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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison
Company (U338E) for Approval of Energy
Efficiency Rolling Portfolio Business Plan.

Application 17-01-013
(Filed January 17, 2017)

And Related Matters.

Application 17-01-014
Application 17-01-015
Application 17-01-016
Application 17-01-017

**ADMINISTRATIVE LAW JUDGE'S RULING SEEKING
COMMENT ON ENERGY EFFICIENCY BUSINESS PLAN METRICS**

This ruling seeks comment on sector-level and program-level metrics proposed in the energy efficiency business plans filed by existing and prospective program administrators. Initial Commission staff feedback on the proposed metrics, for discussion purposes, is included in this ruling via a link to a document posted on the Commission web site. Specific questions to which program administrators are required to respond are included as Attachment A to this ruling. Program administrator responses to the questions in Attachment A shall be filed and served no later than May 22, 2017.

In addition, this ruling contains a set of portfolio sector-level metrics proposed to be tracked and reported periodically by all program administrators, to ensure that the state's policy goals are being met over time. Commission staff will host a workshop to discuss all of the proposed metrics, with additional opportunity for stakeholder discussions thereafter. After those discussions,

program administrators are requested to file and serve a revised set of comprehensive metrics, with suggested targets for each, by no later than June 26, 2017.

Parties are then requested to file and serve comments on the revised metrics and any other metrics-related issues by no later than July 10, 2017, with reply comments filed and served no later than July 17, 2017.

1. Background and guiding principles

The Commission has a great deal of experience with developing, implementing, and even later dismantling sets of metrics for gauging progress of energy efficiency activities at both the program and the sector level.

Several relatively-recent Commission decisions have given guidance to program administrators about how to develop metrics to gauge energy efficiency program progress. That recent guidance is summarized in Table 1 below.

Table 1. Key Regulatory Direction on Metrics

<p>“The metrics shall be designed for simplicity and cost effectiveness when considering data collection and reporting requirements.”</p>	<p>D.09-09-047, at 92</p>
<p>“...in some cases, overarching market metrics that can track the success of several programs may be more appropriate than program-specific metrics. We have no objection to the application of one set of program metrics to several programs if the metrics are otherwise valid for each program.”</p>	<p>D.09-09-047, at 92 Metrics can be "rolled up". Not every activity needs a metric.</p>
<p>“Business plans shall contain portfolio and sector level metrics for regulatory oversight (gWh, MW, therms, cost-effectiveness, and other metrics where applicable), including performance metrics for non-resource programs.”</p>	<p>D.15-10-028, at 47</p>

<p>“PAs will still need to set more granular metrics than just sector-level metrics, but they will do so in implementation plans, not business plans. It is in the implementation plans that we want to see at least one metric for each program/strategy/sub-sector/intervention strategy; more than one where appropriate. The business plan is not the place for that additional level of detail.”</p>	<p>D.15-10-028, at 53</p>
<p>“We will require that the business plans identify the specific metrics by which progress towards objectives may be assessed, and a schedule for reviewing results against performance indicators on a regular recurring basis.”</p>	<p>D.16-08-019, at 63</p>

In addition, to better operationalize this previous guidance, the California Energy Efficiency Coordinating Council (CAEECC) put together the following consolidated table of guiding principles that should govern the development and adoption of metrics. Table 2 below has been edited slightly for clarity, but otherwise reflects the input from CAEECC.

Table 2. Metrics Guiding Principles for Business Plans

Metrics should...	Explanation
<p>Be used and useful by program administrators to manage their portfolio</p>	<p>Metrics that are used by program administrators to manage programs and portfolios can be valuable to improve implementation. Otherwise, they can become a cost-effectiveness-reducing resource drain.</p>
<p>Be timely</p>	<p>Data collection frequency for metrics should support decision-making frequency.</p>
<p>Rely on data used in program implementation</p>	<p>Metrics should rely on readily available data to increase reporting efficiency and minimize costs. Metrics that require extensive research cause reporting delays and reduce program cost effectiveness. Additional challenges include research funding and identifying appropriate research leads.</p>

Metrics should...	Explanation
Be simple to understand and clear of any subjectivity	Metrics should not rely on subjective assessments.
Be output-based	Output metrics (e.g. number of trainings completed, number of program participants, total incentives paid, etc.) can require synthesis to interpret, but they have the advantages of being readily available and unambiguous.
Have a readily interpretable meaning, with context added, if needed	Metrics provide data points into portfolio/program performance, but will not provide a complete story.
Not be a replacement for evaluation, measurement, and verification (EM&V)	Metrics should not replace EM&V because energy efficiency program interventions are centered on customers and other market actors. Their behavior and decision making are too complex and evolving to capture completely in metrics. However, metrics can inform the need for EM&V. For example, metrics may be used to indicate “red flags,” upon which a targeted process evaluation may be initiated to understand whether program course correction is needed.
Have longevity	Metrics are most useful if they can show trends across time and are resistant to changes in baseline and to goal displacement.

2. Metrics proposed in Business Plans

In general, existing and prospective program administrators appear to have followed the Commission’s previous guidance in this area and have proposed a large number of metrics in their Business Plan filings. Roughly 235 individual metrics were proposed in business plans.

Staff and parties, however, have raised concerns about the quality of these metrics and the ability of the metrics to help us evaluate program and portfolio success, both for the individual program administrators and across all sectors.

