of a local government to perform energy efficiency activities in-house or to access outside support from technical experts when expertise does not exist in-house.

Participating local government representatives appear to have more in-house capabilities and SCE-provided resources to draw on than nonparticipants for conducting energy audits and benchmarking services.²¹ Participating representatives reported having staff who can conduct energy audits and benchmarking, whereas nonparticipants rarely reported having staff with these abilities. Furthermore, all 12 participating local governments noted some experience with audits or benchmarking, whereas two of the five nonparticipants indicated no experience with these two activities (Table 4-8). As we discuss below, we find that most local governments have the inhouse capacity to do core program coordination activities, but differences in capacity exist between the groups for municipal retrofits and strategic plan activities.

²¹ Section 2.3, *Limitations of the Study*, describes that our method does not explore local government characteristics prior to program participation, nor were many of the interviewed contacts knowledgeable about pre-program and early-program activities. Our method uses comparisons between three groups –higher-tier ELP participants, lower-tier ELP participants, and nonparticipating local governments – rather than pre/post comparisons to assess possible program influence.

| LOCAL | | | AUDITS | | BENC | HMARK |
|-----------------|-------|----------------------|---------------------|---------------|----------------------|---------------------|
| GOVERNM (LG) | IENT | Technical Experts | Government Staff | SCE | Technical Experts | Government Staff |
| | | | Participants | (n=12) | | |
| | LG1 | | | \checkmark | \checkmark | |
| | LG2 | \checkmark | \checkmark | | \checkmark | |
| | LG3 | \checkmark | | | | |
| Higher tier | LG4 | \checkmark | \checkmark | | | \checkmark |
| | LG5 | | \checkmark | | | \checkmark |
| | LG6 | \checkmark | | | \checkmark | |
| | LG1 | \checkmark | \checkmark | | \checkmark | |
| | LG2 | | \checkmark | | | \checkmark |
| | LG3 | \checkmark | | \checkmark | | |
| Lower tier | LG4 | | | \checkmark | | \checkmark |
| | LG5 | \checkmark | | | | \checkmark |
| | LG6 | \checkmark | | | | |
| | Total | 8 | 5 | 3 | 4 | 5 |
| | | | Nonpar | ticipants (n= | 5) | |
| | LG1 | \checkmark | | | | |
| | LG2 | \checkmark | | | \checkmark | |
| No tier | LG3 | | | | | |
| | LG4 | \checkmark | | \checkmark | | \checkmark |
| | LG5 | | | | | |
| | Total | 3 | 0 | 1 | 1 | 1 |

Table 4-8: Participants' and Nonparticipants' Experience with Audits and Benchmarking

4.3.1. Municipal retrofits

Most interviewed local governments (14 of 16) reported they had conducted retrofits of their municipal facilities within the last few years, though program-provided support was more commonly cited as important to project completion among lower-tier and nonparticipant local governments than among the higher-tier governments (Table 4-9). This finding is suggestive of enhanced in-house local government energy efficiency capacity among higher-tier governments for municipal retrofits. Local governments accessed outside support from their ELP group (the partnership manager, the implementing organization, and other member local governments), and from SCE-provided technical assistance contractors, which we refer to as program-provided

support. Three local governments (two nonparticipants) also mentioned accessing support from the regional energy network.

| | CONDUCTING MUNICIPAL RETROFITS | OUTSIDE SUPPORT CRITICAL |
|----------------------|--------------------------------|--------------------------|
| Higher tier (n=6) | 6 | 3 |
| Lower tier (n=6) | 5 | 5 |
| Nonparticipant (n=4) | 3 | 3 |

| Table 4-9: Local Governments Conducting Municipal Retrofits in Last Few Years (n = 16)* | Table 4-9: Local Governm | nents Conducting M | Iunicipal Retrofits in | n Last Few Years | (n = 16)* |
|---|--------------------------|--------------------|------------------------|------------------|-----------|
|---|--------------------------|--------------------|------------------------|------------------|-----------|

* One nonparticipant local government was not involved with municipal facilities and could not comment on whether any energy efficiency retrofits had been conducted at his local government's facilities.

Those local governments with the highest in-house capacity to conduct municipal retrofits projects reported that they have staff with knowledge of energy efficiency and years of experience conducting municipal energy retrofits. They also reported having an easy time with the procurement process, saying they acquired contractors to do retrofits either through a job order contracting arrangement or by issuing requests for proposals.

All lower-tier representatives conducting municipal retrofits (5 of 5) reported that the support accessed through the program was critical to completing their municipal retrofits projects, though they cited assistance with different aspects of the municipal retrofits process. For example, one credited their ELP group with changing attitudes among staff. He said, "we all now have energy efficiency in mind when buying equipment now." Another representative said that he would not have been able to do his many retrofits without the support of his ELP, including the IOU partnership manager. He reported his local government has completed water pump retrofits for the municipal golf course, HVAC and lighting upgrades at a community center, direct install lighting upgrades, and window tinting.²²

There is some evidence that higher-tier governments have institutionalized energy efficiency action by relying on their own staff for municipal retrofits work, compared to lower-tier and nonparticipant local governments, whose representatives who reported relying heavily on program-provided technical experts for doing municipal retrofits projects. This suggests that as local governments move to higher tiers, the skills needed to complete energy efficiency projects become more prevalent among staff. The higher-tier governments actively conduct efficiency work and appear more likely to have staff trained to do audits, benchmarking, and energy savings calculations. Illustrating this point, a platinum-tier representative said, "Now that we're at platinum, we understand the importance of energy efficiency and will continue to find ways to do it." (We note that the data are not sufficient to rule out an interpretation that local governments with these skills are more likely to advance to higher tiers.)

²² This local government was reportedly unable to complete lighting upgrades in the council chambers due to a SCE eligibility restriction on the number of fixtures. He also said he could not complete ballfield lighting upgrades due to limited available funding.

The rebate application emerged as a task for which local governments frequently reported needing program-provided help. Of the 11 participating local governments that reported submitting rebate applications, five indicated that they lacked in-house capacity to handle the detailed paperwork required (two higher-tier, three lower-tier). Three of these five reported that the rely on partnership support to get the applications filled out correctly. We elaborate on challenges related to the rebate application in Section 5.3.2.

4.3.2. Strategic plan activities

The interviewed local governments had a mix of awareness and activity relating to the *California Energy Efficiency Strategic Plan*. Representatives from four of the 12 participating local governments we interviewed were unaware of the plan or strategic plan menu items (two higher-tier and two lower-tier). Two representatives unaware of the plan nevertheless indicated that they have technical assistance contractors helping them to benchmark their municipal buildings, demonstrating they are doing actions that contribute to the strategic plan goals, yet are unaware of the larger *Strategic Plan* context (Table 4-10).²³

Table 4-10: Local Governments Doing Strategic Plan Projects (n = 17)

| | DOING PROJECTS | WITH OUTSIDE HELP |
|----------------------|----------------|-------------------|
| Higher tier (n=6) | 5 | 4 (80%) |
| Lower tier (n=6) | 5 | 4 (80%) |
| Nonparticipant (n=5) | 5 | 5 (100%) |

Interviewed local governments used program-provided support to complete most of their strategic plan projects. This assistance included the completion of Climate Action Plans, Energy Action Plans, or greenhouse gas inventories; benchmarking, including helping to obtain utility bills to input into a benchmarking system; and helping organize and conduct trainings on green building practices and LEED certification.

4.3.3. Core program coordination

Core program coordination emerged as the program element for which local governments had the most in-house capacity to perform.²⁴ Of the 12 interviewed local governments conducting core program coordination, all indicated that in-house staff have the capabilities to perform core program coordination actions. A lower-tier representative indicated that his local government posts information about SCE and SCG programs available to residents on the city's website and on counters at city departments, but that low staffing levels have prevented his municipality from

²³ The activities supported by the ELP model conform to the goals of the *California Energy Efficiency Strategic Plan*, as described in the program implementation plan, and does not require that local government staff be aware of the plan or its menu items.

²⁴ We conceived of core program coordination broadly and included outreach for Energy Upgrade California programs and Property Assessed Clean Energy (PACE) financing.

conducting more active outreach in the community. Five representatives indicated that their core program coordination occurs at "community events," which for one local government included summer concerts.²⁵ Figure 4-1 displays the types of energy efficiency programs that local governments reported promoting to their communities – SCE programs, PACE, and Community Choice Aggregation (CCA) programs.





* One higher-tier representative and one nonparticipant local government representative reported that they did not know whether their local government is conducting core program coordination activities.

A higher-tier representative said that their gold tier status allowed them to be a more credible messenger when conducting core program coordination in the community. She said,

"When we talk about energy efficiency and say we really want the business and residential community to be more efficient and here's how you can do it. We know how you can do it because we [the government] did it. Our gold tier status demonstrates our leadership in energy efficiency." ²⁶

Local governments not conducting core program coordination include two participating counties and one platinum-level local government. The platinum-tier representative indicated that the community has a "conservative" mindset and this may be one reason they do not engage in much core program coordination. One county representative said that their partnership implementing organization conducts outreach to the communities and it is likely that the other county's implementing organization does the same. One nonparticipant reported promoting a CCA option for their residents.

²⁵ In interviews the evaluation team conducted during the course of the 2016 targeted process evaluation of the Local Government Partnership Program, two representatives from SCE implementing organizations reported challenges receiving SCE approval of marketing materials in time for an event.

²⁶ This comment supports a conclusion that the tier structure of ELP supports local governments in advance in Strategic Plan goal #3, local governments lead by example (paraphrased).

5. Assessment of ELP Program Processes

This chapter presents our process evaluation of the ELP program based on interview findings with IOU partnership managers, the technical assistance contractor, and representatives from participating local governments. We review the myriad of support provided by the program, collaboration between SCE and SCG, and opportunities for improvement. We finish with a discussion of nonparticipant awareness of and interest in the ELP program.

5.1. Program Fosters the Development of Energy and Sustainability Leadership

5.1.1. Program, partnership, and local government goals

IOU partnership managers and local government representatives view the program's overarching goal as a means to help participating local governments become energy and sustainability leaders in their communities (Figure 5-1). As one SCE partnership manager reflected, "our goal in partnering with them is to provide the support and resources so they can show leadership in the region." As one representative put it, "the program goal is to advance energy efficiency and sustainability practices in local governments." By moving through the ELP tiered model, local governments are able to build their skill set so that energy efficiency and demand response are not secondary thoughts in their operations.



