

**Local Government Partnerships:
Unlocking Energy Efficiency Opportunities in the Public Sector**

**Prepared by:
Cal Broomhead
Howard Choy
Cheryl Collart
Neal DeSnoo
Jerry Lahr
Jody London
Carrie Mann
Patrick Stoner
Michele Swanson
Scott Wentworth**

July 10, 2007

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY.....	1
II.	CALIFORNIA ENERGY POLICY AND UTILITY ENERGY EFFICIENCY PROGRAMS	3
III.	HISTORY OF LOCAL GOVERNMENT PARTNERSHIPS AND PROGRAMS....	4
IV.	BENEFITS OF LOCAL GOVERNMENT PARTNERSHIPS AND PROGRAMS ..	4
	A. Cost-Effective Energy Efficiency Programs That Produce Hard Savings	5
	B. Partnership Programs Capture Lost Opportunities	7
	C. Increased Accountability	9
	D. Partnerships Leverage Opportunities For Other Utility Programs.....	9
	E. Partnerships Enhance the Ability To Identify And Implement Emerging Technology	11
	F. Partnerships Provide An Established Relationship With Small And Medium Cities.....	11
	G. Partnerships Foster A Regional Approach To Energy Issues	12
	H. Partnerships Help Identify Demand Response Opportunities	12
	I. Partnerships Help Develop Codes and Standards	13
	J. Partnerships Identify Green Building Initiatives.....	13
	K. Partnerships Facilitate Informal Sharing of Information	14
V.	PRACTICES OR PROCEDURES THAT HAVE FACILITATED CURRENT ENERGY EFFICIENCY PROGRAMS	14
	A. Champion for the Partnership.....	14
	B. Training Local Contractors	15
	C. Do As Much Work In-House As Possible	15
	D. Audits	15
	E. Tailored Incentives.....	15
VI.	LOCAL GOVERNMENTS AND BIG BOLD ENERGY EFFICIENCY STRATEGIES	16
	A. Big Bold Strategies Objectives and Process.....	16
	B. Local Government Program Examples	18
VII.	OPPORTUNITIES TO IMPROVE LOCAL GOVERNMENT PARTNERSHIPS.	18
	A. Funding Guarantees	18
	B. EM&V	19
VIII.	NEXT STEPS	19
	A. Direction From CPUC On Nature Of Relationship, Roles And Responsibilities.....	19
	B. Establish A Statewide Approach to Local Government Partnerships.....	20
	POST SCRIPT COMMENTS:	21

Local Government Partnerships: Unlocking Energy Efficiency Opportunities in the Public Sector

I. INTRODUCTION AND SUMMARY

This paper reports on the success of energy efficiency partnerships between California's investor owned utilities (IOUs) and local governments and other public agencies, including special districts, boards, and commissions. The paper looks at the role of partnerships in helping California implement its aggressive energy efficiency policies, providing a brief history on partnerships and a report on their current status. The paper then looks at the benefits that partnerships bring to California's energy efficiency and other energy programs, and explores areas for improvement. Local government programs are examined in light of the big, bold strategies initiative of the CPUC. Finally, this paper provides recommended next steps for ensuring that local government partnerships continue to contribute to the success of California's energy goals.

Energy is considered a basic public health and safety service in the U.S., like water and clean air. Public agencies and local governments provide services to the public at large, and operate many facilities that require electricity and natural gas, including jails, hospitals, courts, sewer treatment facilities, schools, traffic signals. Indeed, much of the operational continuity of our society relies on a constant supply of energy. Local governments can better serve the public at large when they are consuming energy wisely, and most local governments want to do their part to reduce consumption. Energy efficiency partnerships can be a very useful method for local governments to do so.

New problems and opportunities often appear in specific locations before they are noticed statewide or come to the attention of utilities. Local governments are consistently the first to experience these and can respond with local programs and policies. For example, San Francisco, in response to community support for energy efficiency, is introducing an ordinance to require minimum efficacy of linear fluorescent lighting that will effectively require retrofits of old inefficient fluorescent technology. Another example is Santa Monica, which through its Solar Santa Monica program is combining energy efficiency retrofits with incentives for installation of rooftop solar technologies. And Berkeley and San Francisco through their time of resale

residential energy conservation ordinances are grasping an opportunity not yet being addressed by the State.

Partnerships between IOUs and local governments have become an important vehicle for delivering energy efficiency programs and services. For utilities, partnerships with local governments provide an avenue for increasing the amount of energy saved and recruiting more participants to energy efficiency efforts and other energy programs. Working through local government partners, utilities can couple energy efficiency with demand response, apply enhanced or new technologies and renewable energy resources, and find other ways to combine resources to best secure the public's energy needs while minimizing the cost to ratepayers. Local governments and local energy offices can more easily function in a collaborative or coordinated organizational approach than can large independent utilities.

