ENERGY DIVISION

QUESTIONS ON ISSUES RAISED BY THE IOU'S 2009-2011 ENERGY EFFICIENCY APPLICATIONS

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Areas with Workshops Planned/Completed:

1) Market Transformation

The California Energy Efficiency Strategic Plan (CEESP) identifies market transformation as a major goal for energy efficiency programs. The CEESP articulates a vision for market transformation that makes substantial progress "toward more efficient technologies and practices in each of the customer end use sectors, (including) how cross-cutting sectors will further address these efforts". The CEESP also called for the "development of milestones to measure progress towards this goal, and a targeted time frame that ensures market transition" but does not identify the specific process. The Market Transformation Workshop on June 3, 2009 will begin a dialogue to identify indicators to measure progress and start a framework for tracking market change within IOU portfolios. Below are important questions Energy Division has developed to solicit insight that can help inform this process.

Specific Questions:

1. Do Parties agree with Energy Division's Straw Proposal on Identifying a Process to Track Progress on Market Sector-based Market Transformation (see workshop materials). What additional suggestions would Parties have?
2. Do Parties support Energy Division's suggested approach to identify ultimate, proximate and IOU program/activity indicators to track progress on Market Sector programs, in particular the Big Bold Programmatic Initiatives, towards Market Transformation?
3. What are some possible ultimate and proximate indicators of measures in the IOU portfolio for the Big Bold Programmatic Initiatives? For other Statewide programs?
4. What are the priority technologies for a CPUC process to identify progress towards defined "end points" where market change in the target market is significant enough to warrant substantial phase out of incentives and funding for such technologies?
5. Who could/should be collecting this indicator information and can it be collected and assessed in the 2010-2011 period? If so, how should the information be presented to or used by CPUC/stakeholders/IOUs?
6. What are the strengths and weaknesses of various indicators of market change?
7. In case of limited time or funds, what are the key indicators for a) technologies and b) market sectors programs that comprise programs to achieve market transformation in the IOU portfolio?
8. What key market actors are needed to engage in program feedback/oversight during 2009-2011? At what frequency?
9. What technologies are in early stages of the adoption curve that should comprise significant components of market transformation programs?
10. What criteria should the IOUs and the CPUC use to identify such technologies?
11. What relevant research for market studies related to Big Bold Programmatic Initiatives need to be conducted, who will conduct it and what will be the primary data sources?

12. Many Technology-Based Market Studies related to the Big Bold Programmatic Initiatives have been performed and are noted in the Market Transformation Workshop Reference Material. Do Parties find the results of these studies sufficient to understand technology specific market transformation?
13. What additional research for Technology-Based Market Studies related to Big Bold Programmatic Initiatives need to be conducted, who will conduct it and what will be the primary data sources?

2) Residential Whole House

Backgound

The CPUC has set a strategic goal to reaching all 13 million residential homes across the state with comprehensive home improvements by 2020. By setting very ambitious goals for the existing residential sector California gives stakeholders the signal that the bold support and leadership needed to raise an industry to maturity. Foundational support for this industry growth comes from the recent California utility submission of a $772 million residential rebate program application, the largest application for residential energy efficiency programs ever. $13 million of this statewide program is dedicated specifically to incubating the home performance industry through training, certification, outreach, education, and business coaching for contractors as well as incentives for them to offer to participants. The California Legislature passed AB 811 in 2008 authorizing every city and county to offer their residents the ability to finance home performance and distributed generation projects with repayment through their property taxes. This bill is modeled after the successful Berkeley program and implementation is expanding rapidly.

These efforts will help California become more energy efficient, reduce environmental impacts, enhance the effectiveness and bring down the cost of renewable energy. It will also provide California homeowners with more comfortable, safer, healthier home environments, allowing them to save money year after year on utilities and their homes.

Simultaneous to California's efforts, comprehensive home performance for our nation's entire stock of 127 million existing residential homes has become a serious focal point of attention by the Obama administration's American Recovery and Reinvestment Act (ARRA). There are likely to be activities supportive of comprehensive home performance through the CEC's use of SEP funds and Local Government use of block grant funds. There are tremendous expectations with the expanded budget for weatherization activities in the AARA for the nation's low income community. Creative partnerships between IOUs and HUD around neighborhood revitalization also with ARRA funding are also taking shape.

Over the past 5 years U.S. DOE & U.S. EPA cooperatively have been leading home performance market coordination efforts. Building on these market coordination efforts to address the post-stimulus future, legislation introduced by Representatives Waxman and Markey includes language directing actions by the DOE and state energy offices which would rapidly expand the demand for home performance. Entitled the Retrofit for Energy

and Environmental Performance Program (REEP)[1], this language if adopted would eclipse California's efforts and would give home performance a national prominence.

As home performance has become more prominent nationally, and is coming into its own as an industry, nationally focused groups in the form of a trade association are starting to emerge such as Efficiency First. At other levels, government agencies, utilities, certification & standards bodies, education providers as well as a variety of other stakeholder groups essential to providing a strong framework to meet the challenges faced head on are working together. It is also essential to recognize the building & trades industries which have a growing number of green/sustainable and quality based efforts underway that support home performance in various ways. All of these efforts are changing the way existing building improvements, upgrades and maintenance are performed.

Specific Questions:

These and more are expected to be discussed at the June 11 Residential Workshop (for full set of workshop materials, see CPUC Energy Efficiency workshops webpage).