Figure 5-1: Understanding of ELP Program Goals

* Multiple responses allowed.

The main distinction between the open-ended responses of IOU partnership managers and local government representatives is that more representatives noted the program's goal as proving guidance and encouragement to the local governments so they continually conduct energy

efficiency activities. Section 5.1.2 elaborates on this guidance. The other notable difference is that while a third (4 of 12) of representatives called out energy savings as a program goal, only one IOU partnership manager did the same.

Energy saving, strategic plan, and core program coordination goals are set at the partnership level, though the goal-setting process is slightly different depending on the partnership structure. For multi-government partnerships, the IOU partnership managers typically worked with staff at the partnership's implementing organization to set partnership goals.²⁷ The partnership implementing organization typically worked with each member local government to identify projects that will contribute to the partnership-level goals. At the time of the interviews, for single-city partnerships, IOU partnership managers worked directly with the partnering city staff to set goals and identify projects to achieve goals.

Nearly half (5 of 12) of the interviewed representatives characterized the process of setting local government goals as a joint process between the IOU partnership managers and the local governments (Table 5-1). For example, one representative at a multi-government ELP described the collaborative process where, "city staff work with Edison to establish [our] goals, then go back to city council for their approval, then once council blesses it we [city staff] put funding toward it." An equal number of representatives (five, two of which were at single-government partnerships) described a less-collaborative process, with three representatives stating that the IOU sets the goals (in the words of one, "without much input by city") and two reporting that the city sets its goals. An additional two representatives reported no local government goals for the ELP program or their partnership.

| ENTITY OR ENTITIES | NUMBER OF REPRESENTATIVES |
|------------------------------|---------------------------|
| Local government and IOU set | 5 |
| Set by IOU | 3 |
| Set by local government | 2 |
| No goals set | 2 |

Table 5-1: Entities Involved in Goal Setting (n = 12)

Of the seven representatives who reported that either the local governments worked with the IOU (5) or the local government set goals (2), nearly all described these goals at a high level, such as completing projects (5) or tier advancement (2). All (10 of 10 reporting goals) of the representatives indicated they are able to accomplish the goals,²⁸ however, one third (3 of 9)²⁹ provided the same suggestion for improving goal setting: align goal setting with the fiscal year.

Currently, ELP goals are set on a calendar year basis. Two representatives noted that this timing can be problematic as local governments set aside funding that pays for their municipal retrofit

²⁷ A reviewer of the draft report noted that SCE partnership managers may establish the partnership goals.

²⁸ As defined by the local government representatives, that is, project completion or tier advancement.

²⁹ Two local government representatives did not report having goals and one indicated he was not part of goal setting.

and other projects on a fiscal calendar. To meet municipal budgeting requirements, all projects must be completed by the end of the fiscal year, but for projects to contribute to the partnership goal, they must be completed by the end of the calendar year. This difference in timing can result in local government projects not being completed by the end of the calendar year and therefore no longer being counted toward annual ELP goals. As one representative recalled,

"In our city, we get the money July 1 and projects need to be done by end of May, so by the end of the fiscal year, all bills are paid. Edison wants it all done by December 31 and I may not be able to get money in July and get the project completed by December if it's a large project."

5.1.2. IOU partnership managers provide support to drive action and energy savings

The interviewed IOU partnership managers and the local government representatives agreed that frequent communication between them enables the local governments to access support and guidance from the IOU partnership managers. Local governments also receive support from partnership implementing organizations.

IOU partnership managers represent the IOU in the partnership providing support to participating local governments across the three program elements, with the types of support detailed in Section 5.1.3.³⁰ Nearly all managers (9 of 10) described meeting with local government city and/or facility staff as well as implementation staff, as appropriate.

Local government representatives expressed similar views of the IOU partnership managers' role. All representatives (10 of 10) reported that they look to IOU partnership managers to provide project guidance.³¹ As one representative noted, the partnership was formed,

"To facilitate and provide resources the cities need to complete projects. SCE needs to keep us informed of everything going on. There are lots of changes all the time – they need to be the conduit to give us correct information so that we can make informed decisions."

Most representatives (8 of 11) reported they make use of and highly value ELP program support.³² For example, one representative summarized her partnership manager as "amazing" saying that "he's responsive, he's supportive, he's knowledgeable, when he doesn't know the

³⁰ See Chapter 1 for a description of the three program elements – municipal retrofits, strategic planning, and core program coordination

³¹ One local government representative indicated he had not interacted with the IOU partnership manager and therefore did not provide input. One local government representative was not asked this question due to limited time in the interview.

³² One local government representative reported having had no interactions with IOU partnership manager at the time of the interview and therefore did not answer this question.

answer he will find someone who does. He makes my [work] life so much better." Another representative reflected,

"We need him [partnership manager] to guide and direct us so we can achieve the next level, to point out things that we may not know. We are not the experts; we are trying to run a city."

Local government representatives particularly valued project guidance and viewed it as essential to getting projects completed (7 of 10).³³

IOU partnership managers' level of interaction with local governments varied depending on partnership structure. For multi-government partnerships, IOU partnership managers worked with Council of Governments or lead partnership staff to identify partnership goals and allocate funding. Partnership staff, in turn, worked with member local governments to identify projects across the three program elements. At the time of the interviews, for single-city partnerships, IOU partnership managers and other IOU staff, such as account executives, communicated directly with local government staff.

Most representatives reported frequent communication with their IOU partnership managers and with staff at their partnership's implementing organization (if they have one), as well as with other member governments in their partnership. The communication with IOU staff provides a way for partnership managers to stay abreast of activities and challenges experienced by the local governments and solve problems as they arise to mitigate delays. Three-quarters (8 of 12) of the representatives reported communication with IOU partnership managers by phone, e-mail, or in-person. Communication occurs daily, weekly, or monthly depending on how busy they are and how many projects are underway.

Most (7 of 10)³⁴ representatives reported regular communication with the other member local governments in their partnership, either monthly (6) or quarterly (1). Three representatives described communication as occurring less than quarterly; however, one pointed out that since his municipality had reach the platinum tier, they did not need as much support and hence, communicated less frequently with other local governments in his ELP. Another representative indicated that he meets with other member local governments in his ELP on an annual basis, but meets with his IOU partnership managers more often.

Local governments rely on outside organizations to help attend to program administrative duties. Representatives recalled a number of different parties who set-up and hosted partnership meetings including: partnership implementing organizations (7), IOU partnership manager (2), technical assistance contractors (2), and local government staff (1).

³³ One local government representative indicated he had not interacted with the IOU partnership manager and therefore did not provide input. One local government representative was not asked this question due to limited time in the interview.

³⁴ Two local government representatives were from single-city partnerships and therefore were not asked this question.

5.1.3. Types of support provided

IOU partnership managers described providing a variety of program support that engenders local governments to take energy efficiency action and generate energy savings (Table 5-2).

| Table 5-2: IOU Partnership Managers' Mentions of Support They Provide Local Governments |
|---|
| (n = 10, Multiple Responses Allowed) |

| | | SUPPORT PROVIDED (NUMBER OF MANAGERS MENTIONING) | | | | |
|---|-----------------------------------|---|-------------------|------------------------------|--|--|
| TYPE OF SUPPORT | Total | by Program Area | | | | |
| | | Municipal Retrofits | Strategic Plan | Core Program Coordination | | |
| Coordinate with program (IOU) staff | 17 | 10 | - | 7 | | |
| Provide overall guidance | 16 | 6 | 10 | - | | |
| Identify projects | 10 | 9 | 1 | - | | |
| Promote energy efficiency programs | 9 | - | - | 9 | | |
| Provide technical assistance | 8 | 8 | - | - | | |
| Provide rebate application support | 6 | 6 | - | - | | |
| Provide demand response assistance | vide demand response assistance 5 | | | - | | |
| Provide marketing materials | - | - | 5 | | | |
| Coordinate with other (non-ELP) IOU staff | 4 | 4 | - | - | | |
| Manage ELP budget | 4 | - | 4 | - | | |
| Coordinate with partner IOU | 2 | - | - | | | |

IOU partnership managers recognized the ELP program is structured to provide significant support to local governments, though they also noted that the local governments typically require more support for some program activities than for others.

IOU partnership managers and local government representatives described the following IOU-provided support across the three program elements.

- Program guidance: Partnership managers monitor the ELP budget; explain the ELP program goals, requirements and processes; discuss program changes, including new program opportunities and changes to rebates; and clarify the requirements of projects underway or under consideration.
- Problem-solving: Partnership managers are there to help the local governments overcome "any obstacles they encounter" as the local government works to complete municipal retrofit projects and other program activity. This includes identifying supplemental funding sources like on-bill financing or grants.
- > **Project and opportunity identification:** Partnership managers (as well as partnership implementing organizations, energy networks, and IOU account managers) help identify

project opportunities across the three program elements. For municipal retrofits, this includes identifying high-usage municipal buildings that are candidates for upgrades and identifying the best equipment options. For demand response criteria, this includes finding eligible facilities to enroll in demand response programs. For strategic plan, they help select appropriate strategic plan menu items to pursue.

- > Technical assistance: Partnership managers identify when it is appropriate to bring in SCE's technical assistance contractors to support program activities, such as conducting audits, or assisting with the development of a Climate Action Plan or greenhouse gas reduction plan.³⁵ Partnership- managers may also recommend specific contractors.
- Application, invoicing, and reimbursement support: Partnership managers support local government staff as requested with rebate applications. Strategic plan guidance includes helping local governments submit their applications, assisting them in developing and finalizing statements of work, holding regular meeting to make sure the work is completed as planned, reviewing deliverables, explaining invoicing processes, and assisting with reimbursement.
- Core program coordination support: Partnership managers attend local events with local government staff to help increase awareness of core energy efficiency programs throughout the community.³⁶ They assist with the development and SCE approval of marketing materials such as flyers or posting on social media.
- Coordination across multiple entities: Partnership managers coordinate with other entities to provide local governments with needed information and support and to ensure consistency among the various entities. They coordinate with other staff within their IOUs (such as retrofit program staff), with the other IOU (SCE and SCG), with the implementing partner, and among the local governments within a partnership.
- Single-city partnership support: At the time of our interviews, some ELP partnerships were a single city partnering directly with the IOU without an implementing organization. Two partnership managers pointed out the importance of providing comprehensive support to single-city partnerships, as they tended to have fewer staff resources to dedicate to partnership activities.³⁷

³⁵ Two managers characterized outside support on Strategic Plan projects as critical, with one pointing out that Strategic Plan projects require services that "are not part of critical skill retention for the cities." Therefore, identifying a qualified technical expert to provide services to support development of a Climate Action Plan or greenhouse gas reduction plan is essential.