For local governments, partnerships allow them to expand or, in some instances, institute energy efficiency programs that save energy (and reallocate scarce budget dollars). Partnerships also allow local governments to fulfill their mission of providing essential services to constituents in the most efficient, cost-effective manner. Particularly for local governments that have adopted sustainability policies and/or are looking to reduce their global warming impacts, energy efficiency partnerships can be important elements of the government's program, and can result in long-term structural changes that can outlive the utility contract. Local governments are reliable partners for the long term. Partnerships with public agencies increase the quality of end results by adding important perspectives to the job of saving energy.

Investing public goods charge funds in public agency facilities provides a direct benefit to utility customers. Local government energy staff can provide comprehensive services that cross sectors, such as water, energy, and waste, which individual utilities cannot duplicate. Many customers only interact with their energy utility through bill inserts or via the Internet, whereas a local energy personnel can bring about significant change because they are located in, have direct contact with, and serve the community. Local governments also issue permits for new construction and major remodels, and licenses for businesses in their communities. Local government partnerships, when leveraged correctly, can extend the impact of utility energy efficiency investments.

Local government associations, such as various Councils of Governments¹ within the state, can be a very effective and efficient way of reaching out to the many local governments that do not maintain their own energy programs and would otherwise not have the resources to participate in the program to which they contribute.

II. CALIFORNIA ENERGY POLICY AND UTILITY ENERGY EFFICIENCY PROGRAMS

The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) have made energy efficiency the cornerstone of the state's energy policy. The October 2005 Energy Action Plan II² endorsed the policy adopted in the original Energy Action Plan in May 2003, which states that energy resources in California will be added in the following order:

- ◆ All cost-effective energy efficiency;
- ◆ Renewables;
- ◆ Conventional fossil-fired power plants.

These state priorities align with the priorities of many public agencies. Public agencies will enhance the energy policy and planning documents essential to the implementation of cost effective new development, as well as issue building or other permits necessary for renewable energy projects. There is an opportunity to facilitate in a comprehensive, statewide manner an overall plan for involving local governments in energy efficiency and other energy programs through partnerships. This paper identifies many activities that could contribute to this effort.

Between 2006 and 2008, California's IOUs will be spending \$2 billion on energy efficiency programs. While the public goods charge money, collected from all IOU customers on their bills, will pay for about half of this amount, the remainder will come from funds that otherwise would be used by the utilities to build or purchase energy from power plants. The CPUC views this investment as part of a multi-faceted approach to slow the impacts of climate change, in accordance with the State's Global Warming Solutions Act (AB32).

¹ Examples include: Association of Bay Area Governments (ABAG), Association of Monterey Bay Area Governments (AMBAG), San Diego Association of Governments (SANDAG), Southern California Association of Governments (SCAG).

² California Energy Commission, California Public Utilities Commission, "Energy Action Plan II: Implementation Roadmap for Energy Policies," October 2005, online at <http://www.cpuc.ca.gov/PUBLISHED/REPORT/51604.htm>.

III. HISTORY OF LOCAL GOVERNMENT PARTNERSHIPS AND PROGRAMS

The CPUC first began promoting partnerships between utilities and local governments in 2003, when it solicited bids for the 2004-2005 program cycle. In Decision 03-08-067, soliciting proposals for 2004-2005, the Commission stated:

“Furthermore, we affirm our position in the July 3 ACR [Assigned Commissioner’s Ruling] that we strongly encourage proposals from municipalities and local governments that would seek to partner with the utilities. Local governments and municipalities are potentially a vital source of energy savings and we hold high expectations that the utilities will partner with them in order to foster cost-effective energy efficiency programs along with the other program goals stated herein. It is imperative that these projects be integrated with utility local and statewide programs. We will hold the utilities responsible for ensuring that municipalities and programs created by local governments are given high priority when it comes to partnering, within the context of the stated public policy goals and program evaluation criteria. If a utility partners with a municipality or local government, then whether the funding is supported from the utility allocation or the non-utility allocation will be decided on the specific program proposal submitted. We will not make an upfront determination of where the funding will come from, but rather on a case-by-case basis.” (pp. 14-15)

When authorizing the 2004-2005 programs, the CPUC highlighted partnerships, stating: “We give preference to programs where utilities or non-utilities establish program partnerships with municipalities and local governments, consistent with D.03-08-076. On balance, when we had to choose between local government partnerships and other programs that were otherwise equal, we chose partnership programs.” (D.03-12-060, p. 12)

IV. BENEFITS OF LOCAL GOVERNMENT PARTNERSHIPS AND PROGRAMS

Local government partnerships and programs produce energy savings. Some partnerships focus on municipal facilities, others focus on working with customers or customer groups within a jurisdiction. Most partnerships combine elements of both municipal projects and customer projects. Some partnerships have been structured to produce hard energy savings from their inception,³ while others have started with more of an information and education focus, and are now shifting their emphasis to activities that yield actual savings, in response to the aggressive energy savings goals set by the CPUC. The measurement and evaluation process will be an important tool for further refinement to these programs as they continue to evolve.

³ Some partnerships started as third-party programs offered by the local government, and have been brought in to the partnership category for the 2006-2008 program.