1) What is the best role for the IOU's to play regarding home performance programs in a multi-stakeholder marketplace as exists today? Program Implementer? Program Administrator? Education Provider? Incentive Provider? Marketing Assistance? Third Party Quality Assurance? Other?

2) In addition to the Home Performance programs already proposed, should IOUs for 2009-2011 develop a program to implement a more mainstream-accessible "prescriptive path" program in line with what was suggested in the Retrofit for Energy and Environmental Performance (REEP) language of the Waxman/Markey bill?

- Should this program include the use of the statewide Home Energy Efficiency Survey (HEES) program (energy audit) in all of its three remote forms (online, mail-in, telephone) as a source for referrals?
- Should the IOUs offer a list of qualified contractors for customers to choose from on the HEES website as an entry point to the proposed Prescriptive program? What should the qualifications be (see next point)? What type of incentive structure should go along with this; a lump sum for achieving performance thresholds such as 10 or 20% annual reductions? Individual measure rebates also? Other?
- What relationship should a contractor have with program administrating utility? Should it be a formal 3rd party? Should they be on an approved list after having been certified as taken a basic building science course? Should such a list include contractors with trade specialty training, certification, or accreditation? Other?
- For IOU 2009-2011 budgeting purposes, what level of participation should IOUs plan to achieve with a potential prescriptive program and the performance program? 5,000 homes? 10,000 homes? 13,000 homes (tenth of one percent of all homes in CA)? Other?

[1] Please find this language at http://energycommerce.house.gov/Press_111/20090331/acesa_discussiondraft.pdf on page 177 of the bill.

- Should this prescriptive program be fully cost effective or should it be part of a cost effective portfolio of programs?
- Should some other test be used to asses cost effectiveness besides the TRC test (at the program level) such as the PAC test?

3) Verification of prescriptive pathway savings (deemed measure verification) could result in a certification of work. Is this certification important? Should the contractor, business, or specific individuals be associated with this certification? How? What percent of projects should receive such verification? 15 percent (proposed in REEP)? 50 percent? 100 percent?

4) What entity best fits the role of matching the specifics of the job (planned building upgrade) to any and all available utility, local, state, and federal incentives, and determine the financing details for the participant? A 3rd party hired by a city? The county? The Council of Governments? Community Based Organizations? The state? Can the utility serve in this role?

5) What revisions to the "short term objective" presented above would you suggest?

3) Finance Issues

The California Solar Initiative program benefits from specifications that give a measure of certainty to the quality of installations, and the savings that they will generate. Energy efficiency retrofits funded by emerging mechanisms such as AB811 financing districts might also benefit from such terms & assurances These could boost the confidence of private financiers who might buy bonds that provide the 20-year loans, and give local governments who form AB811 districts certainty that building owners will be getting long-term value from the investment. These terms could be standardized across financing districts. Elements for energy efficiency could include: audits, measure determination, technical specifications for products and installation, certification of auditors & installers, post-installation inspection verification, etc.

- How could IOU programs and services support and leverage such building owner investments in energy efficiency retrofits?
- How could or should IOUs or other parties support agencies in setting up these community finance districts? For instance: Directly invest through the purchase of municipal bonds; offer bridge loans to local governments to start up new financing districts or new rounds of financing by existing districts; provide loan guarantees or other credit enhancements? Who should provide this support and how cost-effective is it?

Reviews of IOU on-bill financing proposals for small commercial and institutional customers have generated critiques that administrative and set-up costs are high, terms are too short, loan caps are too low, and not enough capital will be offered to meet demand. The ability to use electric ratepayer funds to fuel on-bill financing is limited.

- How could ratepayer funds be combined with, or used to leverage private capital to support a viable on-bill financing program for small commercial and

institutional (city, county, schools, hospitals, state buildings) customers? Do Parties agree with the above observations on IOU proposed programs, or disagree? Do Parties have other suggestions or observations?

- For those government agencies that can borrow funds and incur debt: what characteristics does an on-bill financing program need to have for government agencies (state, regional, local) to be able to use it? How much financing is needed for government buildings in the next cycle?
- Should on-bill financing programs be aligned statewide with the same terms, etc?
- Are financed measures described in IOU proposals comprehensive enough? Loans might be especially important for deeper sets of measures.
- Where is the ratepayer subsidy best placed across alternative expenditures: incentives tied to specific EE measures, an interest subsidy on the loan (e.g. to a low- or zero percent interest), administrative costs for processing loan payments? There likely will be tradeoffs among these to ensure that total ratepayer expenditures are cost-effective for the efficiency savings achieved.
- Is proposed marketing of financing services sufficient – are customers always apprised of financing options when considering whether or how much energy efficiency to undertake?

Energy efficiency in government buildings would be facilitated if local governments established revolving loan funds in which savings in excess of debt service from energy efficiency retrofits were returned to the department or facility for use in future energy efficiency projects. Local governments suffer from a scarcity of discretionary general fund dollars and it is typical practice for savings from energy efficiency projects to free up funds for other types of services. This undercuts the ability of ratepayer rebates and incentives to have second and third generation effects.

- How could partnership programs be designed to encourage government agencies (city and county) to create internal revolving loan funds in which savings in excess of debt service from energy efficiency retrofits are returned to the department or facility for use in future energy efficiency projects? (e.g. are there incentives or stipulations that would encourage this?)