³⁶ For example, one IOU program staff reported that, "what's popular is setting up a booth at a county employee health fair. We have a booth to educate about energy efficiency and what's available for their own personal use, like tools and resources, and inform them of what the local government is doing."

³⁷ As one representative said, the program can be "challenging for single cities. We have to hand-hold them on everything; [whereas] the multi-city partnerships have an implementer who is getting paid to do everything." It is the evaluation team's understanding that single-city ELPs have been migrated into multi-local government partnerships, according to program staff feedback in late 2016.

5.1.4. The multi-government partnership group and implementing organization provide support and build capacity

In addition to the support provided by the IOU partnership managers, local governments reported a variety of benefits from interacting with the other member local governments in their ELP and the implementing organizations (Table 5-3). Interviewed local government representatives discussed how their implementing organizations provide them with up-to-date information about program changes or new technologies, and connect local governments with the resources they need to implement energy efficiency projects. Topics that are commonly discussed among local governments at ELP meetings included best practices, new opportunities, sharing of documents, lessons learned such as contractor experiences (which ones are good and which to avoid), equipment selection, as well as requests for proposals and rebate application processes. One representative described comradery among member local governments, and another said that the member local governments in the ELP are all "involved, willing to go after stuff, and have the drive to be part of this program."

| BENEFICIAL ELP ASPECT | NUMBER OF LOCAL GOVERNMENTS |
|--|--------------------------------|
| Collaborative and helping relationships with other local governments | 7 |
| Communication of updated information and available resources | 5 |
| Access to energy efficiency expertise | 3 |
| Project examples | 2 |
| Other member local governments in ELP | 2 |

Table 5-3: Benefits from ELP Group (n = 10)*

* Single-city partnership (local government) representatives were not asked this question; multiple responses allowed.

The technical assistance contractor said that the ELP group meetings build local government capacity through providing education and collaboration opportunities by "connecting the right people together." She cited examples about connecting a local government that completed a request for proposals or a particular municipal retrofits project with a city ready to embark on the same task. The "learning from each other" was an asset the ELP group meetings provided. In fact, a representative from a platinum-tier representative described how his local government serves as a mentor to other local governments in the partnership. He said,

"We have the funding and do a lot of energy efficiency conservation measures that other cities would like to do. We're available to help them and show them how to get things done."

5.1.5. Technical experts provide advanced engineering support

As noted above, a function of the IOU partnership manager is to connect the local governments with needed technical assistance. The technical assistance contractors provide energy efficiency expertise to local governments with in-house staff lacking the requisite expertise. The technical

assistance contractor we spoke with said her role is to serve as the "technical engineering arm of the partnership," assisting with identifying and implementing energy efficiency projects. In particular, she provides energy modeling and calculations, and specifies equipment so that qualifies for incentives.

We discussed use of technical experts in Sections 4.1.7 and 4.3. Those findings suggest that technical assistance accessed through the ELP program (technical assistance contractors or SCE engineers) is facilitating energy savings by enabling participants to do more projects and do projects that generate deeper energy savings than they would without such support. The assistance provided by the technical experts also relieves government staff of some of the work burden. As one representative reported, her departmental staff are more willing to contribute to ELP activities when support is provided to reduce their workload. Another representative described how integral the technical assistance support is:

"I think the technical assistance gives us teeth to the projects. We're part of this partnership, where we get resources and the technical assistance. We can push for projects and every time we do it and see what it's like, it makes council more likely to give me more money for more projects."

We found that technical assistance contractors are heavily involved in municipal retrofits, involved to a lesser extent in strategic plan activities, and do not appear to help with core program coordination activities. For municipal retrofits projects, SCE-provided technical assistance contractors assist local governments through the entire municipal retrofits process, from identification of opportunities via audits to calculating the impact of the project once completed. Fewer representatives reported using technical experts for assistance with rebate paperwork, the procurement process, and performing energy savings calculations (Table 5-4). For the two multi-government partnerships lacking an implementing organization, the technical assistance contractor serves as a "vendor implementer" and assists with scheduling ELP meetings, setting the agendas, and taking notes.

| SUPPORT | NUMBER OF REPRESENTATIVES | | |
|-------------------------------|---------------------------|--|--|
| Audits/identify opportunities | 9 | | |
| Rebate paperwork | 3 | | |
| Procurement process | 3 | | |
| Calculate savings | 3 | | |
| Unspecified help | 2 | | |

* Multiple responses allowed.

For example, the procurement process involves issuing a request for proposal to solicit competitive bids from contractors or consultants.³⁸ Sometimes these requests require technical language that is beyond the ability of government staff to craft. In these cases, the technical assistance contractor will assist with writing the request for proposal, issuing it, and reviewing contractor bids.

Most representatives reported no trouble accessing technical assistance (9 of 12), whereas two representatives noted challenges and one was not aware technical assistance was available through the partnership.³⁹ One representative reported having trouble using technical assistance. The representative thought the partnership implementing organization was reluctant to send them technical assistance because the local government had not fully implemented the projects already identified through the efforts of technical experts. The representative explained, "they've kind of held back with sending anyone at any time to provide technical assistance. Where I've had needs for other audits, I've said, send us the consultant and we'll pay for them."

The other representative noted problems with the perceived quality of the technical assistance. This valued-tier representative stated that the audit reports lacked sufficient detail to make them valuable to the local government. The audits received through the program "were limited, almost like an initial thing, and then the city had to hire someone else to take it the rest of the way." In Section 5.3.4, we discuss potential confusion for accessing technical assistance support.

5.2. SCE and SCG Program Collaboration

Eighty-four percent of SCE's local government partnerships (16 of 19) also have SCG as an IOU partner. This section discusses the program processes of auditing buildings that use both gas and electricity, along with aspects of coordination between SCE and SCG partnership managers.

5.2.1. Dual-fuel audits provide customers with comprehensive insights for deeper retrofits and is resource-efficient

SCE and SCG partnership managers reportedly work together to provide their mutual customers with integrated gas and electric energy audits. All (8 of 8) partnership managers reported that they lead the decision to conduct a single- or dual-fuel audit and that they generally tried to provide audits of gas- and electricity-using systems at the same time.⁴⁰

Managers reported no real disadvantages to conducting audits of electric and gas equipment at the same site visit. Most managers (6 of 8) described a comprehensive, dual-fuel audit as most

³⁸ The 2016 LGP Targeted Process Evaluation report found that a quarter of their sampled local governments reported troubles with the procurement process.

³⁹ The local government representative who was not aware of technical assistance support reported that they had not conducted audits, municipal retrofits, nor Strategic Plan activities, hence it is possible that her partnership implementing organization had not discussed technical assistance with her government due to their relative inactivity. Yet, this is a "chicken or egg" problem, because if they knew about assistance, perhaps they would have done audits.

⁴⁰ One partnership manager was not asked this question due to time limitations in the interview; the ELP program manager reported that he had no knowledge of when SCG staff do audits.

beneficial because it offers the local government an overview of the whole facility.⁴¹ These managers noted that an analytical perspective integrating the two fuel systems can facilitate deeper retrofits than a single-fuel audit may lead to.

Two managers noted that a dual-fuel audit is more efficient for the local government. Separate audits require two auditor visits, creating a greater burden for government staff, who must twice escort auditors through the facility. Similarly, integrated audits reduce the cost for the IOUs, in contrast to paying separately for gas and electric audits.

Despite partnership managers' intent to offer dual-fuel audits, not all interviewed local governments have taken advantage the opportunity. Although four of seven⁴² representatives reported receiving a dual-fuel audit, the three remaining local governments reported only having single-fuel audits performed to date.

Nearly all (6 of 7)⁴³ responding representatives recalled installing upgraded gas equipment; however, all (7 of 7) of them also noted that their facilities offered comparatively little opportunity for gas retrofits.

5.2.2. IOU partners are highly collaborative, but IOU differences pose continuing challenging

All (10 of 10) IOU partnership managers described coordination between SCE and SCG as a program achievement and characterized the coordination as working extremely well. In an illustrative comment, an SCE manager said,

"The Gas Company and I, we're so joined at the hip, and I've been working with them so long, I see them as an extension of my own company... It's easier if we perform our work very similarly, that way the local governments are not confused by one utility doing something one way and the other does it a different way."

Managers listed a range of coordination efforts in addition to dual-fuel audits, including frequent partnership meetings to make sure they are on the same page, sharing company agreements with technical assistance contractors, and communicating with partnerships.

Despite the close working relationship, more than half (7 of 10) of the IOU partnership managers noted basic company differences as ongoing coordination challenges, including the following:

Paperwork: There is no set of uniform paperwork for the program. For example, invoice documentation is not aligned between the two IOUs, which can be confusing for customers. As one SCE partnership manager noted, "we have the same invoice template, but what we're asking for backup documentation can be different...but sometimes SCG

⁴¹ Two IOU partnership managers not asked this question due to time limitations.

⁴² Two local government representatives did not have SCG as an IOU partner in their ELP, two did not have enough knowledge about the audits preformed in the partnership to comment, and one was not asked due to limited time.

⁴³ Two local government representatives did not have SCG as an IOU partner in their ELP and three had not completed gas projects in recent years.

and SCE aren't in agreement over backup documents, or rates, or tedious stuff, which can cause some issues for our customers."

Program structure: SCE encourages local governments to increase engagement in efficiency activities through setting tier achievement criteria; SCG's program does not include a tiered structure. This structural difference requires some different communication with local governments. For example, one SCE partnership manager recalled they had recently been working on how "we [SCE and SCG] could communicate to the partners in a similar and cohesive way to avoid confusion and enable everybody to understand what we're trying to achieve more easily."

5.3. Identified Opportunities for Improvement

5.3.1. Goals

As mentioned in Section 5.1.1, four representatives provided suggestions to improve the goal setting process. In brief, three recommended alignment of partnership goals to the fiscal year and one suggested goals at the local government level instead of at the partnership level.