The 2004-2005 partnership between the County of Los Angeles, Southern California Edison, and Southern California Gas sponsored a study of public agency participation in energy efficiency programs.⁴ The purpose of the study was to gather better information about why public agencies do or do not participate in energy efficiency programs, to identify best practices and policies that contribute to success in energy management activities, and to develop a model for regional delivery of energy programs to public agencies in the Los Angeles metropolitan area. This study can inform future efforts by utilities to engage local governments.

The survey and interviews conducted as part of the study confirmed what was found in the literature: the key barriers to public agencies undertaking more energy efficiency projects are time and resources. Secondary barriers included lack of knowledge about energy issues and technologies, and a comprehensive understanding the various energy programs. The report also included information on energy management best practices for public agencies and local governments, an area that could benefit from further development.

A primary finding from the best practices research and experience was the importance of top-level support for energy efficiency policies and programs. The report recommended several next steps for the 2006-2008 partnership between the County of Los Angeles, Southern California Edison, and Southern California Gas, including using County energy management staff and resources to help County affiliated organizations to implement projects, establishing a venue for public agency energy managers to exchange information and ideas, and increasing knowledge and understanding of energy efficiency, as well as considering the full range of energy programs and services available for implementation as important issues among public agency decision makers. These are all areas where local government partnerships can play a key role.

Specific benefits that local government partnerships bring to local governments, their constituents and the utilities are described below.

A. Cost-Effective Energy Efficiency Programs That Produce Hard Savings

Partnership programs can deliver hard savings to utility energy efficiency targets. For example, the Ventura County Regional Energy Alliance (VCREA) provided hard savings through tailored incentives directed to public agencies and based on real measurable energy

⁴ *Public Agency Participation in Energy Efficiency Programs: Technology Transfer Feasibility Study*, December 2, 2005, prepared by Jody London Consulting. Can be found online at <http://socalgas.com/energyefficiency/studies.shtml>.

savings — the result was both energy saving of more than 3.1 million kWh and educational value to invest in energy efficiency.

Oakland's 2002-2003 Energy Partnership program resulted in 13,053,000 kWh avoided, 2,069 kW of demand reduction, and \$1,556,000 per year of energy savings. Los Angeles County's savings for 2002-2003 were 6,000,000 kWh and 1,245 kW of demand reduction. For the 2004-2005 program, the LA County program saved 6,400,000 kWh, reduced demand by 385 kW, and saved 676,300 therms. Higher savings are projected for the 2006-2008 program.

Many partnership programs have been successfully used in "information only" programs. For example, the Silicon Valley Energy Watch program (San Jose) offers effective outreach as an information only program. While not being credited with hard savings, these programs often provide technical assistance and effectively increase the participation in other programs to which the savings are accrued.

In the 2006-2008 program cycle, many of these partnerships transitioned to resource acquisition programs with energy savings targets. If structured properly, this is something the local government partners welcome. There is a learning curve for both the partnership staff and their clients as the local governments become more familiar with the intricacies and complexities of the energy industry.

The South Bay Cities COG did not deliver hard savings in 2004-05. Its program is still designated as an Education and Information Program for 2006-08, even though it is pursuing hard savings through its Energy Efficiency + (EE+) program with public agencies, school districts and special districts.

To date, the SBCCOG's South Bay Energy Savings Center's EE+ program has identified potential projects that could save South Bay public agencies over 4 million kWh of electricity savings and over \$3.3 million in electricity and gas cost savings over 5 years. Additionally, expansion of this effort to all agencies and facilities in the South Bay, including all schools, could produce an estimated 10 million kWh, 450,000 therms and \$8.6 million in electricity and gas cost savings over 5 years.

With SBESC's distribution of CFL light bulbs, 282,928 kWh have been saved with an additional bonus savings of 1,566,157 pounds in CO2 emissions. Seasonal Holiday LED Light exchanges have garnered 17,296 kWh savings.

As part of SBESC's EE+ procurement program, the installation of 160 vending machine energy controllers throughout South Bay public agencies and school districts is saving 212,853 kWh per year with an estimated annual energy cost savings of \$34,056. Additionally, the EE+ Lighting Retrofit initiative, which supports upgrades to more efficient technologies, and in which 11 of the area's public agencies are actively participating, will initiate the capture of approximately 1.4 million kWh in potential savings.

The mission of the EE+ program is to deliver significant and measurable energy savings by coordinating joint procurement of energy efficient products and services on behalf of public agencies. This approach reduces the overall costs for both the procurement process as well as the services delivered through economies of scale. In this way, SBCCOG provides its small cities and school/special districts with energy efficient equipment they might not otherwise afford in addition to providing them with project coordination and technical support that saves staff time and money. Future EE+ initiatives include: pool pumping; computer energy management; recreational field lighting; gas saving initiatives; heating, ventilation and air-conditioning; and self generation.

While approved as an information-only program, the 2004-05 ABAG Local Government Energy Partnership (LGEP) assisted many cities in developing projects with approximately 7,000,000 kWh in annual savings. LGEP not only facilitated the technical studies for these projects but also provided continued assistance (e.g., project bid documentation and process assistance) in order to work through each local government's specific barriers to project implementation. For the 2006-08 cycle, the program transitioned to the ABAG Energy Watch program with hard savings targets.