4) Performance Metrics

Specific Questions:

1) Have the IOUs sufficiently included plans to monitor program implementation for their 2009-11 programs?
2) For what purpose should IOUs use performance measurement (program monitoring, program evaluation, strategic planning, quality improvement, external benchmarking, communication to the public etc.)?
3) Have the IOUs adequately identified performance metrics for program plans in their 2009 – 11 portfolio filing?
    i. Identify programs that include performance metrics that adequately gauge the program goals and objectives.
    ii. Identify programs that do not include performance metrics that adequately gauge the program goals and objectives.

4) How might the performance metrics identified within the IOU program plans be improved? What are the characteristics of effective performance metrics?
5) Indicate the programs that have developed ideal program theory and logic models that might serve as models for other programs. Why are they ideal?
6) Indicate specific examples for how programs logic models can be improved. Does each program have a clear program mission, goals and objectives?
7) Have the IOUs adequately linked their individual program goals and objectives to their relevant sector goals as presented in the California Long Term Energy Efficiency Strategic Plan (CEESP)?
    i. Identify specific programs that have adequately linked program goals and objectives to the relevant CEESP goals.
    ii. Identify specific programs that have not adequately linked program goals and objectives to the relevant CEESP goals.
8) How frequently should performance metrics be tracked, updated and reported to ensure the programs are meeting their objectives and goals?
    i. Identify the process by which the IOUs should track, update and report the performance metrics for each program.
    ii. What is the process for data collection, processing and quality assurance?
    iii. Who should be responsible for collecting and reporting the data?
    iv. Where and in what format should the data be reported?
    v. How often should the data be updated and reported?

5) Lighting and CFLs:

Background:

The CEESP goals for residential lighting state that "the residential lighting industry will undergo substantial transformation through the deployment of high-efficiency and high-performance lighting technologies, supported by state and national codes and standards." Key strategies identified toward this goal are to: 1) Drive continual advances in lighting technology through research programs and design competitions; 2) Create demand for improved lighting products through demonstration projects, marketing efforts, and utility programs; 3) Continuously strengthen standards; Coordinated phase-out of Utility incentives for CFLs; 5) Ensure environmental safety of CFLs and other emerging lighting solutions.

However, the process of phasing out utility incentives for bare spiral CFLs -- and phasing in utility-program support fo Super CFLs and other advanced lighting products -- requires a common understanding by the Commission and Parties on how to best achieve these objectives. Specifically, the issues remaining to be resolved include the appropriate funding and incentive levels for bare spiral (medium screw base) CFLs (in residential upstream programs) in the 2009-2011 period; and, utility lighting program options with regards to incentive strategies, delivery strategies, measure mixes and delivery channels across a broader set of lighting technologies, and in both the residential and non-residential sectors, in the 2009-2011 period. Although Parties have provided comments in initial responses to the IOU's filings, Energy Division seeks additional and broader Party comment on the questions below aimed at the role of utility lighting programs in achieving market transformation. We note that the recent Lighting Metering Study results may provide useful data to inform Parties' comments.

Specific Questions:

1) To what extent has the market for bare spiral CFLs (medium screw base) been transformed? Are there any market segments that are not transformed (and if so, what type of continued support is required)? What mixture of incentives for CFLs and other lighting solutions are needed to coordinate the phase-out of incentives for bare spiral CFLs and ultimately achieve residential lighting market transformation?

2) What are the primary barriers to enacting a systems-based approach (rather than lighting technology or "widget-based" approach) to incentives in utility lighting programs? How might utility lighting programs be modified to better advance a systems-based approach? In what market sectors is the advancement of a systems-based approach for lighting currently most feasible?

3) What options exist for scaling up incentives for specialty CFLs and other advanced lighting solutions in the 2009-11 period? Please comment on specific incentive levels and measure mixes (ex: Super CFLs, LEDs, occupancy sensors, etc) if possible.

4) What should the specific strategies and delivery methods entail in the next phase of lighting programs? Specifically, what types of delivery methods (ex: upstream, midstream, downstream, group purchase, etc.) for advanced lighting should be employed? What delivery channels (ex: home improvement stores, mass merchandisers, small/ethnic grocery, etc.) should be utilized?

5) What information is needed to determine whether or not retailers are prepared to stock the next generation of lighting products? What market conditions need to exist to ensure that suppliers are ready to stock non-subsidized bare spirals when the bare spiral incentives cease?

6) The Statewide Lighting Market Transformation (LMT) Program establishes a process through which the IOUs can introduce advanced lighting solutions and emerging technologies to the marketplace, improve current lighting programs and develop new strategies to advance the lighting market. As set forth in the PIP, does the Statewide LMT Program succeed in accomplishing these objectives? How can the program be modified to ensure that these objectives are met?

7) How should the focus and structure of the utility lighting programs be modified in light of the California Lighting Efficiency and Toxic Reductions Act of 2007 and the federal-level Energy Independence and Security Act of 2007? Please comment on lighting efficiency standards, mercury content levels and safe disposal practices.