5.3.2. Municipal retrofits rebate applications

One area for improvement is the SCE rebate application process, as noted by the participants and the technical assistance contractor. The technical assistance contractor thought that the incentives available through the program motivate local governments, but said the *process* to obtain the incentives "is not motivating." Feedback the technical assistance contractor heard from local governments and reported to us included that the process was "time consuming," "takes a long time," and is "cumbersome" to the point where they "did not care about incentives." Nearly two-thirds (7 of 11)⁴⁴ of the participating representative reported facing challenges with the application process.⁴⁵ Representatives noted three distinct challenges.

First, four of the seven representatives described the **paperwork** as overwhelming. Two of these contacts reported receiving assistance with the paperwork. One representative said that their account manager was very helpful in submitting the application and the other said that SCE provided them with someone to help them "navigate the maze of paperwork." One representative said that SCE rejected invoices multiple times, requesting more supporting details before it would be paid. This required her to spend time locating old forms and re-submitting invoices, which she found "irritating."

⁴⁴ One local government representative had not completed any municipal retrofits projects and therefore did not answer the question.

⁴⁵ This finding is consistent with the 2016 targeted process evaluation of the Local Government Partnership program that found 50% of SCE's ELPs reported some difficulty with the rebate application process' parameters.

The following comments illustrate local government views:

"No one has walked us through [the process of] doing an application in the system. [The contractor] is good about helping with that but I want to be able to do it on my own. I have to sign the applications and there's a lot of steps. Section 10 or Section 11 - if you don't do it right you could be denied. No one wants that so we have to figure it out."

"The paperwork has to be done a certain way. [We ask ourselves] how much are we getting out of this versus the time we'll spend to do it [the paperwork]?"

A third representative from a higher-tier government said because of the rebate application paperwork, she has to "convince" her staff that the rebate will be worth the "extra work." A fourth representative desired more "express rebates" to reduce the amount of required paperwork

Describing a second challenge, three of the seven representatives reported frustration **at how long the rebate process takes**; however, they did not offer an estimate of the average elapsed time. One representative said that the protracted process was a disincentive to complete energy efficiency projects. The technical assistance contractor said cities can get frustrated with the process because of how long it takes for SCE to do reviews of the application, get the preinspection, do the post-inspection, and to issue the check. She estimated each stage takes six to eight weeks.

Third, the frequency with which **measures move off the eligibility list** was an expressed concern. Three of the seven representatives mentioned that they had submitted applications only to find out that the measure was no longer eligible by the time they had completed the project. As on representative stated, "one challenge and frustration has been navigating the different measures that are in effect at any given time because they're constantly changing." This situation can be especially problematic for local governments with limited budgets.⁴⁶ The technical assistance contractor added that local governments dislike the "constant dropping of measures" because, reportedly, the discontinued measures will not contribute toward meeting the requirements for tier advancement. It is understandable that the eligible measures list is updated, but the word choice of representatives is telling; from their perspectives, measures are eliminated "constantly."

As discussed in Section 5.1.3, over half (6 of 10) of the IOU managers see their role as providing rebate application support. The detailed nature of the rebate applications, as well as the periodic changes in measure eligibility, underscore the importance of partnership manager and implementer staff support to local governments. While this type of continued support currently occurs within the program, expanding the focus of such support could ensure local governments submit correct applications the first time, which will mitigate potential rebate delays, as well as keep local governments informed of measure eligibility throughout project duration.

⁴⁶ The 2016 targeted process evaluation of the Local Government Partnership program report found that when a local government submits a rebate application expecting a certain rebate amount, but does not receive it due to changing eligible measures or incentive levels, it can create ill-will between the government and the IOU, discouraging the local government from further participation.

5.3.3. Tiered model

The tiered model motivates local governments to complete energy efficiency activities, though IOU partnership managers and participating representatives indicated there could be improvements. Specifically, they noted that some of the advancement criteria could be clearer or more flexible to allow local governments with insurmountable barriers that preclude the fulfillment of some requirements to continue tier advancement by performing other energy efficiency actions.

Advancement requirements unclear

First, the technical assistance contractor, IOU partnership managers (2) and local government representatives (2) indicated that the tier advancement criteria were not clear and sometimes caused confusion for local governments as they attempted to advance through the tiered structure. One of the representatives described the requirements for energy savings as clear, but thought the "list of other things" needed to be better understood by local governments and more realistically achievable. The technical assistance contractor reported that the tiered model has a learning curve and that "it takes the city up to a year to understand the requirements." She added,

"There's a lot of rules. You have to learn to understand how the incentives apply. It's not every energy efficiency project that you implement that you get credit for – it's only the ones that are incentivized. And there's a whole set of other programs that you get credit for that are not directly tied to your partnership."

Furthermore, we heard from one representative that he had done several energy efficiency projects that his local government did not get credit for through the partnership.

An SCE partnership manager provided specific examples about how the Energy Action Plan requirements to advance are not concrete and can be "broadly interpreted." Advancement from valued to silver requires the local government to initiate an Energy Action Plan; to reach platinum, the local government must implement everything in the Plan. The manager reported that local governments do not know exactly they need to do to demonstrate they have met the tier requirements. Do discussions among government staff qualify has having initiated Energy Action Plan development, or do they need to have identified the personnel who will be completing the Plan? Further, the Energy Action Plan sets long-term goals for the local government to achieve by 2020 or 2030. Does advancement to the platinum tier require that local governments have met their long-term Energy Action Plan goals, or whatever goals were specified for the given year. IOU partnership managers also noted that it is unrealistic to think that local governments with very limited budgets will succeed in allocating funds sufficient to implement all the Energy Action Plan actions.

Advancement requirements inflexible

IOU partnership managers and local government representatives characterized some of the tier advancement requirements as rigid, providing little flexibility to adapt to an individual local government's circumstance. These contacts discussed how the current program design follows a "one-size-fits-all" model, with advancement requirements the same for every local government. Our analysis found that since tiered program inception in 2008, no participating local government in our sample moved through all three tiers, suggesting some requirements may be very challenging for some local governments to meet. Most local governments stay at one tier level for multiple years before they advance (Table 3-1).

One SCE partnership manager noted that the current tier structure does not allow small cities with few municipal buildings to use other energy efficiency activities such as outreach or strategic planning to advance through tiers. This manager could envision tier advancement criteria that better reflected the accomplishments of small local governments. As he suggested, "Let them [the government] shine where they have capabilities, and don't hold them back in areas where they just don't have resources to do it and prevent them from advancing." The other SCE partnership manager recommended allowing partnership managers to use discretion in deciding whether a local government will advance and suggested that customizing the advancement criteria for each city would improve the tiered model.

Below are specific examples of challenges local governments had meeting tier requirements:

- > **Limited space to conduct community outreach or education events**: One local government reportedly does not have many facilities in which they can hold these types of events, making this action difficult, if not impossible.
- SCE policy limitations restrict community outreach events: The ELP advancement criteria count only a handful of community outreach options, according to one SCE partnership manager. If a local government has done one of them, repeating it the following year will not count toward ELP tier advancement. This policy constrains local governments' action in this area.
- Identifying eligible facilities to enroll in demand response programs: One requirement to achieve platinum is enrolling 50% of eligible facilities in a demand response program. Multiple parties (one SCE partnership manager, one participating representative, and one nonparticipant) reported challenges identifying enough facilities to enroll that would not be adversely affected by responding to a demand response event. For example, a platinum-tier representative said it was difficult for them to meet this requirement because they had to identify locations that would respond to a demand response event without "jeopardizing the welfare of the community." He could not enroll the senior center or city hall in a demand response program, and had to identify locations with backup generators if needed.

5.3.4. Duplicative services

Multiple entities provide the same types of services and support: The technical assistance contractor and one partnership manager noted that the regional energy network serving the area provides many of the same types of services and support to local governments that the partnerships offer. This can create confusion for local governments in the ELP program that are also working with the regional energy network. For example, duplicate services the technical assistance contractor cited included rebate assistance and identification of energy efficiency opportunities. The partnership manager added that "we [SCE staff] don't implement, but the

RENs [regional energy network] do some implementation." Both of these contacts thought it made more sense for the regional energy networks to be serving only local governments not participating in the ELP program.

One platinum-tier representative reported confusion related to duplicative services, particularly audits. The duplication this contact noted was between the services provided by his partnership implementing organization and the services that "Edison offers." He was unsure who he was to approach if he wanted to schedule an audit through the ELP program. He said,

"If I wanted an audit done, I would go to [my implementing organization] before going to Edison. I don't know if they're the same people. That's confusing. If I get an audit through Edison, and get electricity savings, am I not giving those to [my implementing organization]?"

From a representative's point of view, they have an SCE account executive, an SCE partnership manager, a partnership implementing organization, a regional energy network contact, and perhaps have developed a relationship with a particular technical assistance contractor. A government staff person may not understand how much coordination occurs between all of those entities and could be confused as to who they are supposed to approach when they need support. To this point, the partnership manager quoted above noted that he makes an effort to "establish a protocol" with the local governments and implementing organizations so that they start by approaching him rather than independently contacting the regional energy network.⁴⁷

5.4. There is Interest in ELP Among Nonparticipants

We spoke with representatives from five local governments not participating in the ELP program. Of these, three said they were aware of the program, although one of these gave the qualified response that he was "a little" familiar with it. The two more familiar nonparticipants described the program goals as that of reducing the electric load, thereby reducing the need for additional power facilities (one contact) and of reducing the impact of climate change by saving energy, as well as saving money for the IOUs and local governments (the second contact).

These three aware nonparticipants viewed benefits of ELP participation as follows:

- > Having a network of other local governments with which to discuss best practices and lessons learned.
- > The ability to do bulk purchases for energy efficiency retrofits.
- > Access to enhanced financial incentives available for completing energy efficiency retrofits through the ELP program.
- > Support for local governments with limited staff resources.

⁴⁷ A reviewer of the draft reported noted that a coordination strategy between SCE and the regional energy network serving governments in SCE's service territory has been in place since 2013. The coordination strategy intends to reduce customer confusion and avoid duplication of efforts.

With regard to the last benefit, a nonparticipant representative explained,

"When cities don't have staff dedicated to just energy efficiency, it [the program] leverages opportunities to help those cities participate in [efficiency] programs where otherwise they wouldn't have enough capacity to do it. It's invaluable, especially for smaller cities that don't have the resources to pull together a team and move through the process in energy efficiency."