B. Partnership Programs Capture Lost Opportunities

Many local government partnership programs go beyond rebates and offer full-service audit and comprehensive technology retrofits. Energy is one component of the many issues that local governments address, usually as a public works function. Energy is not commonly singled out. It therefore follows that when developing energy efficiency programs, local governments design them to take advantage of synergies in other areas. This is consistent with the CPUC's direction on capturing "lost opportunities:"

We also direct the IOUs to develop strategies to minimize lost opportunities in the design and implementation of programs, and to describe those strategies in their program plan applications. In addition, in response to workshop comments, we

have broadened the definition of “lost opportunities” to recognize that they can occur if energy efficiency options that offer long-lived, cost-effective savings are not exploited in tandem with other load-reduction technologies and distributed generation technologies being installed at the site (e.g., solar water heating or photovoltaics) ... we direct the IOUs to manage the portfolio of programs to meet or exceed the Commission-adopted short-term and long-term savings goals by pursuing the most cost-effective energy efficiency programs first, while minimizing lost opportunities. . (D.05-04-041, pp. 16-17)

One example of how partnerships can help capture lost opportunities is the Ventura County Regional Energy Alliance (VCREA), which provides a local home for energy information. In its clearinghouse function, VCREA in 2004-2005 gave visibility to the region and attracted other CPUC funded programs such as KEMA’s BEST program for small business, and Navigant Consulting’s CALEEP planning program to integrate energy efficiency with green building principles.

The South Bay Cities COG’s South Bay Energy Savings Center, the local clearinghouse for energy efficiency and water conservation information and services in the South Bay of Los Angeles County, also attracted Navigant Consulting’s CALEEP program in 2005. The energy audits conducted for public agencies during the CALEEP program led to the advent of the current EE + program referenced above.

Oakland has taken the advice of its CA LEEP study and significantly increased the level of energy-related activity in its Community and Economic Development Agency that has constant contact with businesses and residents.

The Association of Bay Area Governments’ (ABAG) LGEP program tailored the program’s services for each local government agency. The result of this process is a comprehensive Action Plan that aims to capture as much potential as possible. Some action item examples include facility energy assessment/ benchmarking reports; comprehensive and targeted audits; lighting and HVAC retrofits, retro-commissioning, computer power management, and assistance with incentive, auditing, and financing applications for other programs, e.g. PG&E’s incentive programs and the California Energy Commission’s (CEC) Energy Partnership Program (EPP). ABAG’s program also provides energy efficient equipment purchasing guidelines, replacement language for energy efficient HVAC equipment, and policy assistance to encourage energy efficiency in the wider community.

The Association of Monterey Bay Area Governments (AMBAG) uses its connections with local elected officials in the area to promote participation in its Energy Watch program. It uses its non-incentive budget to help understaffed local governments navigate the process for applying for rebates, overseeing retrofits and tracking results. It also offers free in-home energy surveys, which are no longer offered by PG&E. It has a hospitality program to serve its second largest industry that works through local hospitality associations and chambers of commerce.

Local governments operate as testing grounds for preparing leading edge concepts for mainstream implementation. Direct-install and retro-commissioning programs were implemented on a small scale in the Oakland, East Bay and other energy partnerships starting in 2002. These programs tackle issues that were historically difficult to overcome. By working in a limited geographic area, the scale of these programs could be kept small enough to retain pilot status while testing the approach in very real-world situations.

C. Increased Accountability

Local partnerships are not only contractually obligated to provide services and ensure customer satisfaction, they are obligated by their constituency to produce good results and a positive customer experience.

D. Partnerships Leverage Opportunities For Other Utility Programs

Local governments can leverage their relationships with other public agencies and their constituents to the benefit of utility programs beyond energy efficiency. For example, the 2004-2005 County of Los Angeles partnership with Southern California Edison and Southern California Gas, has provided new marketing and outreach avenues, or avenues that can be enhanced, because of the relationships of the Internal Services Department with organizations such as: County Office of Small Business, Public Housing Authority, County Office of Education, and Metropolitan Transit Authority. In the 2006-2008 partnership, the Office of Small Business is helping to promote the IOUs' On-Bill Financing Programs. Similarly, Public Housing could be utilized for low-income outreach efforts, and the Education Office could help develop specialized incentives under school renovation projects that qualify the schools for County incentives.

The 2004-2005 LA County partnership included a workshop for public agency staff in the Los Angeles area, as part of the preparation of the report described above on barriers to public agency participation in energy efficiency programs. Over 100 people attended the

workshop, which included presentations by Commissioners from the CPUC and CEC, the Governor's staff, and the Chair of the Assembly Committee on Utilities and Commerce. The workshop received high ratings from participants, and allowed the utilities and the CEC to showcase their programs and services to many public agency staff that were not familiar with them.