6) Marketing, Education & Outreach

D.07-10-032, *Interim Opinion on Issues Relating to Future Savings Goals and Program Planning for 2009-2011 Energy Efficiency and Beyond,* dated October 18, 2007, stated the following as it relates to Marketing, Education and Outreach (ME&O):

- ME&O programs should be more strategic and comprehensive in the way they are used to promote energy efficiency and the statewide energy efficiency strategic plan should address ME&O.
- Utilities should work with Commission staff to develop an energy efficiency web portal that provides integrated point of access to energy efficiency program information.
- The Commission should lead an ME&O task force to assist in the relevant aspects the statewide strategic plan and utility portfolio applications, develop an energy efficiency web portal and consider the development of a brand for California energy efficiency products and services.
- The statewide strategic and utility applications for approval of 2009-3011 energy efficiency portfolios should provide details about how education, marketing and outreach activities will be used to promote energy efficiency program in an integrated and coordinated fashion.
- The Commission should reconsider its approach to ME&O funding and contracting procedures if it determines that existing programs, practices and procedures are not effective or efficiently managed.

D.08-09-040, *Decision Adopting the California Long-term Energy Efficiency Strategic Plan*, dated September 18, 2008, stated the following in relation to ME&O:

- Directed the IOUs to assist the Energy Division and the Commission in the development of a statewide energy efficiency brand and an integrated marketing, education and outreach (ME&O) strategy.
- Energy Division in consultation with the assigned Commissioner and Administrative Law Judge shall take the steps necessary to develop a statewide energy efficiency brand and integrated ME&O strategy.

D08-10-027, *Decision Adopting Bridge Funding for 2009 Energy Efficiency Programs*, dated October 16, 2008, directed the Utilities, as it relates to ME&O, to:

- Work with Energy Division to improve existing programs during the bridge funding period as warranted, to reflect recommended changes to 2006-2008 program originating from completed process evaluations such those contained in the 2006-20089- ME&O process evaluation directed by the Commission and;
- To continue current work on the Web Portal under the direction of the assigned Commissioner as provided in D.07-10-032. The Utilities shall provide amended Marketing and Outreach budgets in their advice letter filings. Should this funding source be insufficient, then the Utilities are directed to propose the use of EM&V funds for this purpose in their advice letter.

Specific Questions:

<u>Scope of Energy Efficiency Brand</u>

- What should be the goal/s of the brand?
- Should the scope of the energy efficiency brand extend to other DSM options such as demand response, solar, & distributed generation?
- What are the ways to know if a brand is successful?

Statewide Marketing, Education & Outreach Program

- One of the goals of the existing SW ME&O program (Flex Your Power) has been to increase awareness of energy efficiency, what are other goals that the program should have?
- How do you measure program success?
- Who are the key players that should be involved in advising the ideal statewide ME&O implementation?
- Provide examples of best practices of effective marketing & outreach campaigns/programs in other states, cities and countries.

Energy Efficiency Web Portal

- What should be the primary function of the web portal?
- What websites should the portal link to?
- What is the range of tools/options that the web portal should offer?
- How do we draw users to the portal and keep them involved?

7) Industrial Continuous Energy Improvement (CEI) & Agricultural Sector

D.08-09-040 adopted the California Energy Efficiency Strategic Plan (CEESP). Within the strategic plan are included specific goals and milestones for each market sector program. For the industrial program several strategies were identified that attempt to overcome sector specific barriers that impede meeting both private sector and national energy efficiency and GHG reduction goals. Some of these strategies include the integration of solutions through a one-stop shop approach, education and outreach to create awareness for continuous energy efficiency improvements, and leveraging existing workforce training initiatives and technical exchange forums to gain access to highly-skilled professionals in the field of system energy efficiency and energy management solutions.

Similarly the CEESP includes several goals for the Agriculture sector with respect to energy efficiency (EE) programs. Among these goals are included increasing the knowledge base to aid in meeting EE program goals, coordination of regulatory, financing, and incentive mechanisms to promote increase program effectiveness, and increased utilization of integrated demand side energy management options such as EE and onsite renewable generation.

In response to these strategies the IOUs have proposed statewide industrial and agricultural EE program approaches that include the development of a Continuous Energy Improvement (CEI) component that seeks to address the strategies outlined above. In response to these proposals, ED has developed a list of questions for stakeholder input.

Specific Questions:

1. How might the workforce, education, and training network described in the industrial and agricultural PIPs be further developed to promote adequate workforce education and training for these sector specific programs and technologies?
2. Are there existing models that could be emulated to further the training goals for sector specific programs and technologies which may include partnership plans with manufacturers and makers of these technologies?
3. What kind of objectives and milestones should exist for the statewide industrial and agriculture program steering committees?
4. Are there specific performance metrics that will help promote market transformation for identified technologies and integration of demand side technologies (DR, EE, DG) as well as increase production while minimizing or keeping stagnate energy use?
5. Describe how the Continuous Energy Improvement sub-program can be expanded and broadened into a strategic planning tool that informs program design including mid-cycle adjustments and identification of technologies that have already achieved market transformation.
6. The Continuous Energy Improvement sub-program is a strategic long-term market transformation strategy identified in the CEESP. As a market transformation strategy, establishing a baseline and performance metrics is critical. In context of the IOU implementation plans, what recommendations can you suggest to establish baselines and performance metrics for the continuous energy improvement sub-program? With the experience gained by the IOU's in implementing energy acquisition programs, what advantages or disadvantages would the IOUs have in implementing a long-term market transformation strategy such as Continuous Energy Improvement?
7. Integration of the industrial IOU programs with CARB AB32 is a strategic goal in the CEESP. What recommendations can you provide towards meeting this integration goal that might be addressed within the IOU industrial programs? What concerns do you have with attribution and double-counting? How can these concerns be addressed? What policy challenges existing with integrating a mandatory requirement (AB32) and a voluntary program (IOU programs)?
8. Current implementations of the Continuous Energy Improvement programs in Europe and Canada include mandatory or voluntary energy reduction targets for the industrial participant as a critical success factor. In the context of the IOU implementation plans and the California market, how critical is it to integrate target setting into the program design? What advantages or disadvantages would the IOUs have in influencing energy efficiency targets?