In Sections 4.1 and 4.2 we elaborate on the importance to local governments of staff support and time to complete energy efficiency activities. Two of the three nonparticipants aware of the program said their government had considered joining the ELP program. The representative with a little familiarity said that he did not think his government had considered joining the ELP program due to their "isolated" geographic location. His city is located on the other side of the San Gabriel Mountains from Los Angeles.

The other two nonparticipating representatives with greater program familiarity both said their governments had considered joining the program. One said that SCE had approached her government about starting a partnership because their region did not have one. She described a "conservative" mindset in the city about trying new things and how her city does things in a "methodical way" when it comes to climate issues. She noted that her city is growing rapidly and there are many "moving parts" and that is why they are "still deciding" whether they want to join the ELP program.

The other nonparticipant reported frequent collaboration with the Counties of Los Angeles, Riverside, and San Bernardino. He said that SCE offered his municipality a "very different package" from the terms of collaboration with those counties. This representative reportedly did not like the terms SCE offered his municipality and has abandoned efforts to join the ELP program. One specific concern he cited was the emphasis on the demand response requirement, with which he said his government could not comply because of facilities such as a prison, which cannot shed load on demand.

6. Building on Success: Conclusions and Recommendations

In this chapter, we discuss ways that SCE can build on the ELP program's successes by synthesizing findings from the previous chapters to present conclusions and recommendations, organized by research questions.

Research Questions: What are the value, merit, and effectiveness of SCE's ELP program in motivating achievements of, and building capacity within, local governments? What is the likelihood that the ELP model offers a viable strategy for increasing local government capacity? How do SCE-provided technical experts facilitate capacity and savings in local governments?

Key findings: Local governments described how the tiered model motivated them to do energy efficiency projects and, through their project engagement, built their capacity to do future energy efficiency work. Key motivational components of the tiered model include the increased incentives available after tier advancement, the spurring of competition between local governments, and the public recognition of energy efficiency accomplishments. Once motivated, local governments conduct energy efficiency projects and build internal support and expertise, which translates into human and technical resources. Regular communication with the IOU partnership manager and with other member local governments sustains a network of resources for local governments to share best practices, identify contractors, and generate ideas for new projects. Through active participation in the ELP program, government staff learn what resources are necessary to conduct energy efficiency projects and how to obtain them, whether from inside or outside the government, supporting *Strategic Plan* Goal 5 of developing in-house energy efficiency expertise.

In addition, the technical expertise provided through technical assistance contractors assists the local governments with conducting comprehensive audits, identifying opportunities, selecting equipment, and completing rebate applications. Their support reduces some burden on government staff, which may increase staff's likelihood to support partnership activities. Local governments use and value ELP-provided technical assistance.

> **Conclusion: The ELP model is a viable strategy for increasing local government capacity for municipal retrofits actions and Energy Action Plan development.** The tiered model motivates local governments to do municipal retrofits projects and complete Energy Action Plans. By conducting these activities, local government staff gain in-house expertise and knowledge of efficiency opportunities and benefits, and learn how to access necessary support when needed expertise does not exist in-house. As discussed in a subsequent conclusion, the tier advancement requirements do not appear to motivate strategic plan activity beyond Energy Action Plans, nor to motivate core program coordination activity. • Recommendation: We recommend that SCE maintain the ELP model, refine it as suggested below, and reassess it periodically through subsequent evaluations. (R1)

Research Question: What are the opportunities to improve program processes?

Key findings: Local government representatives and IOU partnership managers provided little evidence that ELP motivates strategic plan activity beyond Energy Action Plans or motivates core program coordination activity. Some local governments reported some tier advancement requirements are unclear or seemingly unrealistic. Local governments described the progression of Energy Action Plan activity necessary for tier advancement as unclear. Partnership managers noted that they are not allowed to use discretion when deciding on local government tier advancement and described inflexible criteria in a "one-size-fits-all" format. Challenges to meeting specific tier advancement criteria included:

- > Having enough municipal facilities to complete municipal retrofits projects and reduce energy consumption sufficiently to advance to the next tier.
- > Identifying enough eligible facilities to enroll in demand response programs, particularly the 50% of facilities as required to reach platinum.
- > Local government funding to implement the entire Energy Action Plan as required to reach platinum.
- Having enough municipal facilities in which to conduct core program coordination events and not repeating community menu items, which SCE partnership managers reported SCE prohibits.
- Conclusions: The tier advancement requirements do not appear to motivate strategic plan activity beyond Energy Action Plans, nor to motivate core program coordination activity. In addition, governments' building stocks vary and thus local governments face differing opportunities for energy efficiency actions. Partnership managers observed that local governments with small populations and few municipal facilities can become discouraged as they try to meet tier advancement criteria, in part because the criteria are inflexible. Having limited municipal facilities also presents obstacles for local governments as they attempt to meet demand response and community engagement requirements.
 - Recommendations:
 - If achieving strategic plan and core program coordination objectives is equally important to SCE as is achieving municipal retrofits objectives, consider revising tier advancement criteria to provide increased motivation for a broader set of strategic plan and core program coordination activities. (R2)
 - Consider allowing a local government with limited municipal facilities to leverage other energy efficiency actions for tier advancement, such as enhanced core program coordination efforts. Enable the IOU partnership managers to use discretion in tier advancement, supported by strong

documentation of local government achievements garnering the advancement. (R3)

 Work one-on-one with local governments to identify the facilities eligible to enroll in demand response programs and use discretion to decide whether it is feasible for the local government to ultimately enroll 50% of their eligible facilities in demand response programs. (R4)

Key findings: One area in which local governments reported challenges and lacked in-house capacity was in completing rebate applications: about half of local government representatives reported challenges associated with what they described as a detailed and time-consuming rebate application process and paperwork. Removal of measures from the eligible measures list also frustrated some local governments as they sought to complete rebate applications. Local governments rely on the assistance of IOU partnership managers, technical assistance contractors, and rebate program staff to ensure forms are filled out correctly. Both local government representatives and IOU partnership managers reported that measure incentives frequently change, a situation that is both challenging and frustrating to all parties.

- > Conclusion: The rebate application paperwork taxes local government internal resources.
 - Recommendations:
 - Assess rebate applications and supporting requirements to identify opportunities to make them more readily understood by local governments and easier to complete. (R5)
 - Encourage IOU partnership managers to offer local governments ongoing rebate application support with the goal of eliminating submission errors, which delay local governments' receipt of payments. (R6)
 - **Improve the system notifying local governments** and implementing organizations of changes to the measure eligibility list by notifying affected agencies as soon as the changes are finalized. (R7)

Research Questions: 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?

Key findings: Local governments described how ELP participation contributes to their development as energy efficiency leaders in their communities by rendering energy efficiency actions visible. The program accomplishes this in multiple ways:

- > **Municipal retrofit projects** display the benefits and impacts of a local government's energy efficiency work. Local governments reported positive feedback from library patrons and other constituents following retrofits, particularly lighting retrofits.
- > **Core program coordination efforts** enable the local government to be a credible messenger, promoting energy efficiency work to the broader community. Demonstrating that the local government has done similar work allows for more effective messaging when speaking with residences and businesses.

- > **Tier advancement celebrations** provide a public relations opportunity for governments to highlight their energy efficiency achievements. Local governments particularly valued the public recognition component of tier advancement celebrations, which remind city council of how government staff are being good energy stewards and allow council to take credit for their part, which is usually allocation of funds.
- Close alignment of ELP criteria with the Statewide Energy Efficiency Collaborative Beacon Award criteria facilitates state-level recognition of local government accomplishments.
- Conclusion: The ELP tiered model makes local governments' energy efficiency actions visible to other local governments and to constituents, helping fulfill the "lead by example" goal of the ELP program. Public recognition and increased incentives are strong motivators for local governments.
- Conclusion: The ELP tiered model appears worthy of consideration by the other IOUs. The scope of this study did not include an examination of the other IOU program designs; thus, we are unable to conclude whether the model is appropriate to extend statewide, but we did not find any evidence to the contrary. Nor did we find evidence suggesting any ELP program elements should be discontinued.
 - **Recommendation:** The other California IOUs should consider whether this study's findings suggest the tiered model offers elements appropriate for their programs. (R8)

Research Question: What is current local government capacity? What are the factors driving success? Are some local governments or types of local governments more likely to benefit from the ELP program model?

Key findings: Local governments reported having more in-house capacity to perform core program coordination than they do municipal retrofits or strategic plan activities. Appropriately, local governments use technical experts most frequently for municipal retrofits projects, sometimes for strategic plan projects, and apparently not at all for core program coordination projects. We found that participating local governments had more in-house resources (government staff) and external resources (available through the ELP program or from other organizations, such as regional energy networks) to draw on than nonparticipating local governments, and that among participants, higher-tier governments appeared to have more inhouse capacity for municipal retrofits projects than lower-tier governments.

Local government internal staff support for ELP activities, from both departmental staff and leaders such as city council members, along with someone to serve as a liaison across multiple departments, is associated with local government success. Local governments that lack funds, staff commitment, and staff time are least able to complete activities and make use of program support, limiting their tier advancement and performance in the program. A lack of staff time was the most frequently cited reason for slowed program activity and limited municipal budgets was the most common reason reported for not completing an energy efficiency projects that a local government had already identified. IOU partnership managers indicated that local

governments with limited municipal facilities had difficulty meeting some tier advancement requirements and could get discouraged, leading them to disengage from the program.

Even with fewer resources to draw on, nonparticipating local governments nonetheless reported undertaking energy efficiency activities, though typically to a lesser degree than reported by most of the participating local governments.⁴⁸ Program awareness varied among the nonparticipating local governments, with the most informed reportedly having investigated participation.

- Conclusions: Many local governments, both participating and nonparticipating, appear to have the capacity to make use of program support and incentives to accomplish energy efficiency. Their level of program activity is likely to vary over time as they manage their internal staff and financial resources. Local government organizational support is key to program accomplishments, while lack of such support, limited staff time, budget constraints, and limited eligible facilities undermines a local governments' ability to effectively participate. Interest in the program and energy efficiency activity exists among nonparticipating local governments.
 - Recommendation: Given finite program resources, we recommend SCE develop a process for removing inactive local governments from the program and using the freed-up resources to bring in new local governments. SCE should consider instating a probationary period for local governments for which program participation has gone stagnant. For example, if a local government has not conducted any municipal retrofits, strategic plan, or core program coordination activities (activities as in any component of a project; not necessarily the entire project) for at least two quarterly reporting cycles, perhaps they should be placed on probationary status. If their inactivity persists for an additional two reporting cycles, perhaps they should be suspended from the partnership. Resources previously earmarked for, or used to follow up with, the stalled local governments could be dedicated to incorporating new local governments into the ELP program. (R9)

This recommendation is consistent with a practice common among custom incentive programs in which the utility commits to providing the incentive for the approved project on the condition that the project is completed within a specified period. Should SCE adopt this recommendation, it should ensure all local governments in the ELP program are aware of this change prior to its implementation.