ABAG's LGEP program leveraged an estimated \$50,000 in technical assistance resources from the CEC. As part of the Program design, LGEP had a partnership with the CEC's Energy Partnership Program ("EPP") and referred local governments to EPP so they could apply for and receive energy engineering services associated with a feasibility study (audit) of their facilities. ABAG is testing new street lighting technologies, addressing an opportunity that is almost exclusively the territory of utilities or local governments. Street lighting bills are such a large expense for local governments, that they have unique incentives to find reliable ways to reduce their energy consumption and corresponding emissions; and ABAG is there to help share best practices and create a viable network of leading edge local governments.

Many partnerships deliver other savings that go hand-in-hand with energy savings but are not calculated. For example, the VCREA is reducing water consumption by one-third with the installation of 21 new nozzle heads that reduce energy and gas consumption at the jail food service operations. Jails operate 24/7, so this kind of savings is significant, and the measure is a minimal cost to the IOUs and the public. Unfortunately, this type of multi-sector savings is not encouraged, even as anecdotal information, with the narrow focus of the current program.

In 2006, the South Bay Cities COG formed partnerships with West Basin Municipal Water District and Torrance Municipal Water Department to support local water conservation efforts. Over the past year, the COG's South Bay Energy Savings Center has facilitated the exchange and installation of 120 residential irrigation SmartControllers for an annual savings of 2,058,600 gallons (6,315 acre feet) of water. Additionally, SBESC has initiated 52 restroom retrofits of two toilets, one urinal and two hands-free faucets for local businesses to garner 3,152,760 gallons (9,671 acre feet) of annual water savings. An overall goal of 268 restroom retrofits will achieve a savings of 16,248,840 gallons (49,843 acre feet) per year. Finally, SBESC's assistance with marketing a rebate program for high-efficiency, commercial, coin-operated washing machines has achieved an additional 1,022,000 gallons (3135 acre feet) of annual water savings.

Local government networks make real differences in achieving energy goals and better managing scarce resources. Currently there is no way to properly value this networking service. While not deserving of 100% of the credit, the role of local governments (and others) that makes things happen that would not without their direct action needs to be recognized and rewarded.

E. Partnerships Enhance the Ability To Identify And Implement Emerging Technology

Local governments are close to different customer groups, especially through their economic development, small business, and other offices. This allows local governments to identify needs and opportunities often before the utilities. For example, the City and County of San Francisco identified an opportunity to deploy LED “open” signs to small businesses within its jurisdiction. This activity was done as a pilot within San Francisco’s 2004-2005 partnership. Chiefly, it was an effort to move the market, a goal that now has been achieved. San Francisco is now seeing LED “open” signs in stores where the owners have purchased them on their own.

The County of Los Angeles’ 2004-2005 retro-commissioning (“RCx”) program, conducted as part of the County’s partnership with Southern California Edison and Southern California Gas, was the first one (at that scale) undertaken involving SCE. The County/SCE experience in RCx was well documented by SCE in a paper presented by SCE at the National Building Commissioning Conference in July 2005, which covered the project scoping and contractor solicitation process for building RCx. In addition, much was learned regarding development and application of RCx project steps and benchmarking costs and savings. It could be that as a result of this experience, SCE was able to develop its own RCx incentive program now being offered for 2006-2008.

F. Partnerships Provide An Established Relationship With Small And Medium Cities

Local government partners can utilize established relationships with small and medium cities in order to promote energy policies and initiatives. Small and medium cities often do not have dedicated energy staff, and therefore are not as sophisticated at recognizing and taking advantage of energy opportunities. The Association of Bay Area Governments (ABAG), through its overall membership and various programs has relationships with city and county staff and elected officials that can be key in moving programs/ projects forward. As an example, the ABAG Power program, has existing relationships with senior city managers (i.e., Public Works

Directors, Finance Directors, City Managers) on issues related to natural gas purchases. This has made it easier for ABAG to garner participation in its energy efficiency partnership. The Association of Monterey Area Governments (AMBAG) has a similar partnership for 2006-2008.

G. Partnerships Foster A Regional Approach To Energy Issues

Public agencies are able to bring together the disparate functions – for example, planning departments, building inspectors, water departments, city and county managers – to discuss and develop approaches to energy opportunities. Public agencies are able to bring all the relevant players in a region, not just from one jurisdiction, or one kind of public agency. The VCREA has done this to good result by welcoming cities, schools, water districts and other public agencies; this regional approach is a model in governance, and the subject of energy is an issue that speaks to a common term among the participating agencies. Regional planning on energy issues is most successful when senior managers and executives from the utilities participate in a meaningful way, with familiarity with the issues. In turn, utility executives have opportunity to engage with one of their best partners – local governments deal with regulation, policy, and administration of public funds. The utilities will get more and better results by further increasing their engagement with the public sector, building on local government partners’ understanding of public process, and becoming even more transparent in their utility operations in order to succeed in meeting their energy goals and not lose opportunities that could benefit all parties.

Local government partners have noted that some of the regional and statewide planning organizations – for example the California State Association of Counties – do not have energy elements. The utilities and local governments can work with these organizations to help them prioritize and educate their members about the full range of energy issues, and how an energy component can be a complement to other programs, for example water use, planning, growth, sustainability.