<u>Areas without Workshops Planned</u>

8) Workforce, Education, and Training Sector / Integrated Demand Side Energy Management

D.08-09-040 adopted the California Energy Efficiency Strategic Plan. Within the strategic plan are included specific goals and milestones for several cross sector

strategic planning issues. Workforce, education, and training and demand side coordination (DSM) and integration are two of the cross cutting issues that are called out in the CEESP with specific goals, objectives, and strategies within the IOU EE programs.

Among the goals described for integration of demand side resources are the integration of DSM options that include energy efficiency, demand response, energy management, and self-generation measures through coordinated marketing and regulatory integration via integrated program delivery coordination, integrated marketing, and integrated technology & systems configuration.

The WE&T strategic planning goals seek to incorporate EE education and training in all levels of California's educational systems, as well as ensuring that minority, low income, and disadvantaged communities are fully participating in educational programs at all levels.

Based on the IOU filing and strategic planning guidance from the Commission, ED staff would like to obtain stakeholder input regarding the following questions:

Specific Questions:

1. What are good examples of:
    a. Models involving multi-stakeholder partnerships designed to provide workforce training with shared resources. How are these models applicable to IOU workforce training efforts that seek to collaborate with outside entities?
    b. K – 12 workforce programs designed to provide outreach to high school students linking them to opportunities at the technical / trade school, community college, CSU/UC, and adult education programs.
    c. Community service-learning type programs. How might the IOU existing energy centers be utilized in these type of programs?.
    d. Relevant performance metrics for WE&T programs that seek to measure whether these programs are promoting market transformation in the workplace with respect to creation of jobs and a workforce that support / promote green practices and technologies.

2. How might the IOUs coordinate and leverage their Emerging Technologies and Codes and Standards Programs to identify and leverage opportunities to promote targeted training opportunities which will help achieve market transformation of emerging technologies and promote code enforcement?

9) Statewide Demand Side Technology and Program Integration

Specific Questions:

1. There are several areas that the IOUs can prioritize within their proposed cross-IOU demand side integration task force. Please provide input for how the IOU integration task force might:

a. Be used to obtain subject-matter expert input on IOU efforts to integrate their programs and demand side technologies.
b. Be used to consolidate and disseminate lessons learned as a result of the use of integrated audits, the overall integrated audit tool deployment and portfolio wide integration efforts.
c. Coordinate with the Statewide Workforce, Education, and Training Program to develop WE&T programs that promote integration of demand side technologies.
d. Provide input to the IOU integrated marketing & outreach plans.
e. Obtain subject-matter expert input for developing cost-effectiveness quantification and attribution methodologies for integrated programs and projects.
f. Interact with market sector specific programs to further the coordination and integration of demand side technologies and programs.
g. Coordinate and leverage the IOU Statewide Emerging Technologies Program to promote integration efforts.

2. Describe performance metrics that might be used to track how effective the IOU portfolio is with regard to promoting integrated programs and projects.

10) Commercial Sector

Statewide Commercial Energy Efficiency Program

The Commercial Energy Efficiency Program (CEEP) offered by the four IOUs organizes a well-integrated set of state-wide programs to both overcome traditional market barriers and achieve optimal energy management for existing commercial buildings. Included in the CEEP are three resource sub-programs (Calculated Incentives, Deemed Incentives, and Direct Install), and two non-resource subprograms (Continuous Energy Improvement (CEI) and Non-Residential Audits). Below is the proposed budget requested in the IOU portfolios.

Commercial SW Programs
1. SCE - $222.8 million
2. PG&E - $205.2 million
3. SDG&E - $56.7 million
4. SCG - $23.5 million

Specific Questions:

1. Benchmarking of buildings is one of the most critical steps towards transparency of energy efficiency progress. Energy Division sees opportunity in including benchmarking language in all the IOU PIPs, particularly in the Nonresidential Audit sub-program, as this could be automatic for audited buildings. (Possibly starting with all buildings where Energy Star or California specific benchmarking is available). Would parties support this suggestion?

2. ED sees opportunity in leveraging stimulus funds in the current economic landscape. Do Parties think a more detailed plan of how the IOUs plan on leveraging stimulus funds would be beneficial?

3. ED believes, in alignment with the CEESP, that creating a Zero Energy Pathway (ZEP) Task Force for Commercial Buildings is needed. This is an innovative approach to develop increased coordination among various programs and key stakeholders with Zero Net Energy (ZNE) objectives. Areas that could be addressed by the ZEP Task Force are listed below. What are Parties' views on this issue, and what other priorities for the proposed Task Force might Parties suggest:

    - ZNE program metrics
    - Coordination of process evaluations for adaptive management
    - EM&V of building energy performance that includes coordination of findings with IOU, building owners and design community
    - Review of new technologies for ZNE buildings (existing and new)
    - Support of strategic planning functions relating to ZNE buildings

Statewide Commercial New Construction: Savings by Design

Savings by Design (SBD) is the commercial buildings sub-program for new construction. It encourages use of whole-building design approaches that achieve energy efficiency and green building practices significantly better than Title 24 code.