While we believe that a probationary policy might make the best use of SCE's limited ELP resources, we recommend that SCE carefully design such a policy to best support local governments and the aims of the ELP. For example, we would encourage program managers to confer with local governments during any probationary periods to identify whether additional program support, or the support of other organizations such as the regional energy network, might induce the

⁴⁸ A reviewer of the draft report noted that the regional energy network supports nonparticipating local governments (as well as ELP participants) with technical support to complete municipal retrofit projects

governments to take actions. Such conversations should ensure that all local governments are treated fairly; this study notes that governments differ in their retrofit and demand response opportunities. Finally, it may be prudent to allow exceptions to any probationary policy for local governments in extenuating circumstances, such as significant financial hardship or other setbacks.

Appendix A. Strategic Plan Menu Items

| Strategic Plan Goal 1: Local governments lead adoption and implementation of "reach" codes stronger than Title 24 on both mandatory and voluntary bases. | | | | |
|---|---------|---|--|--|
| Strategy | 1.1 | Adopt codes, ordinances, standards, guidelines or programs that encourage or require building performance that exceeds state requirements. The focus should be on using existing models, or if there is something new and unique that it be replicable. | | |
| Menu Options | 1.1.1 | Adopt building energy codes more stringent than Title 24's requirements, using cost- effectiveness studies by Climate Zone done by the utilities; adopt one or two additional tiers of increasing stringency. | | |
| | 1.1.2 | Adopt a Green Building policy for municipal development, commercial development and/or residential development. | | |
| | 1.1.3 | Develop/adopt point of sale programs such as a Residential or Commercial Energy Conservation Ordinance. Focus on whole building performance. | | |
| | 1.1.4 | Change local codes to allow and encourage integration of energy efficiency (EE), demand response, and on-site generation. | | |
| | 1.1.5 | Develop and adopt programs to encourage EE such as one-stop permitting, on-line permitting, separate Zero Net Energy permit processes, density bonuses, or a recognition program. | | |
| | 1.1.6 | Develop educational programs for local elected officials, building officials, commissioners, and stakeholders to improve adoption of EE codes, ordinances, standards, guidelines and programs. | | |
| Strategy | 1.2 | Implement codes, ordinances, standards, guidelines or programs that encourage building performance that exceeds state standards. | | |
| Menu Option | 1.2.1 | Implement any of the strategies in Section 1.1 through a process involving internal and external stakeholders, etc. | | |
| Strategic I | Plan Go | al 2: Strong support from local governments for energy code compliance enforcement. | | |
| Strategy | 2.1 | Improve processes resulting in increased code compliance through education, training, and enforcement practices. | | |
| Menu Options | 2.1.1 | Local government staff and contract staff attend code compliance workshops offered by the California Energy Commission (CEC), utility codes & standards staff, or other local governments with strong compliance records. | | |
| | 2.1.2 | Redesign enforcement, compliance, plan review processes; introduce new forms and templates. | | |
| Strategic I | Plan Go | al 3: Local governments lead by example with their own facilities and energy usage practices. | | |
| Strategy | 3.1 | Develop a program to track municipal energy usage, such as through energy management software and benchmarking of municipal facilities. | | |
| Menu Options | 3.1.1 | Develop energy benchmarking policies and procedures to enable ongoing benchmarking of all local government facilities. | | |
| | 3.1.2 | Set up a 'utility manager' computer program to track municipal usage. Identify need for sub-metering to plan, budget and manage bills. | | |
| | | | | |
| Strategy | 3.2 | Adopt an Energy Action Plan (EAP) or Climate Action Plan (CAP) for municipal operations. The plan could include setting EE standards for new and existing facilities, developing a revolving loan fund for EE projects, and so on. |
|----------------------------|-----------------------|---|
| Menu | 3.2.1 | Develop/adopt an energy chapter for City/ County CAP or EAP. |
| Options | 3.2.2 | Adopt a policy to require Leadership in Energy and Environmental Design (LEED), Energy Star Ratings, or other program standard for municipal facilities. |
| | 3.2.3 | Develop policy for a revolving EE fund for City/County facilities. |
| | 3.2.4 | Develop commissioning/retro-commissioning policies for municipal facilities. |
| Strategic F and climate | | al 4: Local governments lead their communities with innovative programs for EE, sustainability |
| Strategy | 4.1 | Adopt a CAP, EAP or adopt EE language into another policy document, such as a General Plan, to reduce community greenhouse gas (GHG) emissions with a focus on EE. |
| Menu | 4.1.1 | Develop a regional template for CAP or EAP. |
| Options | 4.1.2 | Customize CAP with EE language and data. |
| | 4.1.3 | Update General Plan/Conservation Element with Climate policies. Provide EE framework and data for other people doing planning. |
| | 4.1.4 | Conduct the EE savings analysis for an annual GHG inventory for the City/ County. |
| – By 20 their fa | 20, 100º acilities | al 5: Local government EE expertise becomes widespread and typical. % of local governments have in-house capabilities devoted to achieving all cost-effective EE in and stimulating the same throughout their communities. |
| - | | participating in activities under Goals $1 - 4$ will be increasing their expertise. The activities ore directly related to the programs operated by the statewide local government associations |

under Goal 5 are more directly related to the programs operated by the statewide local government associations (International Council for Local Environmental Initiatives [ICLEI], Institute for Local Government [ILG] and Local Government Commission [LGC]), by regional local government agencies such as the Association of Bay Area Governments and Great Valley Center, and by the Statewide Local Government Energy Efficiency Best Practices Coordinator.

Appendix B. Program Staff Interview Guide

Start of Interview [ALL]

[Start of Interview]

Thank you for taking the time to talk with me today. As I mentioned earlier, Research Into Action is evaluating Southern California Edison's (SCE's) Energy Leaders Partnership program, or ELP. The focus of our work is to support the investor-owned utilities (IOUs) efforts to deliver the Local Government Partnership, or LGP program and to determine whether the ELP tiered incentive model is effective at driving accomplishments among local governments. Since you play a role in [managing/working with] these partnerships, we would like to obtain your insights and experiences related to the LGP program and SCE's tiered incentive structure. We are particularly interested in the experience of individual local governments, so please try to respond about local governments rather than partnerships.

I will be taking notes as we talk, and I'd like to audio record this interview to ensure the accuracy of the notes. The notes and the recording are for research purposes only and will not be provided to anyone outside the Research Into Action team. All of your responses will be kept confidential and we will not identify you in the report. Is it ok that I record our conversation?

Do you have any questions before we get started?

Respondent Role and Relationships [ASK ALL]

To begin, I'd like to ask some questions about your role in the [ELP/LGP] program.

- Q1. Please describe your role in implementing the LGP program at [SCE/Southern California Gas Company (SCG)].
 - 1. [IF NOT MENTIONED] What role, if any, do you play in supporting or advising local governments on municipal retrofits?
 - 2. [IF NOT MENTIONED] What role do you play in providing Strategic Plan support to local governments, if any?
 - 3. [IF NOT MENTIONED] And what role do you play in supporting local governments' community engagement efforts, if any?
- Q2. How long have you been in that role?
- Q3. What other [SCE/SCG] staff do you work with to deliver the program, if any? [Probe: Account managers? Technical experts?]
- Q4. [IF WORK INVOLVES TECHNICAL CONSULTANTS] When are the technical consultants or contractors brought in to help with program activities?

- Q5. [PROGRAM STAFF] How do you collaborate with SCG/SCE to manage joint partnerships?
 - 1. [IF NOT ADDRESSED] What data or resources do you share with [SCG/SCE] if any?
 - 2. What would you say is working well in the collaboration with [SCG/SEC]?
 - 3. What would you say needs improvement in the collaboration with [SCG/SCE]?
- Q6. I'd like to know more about audits. Please explain the audit process for local government facilities that use both gas and electricity.
 - 1. [IF NOT ADDRESSED] How is it decided whether an integrated gas-electric audit versus a single-fuel audit should be conducted?
 - 2. What are the advantages to the approach to auditing dual-fuel local government facilities? Disadvantages with this approach?
 - 3. What is your approach to supporting local governments undertaking both gas and electric upgrades?

Funding for Local Government Projects [PROGRAM STAFF ONLY]

In this section, I'm interested in learning more about the processes by which local government work is funded through the [ELP/LGP] program.

- Q7. [SCE ELP MANAGER ONLY] We understand that SCE is unique in that its Strategic Plan projects must be approved by the California Public Utilities Commission (CPUC). Is this correct?
- Q8. [SCE ELP MANAGER ONLY] We also understand that SCE is in the process of reworking its request for proposal process for Strategic Plan activities. What feedback have you received from local governments on the current request for proposal process for Strategic Plan projects?
- Q9. [PROGRAM STAFF ONLY] Have you received any feedback from local governments on SCE's Request for Proposals process for Strategic Plan projects, and if so, what?
 [Probe: adds time delaying projects; eliminates potential projects; onerous; transparent]

Driving ELP/LGP Efficiency Activities [ASK ALL]

[PROGRAM STAFF] Let's talk more about managing the local governments in the [ELP/LGP] program.

[CONTRACTORS] Let's talk more about working with the local governments in the [ELP] program.

Q10. [PROGRAM STAFF ONLY] In your own words, what are the goals of the Energy Leader Partnership program?

- Q11. What aspect or aspects of the [ELP/LGP] program do you think are most effective at driving EE action among local governments?
- Q12. What challenges have you encountered as you provide program support to/work with local governments?
- Q13. How are you addressing those challenges?
- Q14. Are there certain program activities that local governments need more support to complete than others? If so, what? [If needed: Relating to any of the program lines including municipal retrofits, Strategic Plan items, or community outreach]
- Q15. What are the similarities among local governments that require more support? Less support?
- Q16. In what ways do you think the ELP program is building the capacity of local governments to undertake EE projects?