H. Partnerships Help Identify Demand Response Opportunities

Local governments, through their existing relationships with businesses in their jurisdiction, can help educate customers about demand response opportunities. For example, San Francisco has worked with PG&E to develop critical peak pricing districts, and develop a program that has allowed the City to shave energy during peak periods.

I. Partnerships Help Develop Codes and Standards

Utilities can use their expertise to help individual local government partners develop codes and standards. For example, San Francisco has received good technical assistance from PG&E in helping revise residential and commercial standards. As energy efficiency program administrators, utilities can bring together their local government partners to facilitate exchange of information on this and other topics.

ABAG's Local Government Energy Partnership and ABAG Energy Watch programs have provided technical assistance to local cities when seeking to implement Residential Energy Conservation Ordinances.

J. Partnerships Identify Green Building Initiatives

Local government partners can help utilities identify opportunities for use of green building techniques. For example, San Francisco has been able to engage its planning department in providing weekly reports to PG&E of applicants for new building or modernization projects in the City. PG&E, in turn, has been able to contact these people for potential participation in the Savings by Design program. San Francisco would like to expand its role to providing customers with information on their greenhouse gas footprint when the City is performing an energy audit.

Similarly, VCREA is located in the coastal communities that have embraced smart growth and want to achieve green building standards that were explored as part of an energy efficiency approach to meeting new building demands. The IOUs need to be at the partnership table as new developments come on line and as planning takes place, in the formative steps even before specific projects that lead to opportunities to participate in the "Savings by Design" program. IOUs can be proactive in partnerships with public agencies; fully functional partnerships can mutually benefit the public and the utilities.

Situated along 20 miles of California coastline, and encompassing more than 1,350 acres of preserved open space, SBCCOG cities traditionally have made environmental preservation and enhancement a priority. To that end, SBESC also actively supports its member agencies as they formulate Green Building policies for residential and commercial development in their communities.

K. Partnerships Facilitate Informal Sharing of Information

Partnerships provide opportunities for informal sharing of information about contractors and/or independent consultants and successful programs by local government partners. Local governments and public agencies, like any entity with purchasing power, are constantly being visited by vendors with specific technologies or programs to sell, often to the point of information overload. Public agencies in the San Francisco Bay Area report that they have benefited from being able to learn from one another's experiences with particular vendors. Public agencies in from Southern California have benefited from similar events.

IOUs have gradually increased their efforts to educate and engage local government partners on energy efficiency and other programs. In the future, the IOUs will see significant improvement by working much more closely with the large public accounts (e.g., County of Los Angeles), or the regional energy offices (e.g., VCREA or Redwood Coast Energy Authority), or regional agencies (e.g., ABAG, AMBAG, SANDAG, or SCAG) that represent many smaller agencies, to advise of new programs, consider piloting new or model programs, etc. Informal venues can facilitate more effective sharing of information; brochures and websites cannot have the same impact as regional roundtable discussions at the management and policy-making level.

V. PRACTICES OR PROCEDURES THAT HAVE FACILITATED CURRENT ENERGY EFFICIENCY PROGRAMS

The past three years have provided an opportunity to document practices or procedures that facilitate energy efficiency partnership programs, as well as issues that can create roadblocks. This section describes those practices and procedures that can help lead to successful energy efficiency programs.

A. Champion for the Partnership

Having a champion for the partnership who has visibility and influence with senior utility executives and California Public Utilities Commissioners can help publicize the work the partnership is performing. As an example, the City of Santa Monica was a charter member of the Energy Coalition's Community Energy Partnership, which is the brainchild of the Energy Coalition's Executive Director, and is regarded as an example of a comprehensive, local government energy policy/program.

B. Training Local Contractors

The 2004-2005 program provided good training for local contractors and public agency staff. San Francisco had an excellent response to programs offered at the Pacific Energy Center. The Ventura County Regional Energy Alliance had good response to training programs it provided independent of the utility training centers, using some of the same contract trainers, but providing the training in geographic regions more accessible to coastal counties. The IOUs could be more helpful in providing the quality training they are known for, using the partners in outlying and regional areas. This was one of the recommendations in the report on public agency participation in energy efficiency programs, discussed above.

C. Do As Much Work In-House As Possible

Some public agencies have found that their partnership accomplishes more when they perform as much of the work as possible, engaging the utility partners at key decision points, but otherwise taking care of the day-to-day program operations.

D. Audits

Under the 2004-2005 partnerships, the audit programs worked well. For municipal facilities, the audit program afforded an opportunity to purchase technical services beyond what the traditional utilities have been allowed to provide; this enhancement and customization of audits has been beneficial for public agencies. The audits have provided the basis for energy efficiency installations, which has not been clearly understood by the IOUs nor clearly reported through the existing report forms. Audits have great value in terms of education, setting priorities and understanding energy use. Some public agencies have found that audits are best completed with third parties who are more knowledgeable of the full range of energy programs than individual IOU representatives. (Cross-cutting options are considered rather than just one program approach.) However, audits cannot be completed without the full cooperation of the IOUs, because the auditor needs customer information to complete the audits.