Commercial New Construction Programs

1. SCE - $49.2 million
2. PG&E - $26.3 million
3. SDG&E - $13 million
4. SCG- $7.6 million

Specific Questions:

1. The PG&E New Construction Savings by Design program has identified several broad program targets below that are included in their PIP**.** Do Parties support the program targets presented? Would Parties consider the proposed targets applicable across all IOUs?

    - Increased percentages for participants
    - Industry partnerships
    - Number of whole building design approach
    - Education of designers and attitudes of the owner/developer community.

2. Do Parties believe that a $5,000 stipend/design firm is the appropriate level to increase participation in integrated design process for the Whole Building approach within a cost-effective portfolio?

Questions per Utility

Southern California Edison (SCE):

Third Party Programs

Sustainable Portfolios -, Leased Office Space Retrofit Program, and Management Affiliates Program

Sustainable Portfolios	**$8.7 million**
Leased Office Space Retrofit Program	**$2.3 million**
Management Affiliates Program	**$5.4 million**

All three programs listed above address leased properties, which have been difficult markets to reach, due to the classic split incentive barrier between owners and tenants. The implementation plans address this barrier but do not effectively explain how the relationship of tenant and owner will work together to maximize environmental sustainability of the property and overcome the market structure with the existing financial constraints.

ED has flagged these programs for Party input because they have ambitious goals and what appear to be uncertain technical strategies, which could lead to questionable success rates. ED has found that incorporation of some of all of the following elements would be essential to the programs' success. We request Party comment on the elements below that you think would be appropriate for these programs:

- The program is noted as a pilot effort.
- Clear progress indicators are provided to track program objectives.
- More detailed program implementation plan are developed
- A monthly or quarterly report on the programs is provided to SCE/CPUC.
- A description is provided of how this project can be managed in conjunction with other related third party programs and what methods will be used to determine what strategies currently incorporated in the PIP are attractive to the market and what strategies need to be rethought.

Sustainable Communities

Sustainable Communities	**$14.3 million**

The Sustainable Communities (SC) program is grounded in good conceptual ideas, but ED review has found that more specificity is needed. The project-based implementation strategies included in the SCE application do not clearly relate to the stated community-based goals of the program making it unclear how the $14 million will be spent. The program describes leveraging the SW Commercial New Construction Program to help implement some of this program. It also references using incentive funds but no clear targets are provided. ED's review has found that a better plan would strengthen this program and we request Party comment on the observations below:

- A clear management structure for this program would help achieve the innovative goals and coordination that is essential for a sustainability program, such as the Sustainable Communities to be successful.
- ED recommends the addition to the program and portfolio of a transparent feedback loop to incorporate insights from this pilot program to the relevant utility programs so that ongoing implementation challenges are addressed and improved.
- Strategies should be formulated to more specifically address community issues, which are noted as a major element of the program.

Sustainable Communities - Performance Metrics

As a non-resource program, ED finds that specific goals toward program outcomes should be identified such as indicated below, and requests Party response on these suggestions:

- o Number of buildings
- o Specific energy savings
- o Sustainable design features, or other metrics that can be compared to anticipated program outlay.
- o The program is designed to support existing sustainable design programs (like LEED and others). IOUs should provide a reasonable target for new LEED projects, such as 100 over the application period.

San Diego Gas & Electric

Local Programs

Sustainable Communities

Local Sustainable Communities $1 million

This program is targeted at the development of sustainable communities, but some elements of the program are unclear and seem to represent unrelated strategies. Even though the budget for this program is slightly smaller than other programs, ED is concerned that the program achieve its' intended goals. Modifications or removal of some of these components would assist the community level goals of the program. Below are ED suggestions by program component as outlined in the PIP. Do Parties have comments on the program components/issues or ED suggestions described below?

1. *Training builders and contractors on sustainable design and construction practices*. This market entry point is downstream in the design process from the community planning activities identified in the program goals, and should possibly be a component of a different program.
2. *Development of 'learning center kiosks' in various sustainable communities to demonstrate to sustainable feature to residents.* This program component should be more directly tied to successful upstream impacts on community design (as it appears from the PIP that this effort will have no effect on initial design). It is unclear what criteria will be used to identify target communities for the kiosk installation, or how this strategy will impact community development.
3. *Design assistance to engineers and architects* to foster the incorporation of sustainable features into projects such as:

a. Clear description of program elements
b. How many projects will be involved in the program?
c. What specific outcomes will be supported by the money invested?

4. *Development of modeling procedures so that residential builders can demonstrate energy performance improvement of their projects to document participation in the program*. Modifications could include:
    a. Do modeling procedures capture current title 24 requirements?
    b. How will modeling procedures impact community development? (This program component may align better with utility programs other than sustainable communities).
5. *Development of a comprehensive community modeling tool to track a wide range of sustainable community development impacts, and to share this information through case studies and other methods*.
    a. This component is very specific, and presents a significant opportunity to affect the overarching goals of the program. Other program elements should be designed to interact with this community impact model, and further development of the information sharing capabilities of this strategy should be considered. This community impact model component could form the basis of a highly effective program.

Sustainable Communities – General Issues

More general recommendations for the Sustainable Communities Local Program are listed below. Do Parties have any suggestion or comments on the following recommendations?

1. Clear management structure
2. Feedback loop to show coordination with SW program
3. Tracking performance metrics ideas such as:
    a. Number of buildings
    b. Specific energy savings
    c. Sustainable design features, or other metrics that can be compared to anticipated program outlay
    d. Reduced Vehicle Miles Traveled
    e. Water conservation metrics
    f. Waste reduction metrics
    g. Number of new communities participating in the program, as well as specific performance goals for these individual projects within the community.