Perspectives on the Tiered Incentive Structure [PROGRAM STAFF ONLY]

Now, let's discuss the tiered incentive structure used in SCE's ELP program.

- Q17. How well do you think the tiered incentive model works to encourage progress among local governments?
- Q18. In your opinion, how effective has the ELP program's tiered incentive structure been in building local governments' capacity for EE projects?
- Q19. What do you think are the advantages of using a tiered incentive structure?
- Q20. What do you think are the disadvantages?
- Q21. What, if any, feedback have you heard from local governments about the tiered incentive structure in the ELP model? [Probe: Positive, negative, causes competition]
- Q22. Do you have a sense that the incentive structure is more effective at motivating activity among some local governments than others? [Probe for ELP organization type single-government versus multi-government]
- Q23. When might a local government experience difficulty advancing through the tiers? [Probe: Community characteristics, local government characteristics, market or building characteristics].
- Q24. [SCE PROGRAM STAFF ONLY] After a local government reaches the platinum level, are there any processes in place to encourage continued program participation? [IF YES] What are those processes?

Communication with Local Government Representatives [ASK ALL]

Now let's talk about communication with your contacts at the local governments.

- Q25. With whom do you communicate at the [ELP/LGP] to accomplish program goals? [Probe: Is it more than just the lead local contact]
 - 1. What do you communicate with them about?
 - 2. How often do you communicate with this person/these people? [Probe for variability]
- Q26. With whom do you communicate at individual member local governments to accomplish [ELP/LGP] program goals, if anyone?
 - 1. What do you communicate with them about?
 - 2. How often do you communicate with this person/these people? [Probe for variability]
 - 3. How easy or difficult is it for you to identify and reach the person at individual local governments you need to speak with? [IF DIFFICULTY: How does this affect your ability to implement the ELP program?]

Feedback on Proposed Sample [SCE ELP MANAGER ONLY]

As part of our evaluation, we will be comparing program experiences and accomplishments among similar local governments. As you know, we have created groups of local governments that are matched along relevant local government and ELP characteristics but differ in what tiers they have achieved. This will allow us to examine whether the ELP program is effective at driving accomplishments among groups of similar local governments. We'd like to get your feedback on the groupings we have put together that we sent to you via email.

- Q27. Are there any groups that stand out to you as being particularly interesting or useful?
- Q28. Are there any groups where you question why a local government was included, that is, where one member doesn't seem to fit well with the other two?
- Q29. Are there any important factors that may influence ELP program progress that we are not capturing in our proposed groupings?
- Q30. We were unable to find nonparticipating counties in SCE territory. Are there any that you know of?
- Q31. Is there a nonparticipating city that you would consider "far away" or hard to reach, approximately the same population size as Tulare, Porterville, and Hanford, which is about 55,000-61,000 people? We identified Exeter, but it is much smaller, at about 10,000 people.]

Closing [ASK ALL]

That is all the questions I have for you today.

Q32. Is there anything else you'd like to add about the [ELP/LGP] program that we haven't talked about?

Web-Survey Data Collection [SCE PROGRAM STAFF ONLY]

The last task for today is a short web-survey we'd like you to complete to provide information on the specific characteristics of selected local governments in the partnerships you manage. We will be speaking with a sample of diverse local governments as part of this evaluation, and we'd like your assessment of where these local governments fall on a number of characteristics.

It'll be quicker and easier for you to read these and enter the answers as part of a short surveys than for me to read the questions to you. I have emailed you the link. Is this something you are able to do right now? **[IF YES:]** Great, I'll stay on the line with you to make sure the link works. **[IF NO:]** Okay, please do your best to complete it within a day or two while our discussion is still fresh in your mind. I'll follow up with you if I don't see the responses submitted within a few business days.

Survey Instrument

The following questions ask your opinion about selected local governments within partnerships you manage. Please read the instructions for each question and answer to the best of your ability.

Q1. Using a scale of 1 to 5, please rate each local government on the degree to which you see **commitment to EE among local government (LG) leadership.** Local government leadership may include the mayor, city council, city manager, or other leadership. Commitment may be demonstrated by their willingness to dedicate resources and staff time to EE.

| | 0. | 2 | 2 | 5 Extremely committed | 98 DK |
|------|----|---|---|-----------------------|-------|
| LG 1 | | | | | |
| LG 2 | | | | | |
| LG 3 | | | | | |

Q2. Using a scale of 1 to 5, please rate each local government (LG) on its **staff members'** levels of expertise and experience as it relates to their EE activities.

| | 0 5 | 2 | 2 | 5 Extremely knowledgeable | 98 DK |
|------|-----|---|---|------------------------------|-------|
| LG 1 | | | | | |
| LG 2 | | | | | |
| LG 3 | | | | | |

Q3. For each local government, please indicate whether each factor listed below serves as an **internal barrier** that inhibits EE accomplishments.

| | 0 | | 0 | | Comp makin | | | Compe | ting pri | orities | Limiteo resourc | | | Limiteo resourc | | | Other internal barriers (please list) |
|------|-------|------|-------|-------|---------------|-------|-------|-------|----------|---------|--------------------|-------|-------|--------------------|-------|--|--|
| | 1 Yes | 0 No | 98 DK | 1 Yes | 0 No | 98 DK | 1 Yes | 0 No | 98 DK | 1 Yes | 0 No | 98 DK | 1 Yes | No | 98 DK | | |
| LG 1 | | | | | | | | | | | | | | | | | |
| LG 2 | | | | | | | | | | | | | | | | | |
| LG 3 | | | | | | | | | | | | | | | | | |

Q4. For each local government, please indicate whether each factor exists as an **external barrier** inhibiting EE accomplishments.

| | Lack of | constituent su | | Marketplace barrie EE equipment) | Other external barriers (please list) | | |
|------|---------|----------------|-------|-------------------------------------|---------------------------------------|--|--|
| | 1 Yes | 0 No | 98 DK | 1 Yes 0 No 98 DK | | | |
| LG 1 | | | | | | | |
| LG 2 | | | | | | | |
| LG 3 | | | | | | | |

Q5. Does the local government have someone you might call an **energy champion** - someone who advocates for prioritizing EE?

| | 1 Yes | 0 No | 98 DK |
|------|-------|------|-------|
| LG 1 | | | |
| LG 2 | | | |
| LG 3 | | | |

Q6. **How often does each local government contact you** (the partnership manager) to obtain programmatic support?

| | 1 Daily | 2 Weekly | 3 Monthly | 4 Quarterly | 5 Yearly | 6 Less than yearly | 7 Never | 98 DK |
|------|---------|----------|-----------|-------------|----------|--------------------|---------|-------|
| LG 1 | | | | | | | | |
| LG 2 | | | | | | | | |
| LG 3 | | | | | | | | |

Appendix C. Participating Local Government Representative Interview Guide

Introduction

Thank you for taking the time to talk with me today. As I mentioned earlier, Research Into Action is evaluating SCE's Energy Leaders Partnership program, or ELP. The focus of our work is to support SCE's efforts to deliver the ELP program and to determine whether the tiered incentive model is effective at driving accomplishments among local governments.

I will be taking notes as we talk, and I'd like to audio record this interview to ensure the accuracy of the notes. The notes and the recording are for research purposes only and will not be shared with anyone outside the Research Into Action team. All of your responses will be kept confidential, and we will not identify you in the report.

Is it ok that I record our conversation?

Do you have any questions before we get started?

Respondent Role [ASK ALL]

- Q1. To begin, please tell me your organization and title.
- Q2. How would you describe your role in the ELP program?
 - 1. How long have you been in that role?

Perceptions of Program Influence [ASK ALL]

- Q3. In your own words, what are the goals of the ELP program?
- Q4. Has participating in the ELP program allowed your municipality to do more EE work than you would have been able to without the program? What makes you say that?
- Q5. Has the ELP program helped build the capacity of your municipality to engage in EE activities in the future?
 - 1. [IF NO] Why not?
 - 2. [IF YES] Can you provide an example or two of how the ELP program has helped you build capacity?
- Q6. Please describe the process by which ELP goals are set for your municipality. [Probe for: who's involved in goal setting, frequency of goal setting]

- Q7. Do the goals set through the ELP program accurately reflect what your municipality is able to accomplish? What makes you say that?
- Q8. Do you have any recommendations for improving the goal setting process?
- Q9. What is your local government's current ELP tier level?
- Q10. Would you say that your tier level accurately reflects your municipality's EE accomplishments? Why or why not?
- Q11. How long has your municipality been participating in the ELP program?
- Q12. Since you've been in the program, to what degree has your municipality's level of activity varied? [If needed: Have your accomplishments varied year over year?] [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
 - 1. What do you think contributed to that level of variation?
- Q13. How does the tiered incentive structure influence your decision-making for strategic plan activities? What about for municipal retrofit activities? And, for community outreach activities?
- Q14. In your opinion, how effective is the tiered incentive model at driving accomplishments within your local government?
- Q15. What challenges or barriers have you faced as you try to move up the tiers, if any?
- Q16. What do you like most about the tiered incentive structure? [Probes: enhanced incentives, recognition for accomplishments, provides suggestions for activities]
- Q17. What recommendations do you have for improving the tiered incentive structure?

Program Relationships [ASK ALL]

Now I have some questions about your experiences conducting EE activity through the ELP program.

[Multi-LG ELPs: Read Q18-19. Single-LG ELPs: Skip to Q20]

- Q18. How often do you interact with the other Local Governments in your ELP group?
 - 1. [IF NOT CLEAR] Who organizes these interactions? [If needed: SCE, the ELP implementer, or self-organized by member LGs]
- Q19. To what extent do you share best practices, resources, or lessons learned with the other LGs in your ELP?

[ASK ALL]

- Q20. What would you say are your ELP's strengths?
- Q21. What challenges have you encountered as part of the [ELP Name] ELP?