E. Tailored Incentives

The Ventura County Regional Energy Alliance has had very good success with the ability to tailor incentives for public agencies. Using actual energy savings as opposed to deemed savings has allowed VCREA to help public agencies bundle various energy efficiency measures, thereby providing a more comprehensive program. In general, the incentives are below those

offered through the IOU standard performance contracts; the incentives are provided to public agencies for implementation of retrofits and new technologies. The cost of providing the staffing/technical support is covered through the partnership and gives the IOUs opportunities to maximize and leverage public goods charge funds collected from IOU customers with public taxpayers' dollars.

VI. LOCAL GOVERNMENTS AND BIG BOLD ENERGY EFFICIENCY STRATEGIES

Rather than addressing specific program design issues at this time, this document offers recommendations for a process that uses strategic objectives, based on findings from *The National Energy Efficiency Program Best Practices Study*, to drive portfolio and program development and program management. Examples of existing and new programs that address these objectives and that illustrate how local governments may be particularly positioned to implement such programs are also included.

A. Big Bold Strategies Objectives and Process

Collectively, local governments know how to design and run great programs in California. However, the process used to solicit, evaluate, and manage programs may be limiting the potential of local governments. What is needed is a process that (1) encourages the parties to develop portfolios that emphasizes strategic objectives are common to best practices and (2) develop a separate track for managing Big Bold Strategies that encourages these objectives.

Statewide, technology-specific programs have been very effective at achieving high rates of savings at relatively low costs in the short term. These programs certainly have an important place in the portfolio. However, in the longer term, short of another technological advancement on the order of the CFL, T8 lamp or variable frequency drive, we need to learn how to maximize the reach of service to each market and to each site within each market. That is, a process is needed that leads to programs that are designed for the long haul.

The primary objective for Big, Bold Strategies, therefore, should be comprehensiveness, both in terms of achievement of savings within each particular site and achievement of savings within a particular market. Comprehensiveness would encompass issues such as:

- maximization of potential savings achieved (by site and by market);
- persistence of savings;
- cultivation of markets, including customer care and quality control; and

- development of institutions and markets to support market transformation.

However, the tools to objectively analyze program performance on these points are lacking, and program designers, administrators and evaluators are forced to rely on limited existing quantifiable metrics, such as the TRC. The potential of the *some* programs is constrained under this perspective and the ultimate goal of achieving maximum savings over the long term is sacrificed.

The criteria that are used to evaluate the subset of programs that fall under Big, Bold Strategies should be modified to include the somewhat subjective metric of comprehensiveness (there may be ways of making this more quantifiable, the trade off is that quantification may be costly). Furthermore, changes in the way these programs are administered will be needed so that they can be managed for a broader set of objectives (these programs will require a higher level of management attention, since they cannot be boiled down to simple metrics). For this reason, they should be on a separate track from the traditional programs.

The National Energy Efficiency Program Best Practices Study cites several practices (in italics below) that result in more comprehensiveness at each site and within each market. Each of these could, perhaps, serve as design criteria.

Site Comprehensiveness

- *Advance multiple policy objectives.* Bundle a combination of efficiency, renewable energy, demand response and low-income resources under a single transaction.
- *Whole building approaches and integrated delivery.* Look at all systems and interactions among those systems and wrap services under a single transaction. These programs tend to provide engineered solutions, rather than a self-service approach.
- *Go beyond the limits of technology.* Influence behavioral changes that will affect operations as well as purchase and investment decisions.
- *Maintain program design flexibility.* Respond to the variety of existing physical, economic and motivational conditions.

Market Comprehensiveness

- *Tailor program to unique needs of market sector and understand local market conditions.* Design programs to meet specific customer requirements. Become expert in a market and saturate it.

- *Attention on performance and quality installation.* Ensure that customers have a good experience and will participate in other programs and provide referrals.
- *Emphasize non-energy-benefits to expand market share.* Leverage customer values including productivity improvements, indoor air quality or environmental ethics.

B. Local Government Program Examples

Local governments could be helpful in developing and implementing programs that meet the objectives above. An example is provided below.

Comprehensive residential domestic hot water retrofit. Replacing clothes washers, dishwashers, and water heaters with high efficiency models, downsizing/shortening and insulating hot water pipe runs, installing low-flow devices, and installing solar thermal panels where. Bundling all domestic hot water measures could enable the installation of instantaneous or super-efficient units and bring overall costs to below the sum of costs for individual measures. To overcome customer inertia and address quality control issues (particularly important when dealing with plumbing and roofing issues) this is best served with a turnkey program that uses trained local contractors.

VII. OPPORTUNITIES TO IMPROVE LOCAL GOVERNMENT PARTNERSHIPS

Local government partnerships can be even more effective if certain short-term roadblocks are overcome. Partnerships, like other relationships, require attention and fine tuning to best succeed. Resolving the issues below will help ensure that partnership programs for 2006-2008 operate at their fullest potential.