The targets of this program appear to be community developers, but a number of the mechanisms of the program are oriented toward building-specific market players. While the goals of sustainable community development are critical to the Strategic Plan, ED is concerned that this program as currently conceived will not achieve a comprehensive, clear approach to the problems identified.

Sempra Company Third Party Programs

A stakeholder steering committee meeting is suggested to allow flexibility of the planning process, as well as to oversee programs and discuss adjustments that might arise with rapidly changing economic conditions. Do Parties think this could be useful?

11) Codes and Standards SW Program

Compliance Enhancement Program

The IOUs propose to claim savings from compliance enhancement program (CEP) and not treat it as information program.

- **a.** ED suggests that IOUs should ensure that their activities in CEP *only* target T-24 and T-20 measures for which the IOUs did not and will not include in their pre-2006 and post 2006 codes and standards advocacy work i.e. CASE studies to avoid double counting of savings resulting from compliance enhancement work that is covered under these two program activities.
- **b.** In PG&E's current filing, the energy savings resulting from the CEP component are not included but the budget amount is included. The CEP program component accounts for about 6% of the total PG&E C&S projected program budget which leads ED to assume that the energy savings associated with those activities might be relatively small compared to the rest of the program activities. Hence, considering the amount of savings and budget allocated to CEP, it will be cumbersome (both complex and costly) to administer full EM&V (including establishing baseline, performing field work, determining attribution) for this program component. Therefore, ED suggests that the savings associated with CEP should be deemed pending verification (calculation adjustments) by an independent evaluation entity.

Specific Questions:

1. Do parties agree with this ED suggestion?

2. Do Parties feel that IOUs should be evaluated on their efforts associated with the CEP subprogram based on performance metrics and accomplished milestones other than energy savings?

Reach Codes

The IOUs propose that they should be able to claim energy savings that result from their activities associated with the Reach Codes subprogram.

- **a.** ED agrees with the IOUs that savings resulting from completed projects that *do not* participate in an incentive or rebate program might be claimed by *either* the C&S program *or* Local Government Partnership programs.
- **b.** PG&E did not include estimates of energy savings from "Reach Code Subprogram" in its filings but included a proposed budget which accounts for about 7% of the overall PG&E C&S program budget. This leads ED to assume that the energy savings associated with those activities might be relatively small compared to the overall program savings and hence should not warrant the high cost and effort associated with full EM&V activities such as establishing a baseline, conducting field work, and determining attribution. Therefore, *ED suggests* ED suggests that the savings associated with Reach

Codes subprogram should be deemed pending verification (calculation adjustments) by an independent evaluation entity.

c. The IOUs are proposing under the C&S Reach Codes subprogram to claim savings to the extent that they are involved with the development and deployment of voluntary programs such as LEED and Collaborative for High Performance Schools (CHPS). ED suggests that these activities associated with such voluntary programs should be implemented associated with their New Construction Programs.

Specific Questions:

1. Do Parties agree with ED's suggestions?

2. On what bases should the IOUs calculate energy savings from the Reach Codes subprogram and from their activities related to voluntary programs such as LEED and CHPS?

3. Should IOUs be evaluated on their efforts associated with the Reach Codes subprogram based on performance metrics and accomplished milestones other than energy savings?

Definition of Gross Savings and Savings from Non-IOUs Territories

IOUs propose to claim savings from non-IOUs territories and redefine gross savings from C&S to include energy savings resulting from IOUs efforts to adopt statewide energy efficiency standards.

Specific Questions:

1. Should IOUs be allowed to claim savings from non-IOUs territories?
2. What should be the definition for gross savings associated with C&S programs?

12) Government Partnership Sector

Government Partnerships & Strategic Plan Strategies

While Energy Division understands it can be challenging to project outcomes of government policy making and other dynamic processes reflected in the CEESP chapter on local government, ED also believes it is important to document expectations of partnership programs, and ratepayer resources supporting them. This documentation has not yet been explicit in program plans submitted in the 2009 portfolio filings. How can local governments and IOU administrators transparently and collaboratively present Energy Division and the Commission with detailed information that answers the following questions:

Specific Questions:

1. Exactly what work will each partnership accomplish on CEESP strategies and how will this work statewide be tracked? How will it move toward market transformation among local governments?
2. Which CEESP-related efforts are most salient to each local government?
3. How much funding is allocated in each partnership budget for each of these efforts?
4. What outcomes do government partnerships and IOU administrators expect these efforts to produce in the program cycle? What are measurable milestones for these outcomes? How will milestones reached by individual partnerships across the state be tracked? How will they move toward market transformation among local governments?
5. How can energy savings projections from this work be estimated, where appropriate, to show relative value and importance?
6. How can PG&E's Innovator Pilot program provide this level of information on outcomes?
7. How does the work of statewide associations of local governments, contracted by the IOUs with ratepayer funds, support these efforts and market transformation?

Government Partnerships: Data & Information

Data for Local Governments
Local governments need data on energy use in their jurisdictions to create profiles of energy use by sector, which in turn support climate action planning. Data also supports benchmarking of government facility energy use, which allow agencies to compare energy use per square-foot across similar buildings, and target any energy hogs in their portfolios for retrofit using integrated (demand response, energy efficiency, distributed generation) audits, etc.