- Q22. Have you worked with any other ELPs or LGs within other partnerships to conduct program activities? [If needed: this could include community outreach events, bulk purchasing orders, or workshops]. [IF YES] Please describe.
- Q23. How often do you interact with your SCE ELP partnership manager? [Probe: in-person versus phone or email]
- Q24. In your own words, what is the role of the SCE ELP partnership manager?
- Q25. How does your ELP partnership manager support your municipality as you conduct ELP activities? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
- Q26. What challenges have you experienced accessing support from SCE, if any? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
- Q27. [IF SCG PARTNER] How has SCG supported your municipality as you conduct LGP activities? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
- Q28. [IF SCG PARTNER] What challenges have you experienced accessing support from SCG, if any? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
- Q29. How has your municipality made use of the third-party technical assistance available through the ELP program?
 - 1. [IF NOT CLEAR] What services or support have they provided you?
 - 2. Have you experienced any challenges accessing third-party technical assistance?
- Q30. Has it ever been challenging to access the necessary technical expertise required for your LGP activities? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]

Program Activities [ASK ALL]

- Q31. Has there ever been a project your municipality wanted to complete, but that was not approved by SCE? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities] [IF YES] What happened to that project?
- Q32. Has there ever been a project that your municipality wanted to complete, but you couldn't complete for some other reason? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]
- Q33. How has your municipality benefitted from your ELP activities? [Probe for: Strategic Plan activities, municipal retrofits activities, outreach activities]

Before moving on to the next set of questions, I have a few questions specifically about municipal retrofits projects.

- Q34. [IF SCG partner] Regarding audits, what approach does your municipality take to doing audits at facilities that use both gas and electric fuels? [Probe: Are gas and electric audits conducted at the same time or separately?]
 - 1. [IF UNCLEAR] What are the advantages of this approach?
 - 2. [IF UNCLEAR] What are the disadvantages of this approach?
- Q35. [IF SCG PARTNER] What has your experience been including gas measures in facility retrofits? [Probe: for experience working with SCG]
- Q36. What feedback do you have regarding SCE's process for applying for and receiving rebates for municipal retrofit projects?
- Q37. Have you ever had trouble accessing properly trained contractors to install efficient equipment for municipal retrofit projects?
 - 1. [IF YES] What did you do to address that issue?
- Q38. How about sourcing the necessary energy efficient equipment for a municipal retrofit, has that ever been a challenge?
 - 1. [IF YES] What did you do to address that challenge?

Local Characteristic Influences on Energy Efficiency Work [ASK ALL]

Now I'd like to know more about your municipality and local community as it relates to EE.

- Q39. Who in your municipality is involved in making decisions about whether to pursue EE projects?
- Q40. How committed are your local leaders to EE?
 - 1. How does their level of commitment affect your ability to conduct EE projects, if at all? [Probe: allocation of funding/resources]
 - 2. [IF CHALLENGE] How has SCE helped you address this challenge, if at all?
- Q41. Are your municipal leaders involved in setting goals, assigning responsibility, or making timelines for EE projects?
 - 1. [IF YES] Please describe.
- Q42. Do you face any organizational challenges to completing EE projects, like complex decision-making processes or a lack of clear roles and responsibilities?
 - 1. [IF YES] Please describe.

Q43. Would you say your municipality or your local community has someone you would call an "energy champion" – someone who advocates for prioritizing EE?

[If needed: We're using "energy champion" in more of an informal way, so they may not necessarily be the contract-designated energy champion, but instead, someone who nudges others so that EE is not neglected].

- 1. [IF YES] Can you give me an example of what makes this person an energy champion?
- Q44. Do you think your municipality has other priorities competing with EE action? [IF YES] What are those competing priorities?
 - 1. [IF CHALLENGE] How has SCE helped you address this challenge, if at all?
- Q45. How would you describe your constituents' attitudes toward EE? [If needed: In general, are they supportive of your municipality addressing EE and climate change or are they unsupportive of your municipality addressing those issues?]
 - 1. [IF UNCLEAR] How does this level of constituent support affect your ability to engage in EE?
 - 2. [IF CHALLENGE] How has SCE helped you address this challenge, if at all?
- Q46. The next set of questions asks whether your municipality has someone knowledgeable about various EE activities. I'll ask them one by one, please let me know if you have someone with knowledge of how to do these activities and if so, their role at your municipality.
 - Do you have someone who knows how to benchmark your facilities?
 [IF YES] What is their role at the LG?
 [IF NO] Has SCE or its third-party technical assistance contractors supported you in benchmarking facilities?
 - 2. How about someone who knows how to conduct audits of your facilities?
 [IF YES] What is their role at the LG?
 [IF NO] Has SCE or its third-party technical assistance contractors helped you to conduct audits of your facilities?
 - 3. Do you have someone on staff who can calculate energy savings resulting from an upgrade?
 [IF YES] What is their role at the LG?
 [IF NO] Has SCE or its third-party technical assistance contractors helped you in
 - calculating energy savings?
- Q47. Is there anything else I should know about your community or municipality that affects your work in the ELP program?

Closing

Those are all the questions I have for you today.

Is there anything else you'd like to add about the ELP program that we haven't talked about?

Appendix D. Nonparticipant Local Government Representative Interview Guide

Introduction

Thank you for making the time to talk with me today. As I mentioned, my firm is working with SCE to learn more about EE at municipalities in their service territory. My firm is also evaluating SCE's Energy Leader Partnership, or ELP, program which is designed for Local Governments. As part of this effort, we're speaking with a handful of local governments who are not participating in the program to gain a sense of program awareness and the EE actions that governments are taking outside of the ELP program. Do you have any questions for me before we get started?

I will be taking notes as we talk, and I'd like to audio record this interview to ensure the accuracy of the notes. The notes and the recording are for research purposes only and will not be shared with anyone outside the research team. All of your responses will be kept confidential, and we will not identify you in the report.

Is it ok that I record our conversation?

Respondent Role [ASK ALL]

Q1. To begin, please tell me your organization and title.

ELP Program Perceptions [ASK ALL]

Let's talk briefly about the ELP program.

Q2. Are you familiar with the Energy Leader Partnership program through SCE?

[IF NO SKIP TO Q6]

- Q3. [IF FAMILIAR WITH ELP] Has your municipality considered joining the ELP program?
 - 1. Why or why not?
 - 2. [If considered] Why have you decided not to participate in the program?
- Q4. [IF FAMILIAR WITH ELP] In your opinion, what benefits or advantages does participation in the ELP program offer a local government?
- Q5. [IF FAMILIAR WITH ELP] In your own words, what are the goals of the ELP program?

Energy Efficiency Action [ASK ALL]

The next set of questions asks about EE activities done at your municipality.

- Q6. How do SCE staff assist your municipality with EE activities, if at all?
- Q7. Is your municipality also a customer of SCG?
 - 1. [IF YES] How do SCG staff assist your municipality with EE activities, if at all?
- Q8. Have you had energy audits conducted at your municipal buildings in the past three years?
 - 1. [IF YES] Who performs energy audits of your municipal buildings? [Probe: LG staff, SCE staff, third party contractors]
 - 2. [IF YES AND IF SCG CUSTOMER] When a facility uses both gas and electricity, are the gas and electric audits conducted simultaneously or separately?
- Q9. Has your municipality retrofitted any of your municipal facilities in the last three years?
 - 1. [IF YES] Has SCE supported your municipality with municipal retrofits? If so, how?
- Q10. Has your municipality applied for any SCE incentives or rebates for those retrofits in the past three years?
- Q11. Has your municipality completed an Energy Action Plan or a Climate Action Plan?
 - 1. [IF YES] Did you need to bring in outside assistance to complete the plan or did you complete it using only internal staff resources? [Probe for SCE support]
- Q12. Has your municipality benchmarked your municipal buildings or enrolled them in a utility management software program? [If needed: For example, the Environmental Protection Agency's (EPA's) ENERGY STAR[®] portfolio manager is a popular utility management program]
 - 1. [IF YES] Did you need to bring in outside assistance to complete benchmarking or did you complete it using only internal staff resources? [Probe for SCE support]
- Q13. Has your municipality enacted any reach codes? [If needed: Building codes that exceed Title 24]
 - 1. [IF YES] Did you need to bring in outside assistance to implement reach codes or did you complete it using only internal staff resources? [Probe for SCE support]
- Q14. Has your municipality engaged in efforts to increase energy code compliance, like conducting workshops that educate local officials on building codes?
 - 1. [IF YES] Did you bring in outside assistance to do this or did you complete it with internal staff resources?
- Q15. Does your municipality conduct outreach in the community promoting EE among your constituents?
 - 1. [IF YES] Is SCE assisting you with this? If yes, how?

- Q16. Is your municipality conducting any outreach to small-medium businesses or homeowners to connect them with SCE EE programs designed for their needs?
 - 1. [IF YES] How does SCE help you with this?
- Q17. Has your municipality ever had an EE project you wanted to conduct, but weren't able to for some reason?
 - 1. [IF YES] What were the reasons you couldn't complete this project?
- Q18. To what extent has your municipality collaborated with other municipalities to conduct EE work? [If needed: This could be coordinating to conduct efficiency work or sharing of best practices and lessons learned]
 - 1. [IF ANY COLLABORATION] Are any of these municipalities in the ELP program?

Local Characteristic Influences on Energy Efficiency Work [ASK ALL]

My last few questions are about your municipality and local community as it relates to EE.

- Q19. Who in your municipality is involved in making decisions about whether to pursue EE projects?
- Q20. How committed are your local leaders to EE?
 - 1. How does their level of commitment affect your ability to conduct EE projects, if at all? [Probe: allocation of funding/resources]
 - 2. [IF CHALLENGE] How has SCE helped you address this challenge, if at all?
- Q21. Are your municipal leaders involved in setting goals, assigning responsibility, or making timelines for EE projects?
 - 1. [IF YES] Please describe.
- Q22. Do you face any organizational challenges to completing EE projects, like complex decision-making processes or a lack of clear roles and responsibilities?
 - 1. [IF YES] Please describe.
- Q23. Would you say your municipality or your local community has someone you would call an "energy champion" someone who advocates for prioritizing EE?
 - 1. [IF YES] Can you give me an example of what makes this person an energy champion?
- Q24. Have there every been any instances where your municipality wanted to do an EE project but couldn't because you needed to use funding or other resources for something else? [IF YES] What are those competing priorities?
 - 1. [IF CHALLENGE] How has SCE helped you address this challenge, if at all?

- Q25. How would you describe your constituents' attitudes toward EE? [If needed: In general, are they supportive of your municipality addressing EE and climate change or are they unsupportive of your municipality addressing those issues?]
 - 1. [IF UNCLEAR] How does this level of constituent support affect your ability to engage in EE?
- Q26. Is there anything else I should know about your community or municipality that affects your work in EE?

Closing

Those are all the questions I have for you today.

Q27. Is there anything else you'd like to add about the ELP program or your municipality's EE activity that we haven't talked about?