A. Funding Guarantees

Partnerships need ongoing funding indications or assurances to meet start-up, planning, and administrative costs, and need quicker payment processing to meet short-term needs (for example, payroll!). One existing partnership lost its lease in late 2005 because the utility could not provide even a memorandum of understanding or letter of intent until the last 30 days of the year (and the partnership agreement) that the partner could use with its landlord to comfort concerns about payment. The local partner needed more than 30 days notice with the landlord and had so advised the IOU. What may seem a small issue for a large organization like a utility can be a large issue for a smaller partner, and the utilities should be sensitive to these differences in organizational structure. The utility funding process needs to provide for IOU discretion to work more quickly on detail issues such as this.

The IOUs must be sensitive to local government budget cycles and financial requirements with regard to outside contracts. While third parties face similar uncertainties in terms of staffing and organizational viability, they are usually private firms and not subject to the rules that governments must observe. It may be that the IOUs need to come up with new internal guidelines for local government partners instead of wasting time, energy, and dollars fighting to stick to their existing funding system.

B. EM&V

EM&V requirements need to be more flexible to better accommodate the partnership structure. Partnerships are not merely incentive or rebate programs going after a specific technology. Specific ways to improve EM&V for partnerships are provided below.

- Several partnerships are frustrated that there is not a system for harvesting the savings data associated with information programs sponsored by partnerships. To address this concern, VCREA developed a monthly reporting process to capture the "funneled" projects that can be attributed back to the utility programs for direct savings.
- EM&V reports are not tailored to reflect the unique aspects of partnership programs.
- EM&V process lacks ability to provide feedback on the utility partnership; reality is that the EM&V process evaluates the capability of the local partner only. The evaluation process should yield information that will assist utilities and the commission in evaluating their own staffing relationships and program support as well.

VIII. NEXT STEPS

Throughout this paper we have identified many examples of programs and processes that have facilitated partnerships in 2004-2005. In this section, we provide recommendations for actions that will help ensure the 2006-2008 partnerships operate at full potential.

A. Direction From CPUC On Nature Of Relationship, Roles And Responsibilities

The CPUC should offer further guidance on how it expects partnerships to operate. This effort should start with a workshop or conference on partnerships in which Commissioners and

the assigned Administrative Law Judges participate. Subsequent to the workshop/conference, the CPUC should direct the IOUs to:

1. Brand all partnerships in their portfolios as State-approved collaborations that have been developed to enhance the utilities' ability to achieve State energy efficiency goals;
2. Develop boilerplate statements for all partnership public outreach materials that talk about the value of local participation in achieving energy efficiency and greenhouse gas emission goals;
3. Complete contracts within 30 days of the date of issuance of CPUC guidance or pay fines;
4. Allow cities to compete for third-party funds, demand response funds, and other opportunities.
5. Preserve ability of local government partners to have a meaningful role if they want it, for example, running workbooks, managing contractor process, selecting projects.
6. Require development of a strategic plan for each partnership that tracks with both the utility's long-term procurement plan and the local government's deferred maintenance and new construction plans.

The CPUC should provide an opportunity for local government partners to evaluate the IOU's collaborative performance and submits that evaluation to the CPUC, with some consequences for failing to meet partnership targets. It also should reiterate the direction cited above on capturing lost opportunities, recognizing the role local governments can play in making this occur.

B. Establish A Statewide Approach to Local Government Partnerships

As the local government partnership concept matures, it is time to establish a statewide approach to partnerships. Through meetings sponsored by the Local Government Commission, many local government partners have been able from 2004 to the present to meet periodically, sometimes with utility energy efficiency managers, to discuss the progress of their partnerships. (Indeed, that is the genesis of this paper.) Establishing a statewide approach to partnerships could help in several areas, including developing contract consistency between IOUs; developing contracts that are consistent with government formats and processes, thereby more easily gaining support and implementation; minimizing lost opportunities, as discussed above.

The utilities should institute regular meetings of local government partnerships. Meetings for all partnerships in a utility service territory should occur three times per year, and a statewide meeting should occur annually. Those partnerships that are statewide should participate in the service territory meetings to the extent possible. The statewide meeting should be part of an annual utility education conference for public agencies, targeted at high-level civil service and elected officials. Establishing a regular venue for partnerships to meet will allow public agencies to learn from the successes of others, share information, and identify opportunities to collaborate. An annual conference would be a good venue for the utilities to showcase their energy efficiency programs through the media. Covering the cost of travel for cash-strapped local governments will be important to the success of these meetings.

POST SCRIPT COMMENTS:

This document was first drafted in January 2006 to clearly articulate shared experiences and consider how to function in an overly cumbersome process. By providing its own evaluation and developing this white paper, the local government partnerships developed a collegial association focused on implementing improvements for the 2009 – 2011 funding cycle. In the process of working through the 2006-08 cycle, there have been improvements that should be reported because the evaluation process is too slow to capture these successes. For example, in the VCREA partnership, these improvements have taken form in better communication, more timely response from the utilities, development of regional planning efforts, and willingness to cut across traditional utility barriers to share joint success.

The Commission should encourage its staff to work with the utilities to be timely in response and management of the partnerships; such improvement will lead to greater achieves and maintaining California's edge in energy efficiency.