Specific Questions:

1. How should IOUs provide energy use data on individual buildings, or sectors in a community, so it is user friendly for local government employees for whom building energy use data might not be a primary job responsibility – yet still be efficient and cost-effective for IOUs?
2. Are there particular needs that should be considered such as format, alignment with AB32 reporting requirements, or for recognized & adopted third party standards that sync with the major energy information systems?
3. How can building square-footage data be collected centrally to support building benchmarking and AB1103?

In recent comments the LGSEC requested 38 categories of electronic billing data for private customers in local government jurisdictions.

4. Please explain why local governments need information on individual customers in their jurisdictions, and in such fine-grained detail.

5. How does this further CPUC energy saving and market transformation goals? How does this relate to building benchmarking or labeling?

Information for Local Governments

Local governments typically learn from each other's experience, by sharing exemplary practices and policies, and adapting them to fit unique local needs. There are statewide associations of local governments whose primary mission is to foster this networking and sharing of case studies and successes. Further, IOUs in their March, 2009 portfolio filing proposed a peer-to-peer sharing of exemplary practices among local governments.

Specific Questions:

1. How helpful would it be for local governments developing energy efficiency policies and practices if IOU programs included support for a website that showcased best practices, model ordinances and programs, policy documents, case studies, staff reports, and outreach tools?
2. What characteristics should such a resource have?
3. Where should it be kept and by whom?
4. If PGC funds provided for one person to coordinate and share best practices statewide, what exactly should this person do and where should they be housed to best help local governments implement energy efficiency policies and practices?
5. How should peer-to-peer assistance be organized and operated?
6. What types of practices or policies is it most needed for, or suited for?
7. How much of it is needed at what cost?
8. How can peer-to-peer assistance best support local governments in code compliance & enforcement?

Government Partnerships: Facilities & Retrofits

Experts assert that energy use among city and county facilities is at least as large as among state government buildings, whose energy use is measured against reduction goals set by the Governor's Green Building Team. The following are potential mechanisms and opportunities to foster market transformation in the city and county government building sector.

Specific Questions:

1. **Streetlights**: Should government partnerships have the option through their ratepayer funded programs to retrofit streetlights, parking garage lighting and traffic lights? Are there certain technologies that should be considered in replacement? How are the needs of large and small cities different? How should these programs be designed and run? What have IOUs found to date in their pilots of this type of retrofit?
2. **Municipal Facility Energy Use Statewide Tracking**: Do the benefits of tracking and reporting energy use by county & municipal facilities as a sector statewide

outweigh the costs? How could this information be used and communicated? What is its potential for market transformation?

3. **Plan for ZNE**: Should IOU and local governments develop a plan for moving toward zero net energy county and municipal buildings? What might such a plan include? How might it be developed and implemented?
4. **Statewide RCx and MBx Standard**: Should the joint IOUs in conjunction with government agencies set standards for commercial and government building retro-commissioning and monitoring-based commissioning? What would these standards include? How could they be relevant to large cities and counties as well as small ones, whose buildings might need to be retro-commissioned as a cluster? How would these standards be developed?
5. **Tree Planting**: Should government partnerships have the option to include tree planting as a means of promoting long-term cooling and short-term air condition mitigation? Have pilots or programs run by PG&E, SMUD and others shown this to be a cost-effective intervention that produces measurable energy savings?

Incentives for Fee Waivers and Code Enforcement

As local governments point out, code enforcement is their purview. Studies have shown that energy savings, especially during summer peak in hot climate zones, are not achieved due to inadequate enforcement of the state's energy code. At the same time, local governments have been vocal about the complexity and breadth of standards they are charged with enforcing, and the training, skill and expense that calls for.

- Might IOU programs cost-effectively support local government efforts to incentivize energy efficient building retrofits or development by offering a rebate of some percentage of local planning fees for projects that exceed Title 24?
- How might IOU programs use the rebate/incentive model to help local governments overcome financial barriers to enforcing parts of the state energy code that they might otherwise mean increasing permit fees, etc?

Government Partnerships: Administrative Issues

Some local government partnerships have suffered on a number of fronts from the contracting structure created by the three-year length of the program cycle, and the contracting that is tied to that once the Commission reviews and approves a portfolio application. Energy Division understands that lapses or gaps between contracts have triggered a phenomenon where programs ramp up and then ramp down, losing savings opportunities, staff and even office space. We have also been informed that the three-year timeframe is too short for local governments because it doesn't fit with their decision making and other cycles, and can sometimes inhibit them from capturing longer-term savings.

- How could government partnerships move to "evergreen'' contracting to avoid these problems, while still preserving the administrators' ability to change the nature and scope of programs, or end a contract if need be?

13) Residential New Construction

1) The CEC and CA Building Industry Association (CBIA) suggest that the current residential market slowdown is an opportunity to get the market's attention by raising

incentive levels in the California Advanced Home Program (CAHP) to 85% of incremental costs and transforming the emerging market at its lowest volume. Alternately, TURN suggests that reduced budgets for the CAHP are warranted given the market slowdown.
Given that the # of permits for new home construction is at its lowest level in 10 years, and that the CEESP sets an interim milestone of 50% market penetration of above code homes for 2011, should IOUs scale back funding parallel to the market or could increasing incentive levels (while keeping the same proposed budget) be the least cost path to achieving the CEESP target? Are there any possible unintended consequences for IOU programs, ratepayers, or the new home market by following your recommendation?