Commission staff has conducted a preliminary review of all of the metrics, with the guiding principles in Table 2 in mind. Their feedback is contained in a spreadsheet file posted at <http://www.cpuc.ca.gov/egyefficiency/>.

Numerous other parties have also already commented preliminarily on the metrics in their protests and/or responses to the business plan applications, pointing out deficiencies and areas for improvement.

Staff's initial review of the metrics has also led to a number of clarifying questions to which it would be helpful if program administrators responded in advance of additional proceeding work by all stakeholders on the metrics issues. Those questions are contained in Attachment A to this ruling. Program administrators shall file and serve responses to the questions in Attachment A by no later than May 22, 2017.

3. Commission staff proposal for sector-level metrics

In addition to the metrics proposed by program administrators in the business plans, the Commission has previously expressed in several decisions (See Table 1 above) the desire to have portfolio and sector-level metrics by which portfolio oversight can be conducted and progress assessed over time.

To meet this need, this ruling proposes common sector-level metrics, along with a small number of portfolio-level metrics, to be reported annually by all program administrators, to:

- Consolidate metrics around common problems identified by most program administrators for each sector,
- Enable consistent tracking and progress assessment for the whole sector, and
- Enable comparisons across and within sectors, and

- Enable tracking of high-level portfolio progress over a period of time.

Tracking of the sector-level metrics proposed in this section of the ruling would not preclude the program administrators from tracking the metrics they originally identified in their business plans, though some sector-level metrics could duplicate those already proposed. Several of the proposed metrics in this section of the ruling were lifted and/or modified to become recommended sector-level metrics. To complete this process, targets will also need to be developed for each of the sector-level metrics proposed, in collaboration with the program administrators and other stakeholders.

The tables below include preliminary suggested sector-level metrics recommended by Commission staff. The expectation is that these recommendations will form a starting point for discussion at a workshop and in subsequent discussions possibly sponsored by the CAEECC or held separately by the program administrators. These activities are designed to lead to a filing by the program administrators of a set of revised metrics, including sector-level common metrics, along with their associated recommended targets, by no later than June 26, 2017.

Portfolio Level – All Sectors

Common Problem	Common Metric
Capturing energy savings	Total annual gas, electric, and demand savings
Disadvantaged communities	Total annual gas, electric, and demand savings in zip codes and/or census tracts in the top 25 percent as defined by the CalEnviroScreen Tool
Hard to reach markets	Total annual gas, electric, and demand savings where customers are defined as “hard to reach”
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm, and kW

Residential Sector – Single Family

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings for Single Family Customers
Depth of interventions	Average gas, electric, and demand savings per participant
Penetration of energy efficiency programs in the eligible market	Percent of participation relative to eligible population Percent of participation in disadvantaged communities (defined by zip code and/or census tract in CalEnviroScreen Tool) Percent of participation by customers defined as “hard to reach”
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm, and kW
Energy intensity	Average energy use intensity of single family homes (average usage per household - not adjusted)

Residential Sector – Multi-family

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings for multi-family customers (in-unit, common area, and master-metered accounts, tracked separately)
Depth of interventions	Average gas, electric, and demand savings per participant Average gas, electric, and demand savings per project (property level)
Penetration of energy efficiency programs in the eligible market	Percent of participation relative to eligible population (by unit and by property) Percent of square feet of eligible population

Common Problem	Common Metric
	<p>participating (by property)</p> <p>Percent of participation in disadvantaged communities (defined by zip code and/or census tract in CalEnviroScreen Tool)</p> <p>Percent of participation by customers defined as “hard to reach”</p>
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm and kW
Energy intensity	Average energy use intensity of multi-family buildings (average usage per square foot – not adjusted – and including in-unit accounts)

Commercial Sector

Common Problem	Common Metric
Capturing energy savings	<p>Annual gas, electric, and demand savings</p> <p>Annual gas, electric, and demand savings as a percentage of overall sectoral usage</p>
Depth of interventions	<p>Energy savings (kWh, kW, therms) per project (building)</p> <p>Energy savings (kWh, kW, therms) per square foot</p>
Penetration of energy efficiency programs and benchmarking in the eligible market	<p>Percent of participation relative to eligible population for small, medium, and large customers</p> <p>Percent of square feet of eligible population</p> <p>Percent of participation by customers defined as “hard to reach”</p>
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm and kW
Investment in energy efficiency	Dollars of investments (all sources)

Common Problem	Common Metric
Energy intensity	Percent of square feet of eligible population benchmarked

Public Sector

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings Annual gas, electric, and demand savings as a percentage of overall sectoral usage
Depth of interventions	Energy savings (kWh, kW, therms) per project (building) Energy savings (kWh, kW, therms) per square foot
Penetration of energy efficiency programs and benchmarking in the eligible market	Percent of participation relative to eligible population Percent of square feet of eligible population
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm and kW
Investment in energy efficiency	Dollars of investments (all sources)
Energy intensity	Percent of square feet of eligible population benchmarked

Industrial Sector

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings Annual gas, electric, and demand savings as a percentage of overall sectoral usage
Penetration of energy efficiency programs and diversity of participants	Percent of participation relative to eligible population for small, medium and large customers
New participation	Percent of customers participating that are new participants (annually)

Agricultural Sector

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings Annual gas, electric, and demand savings as a percentage of overall sectoral usage
Penetration of energy efficiency programs and diversity of participants	Percent of participation relative to eligible population for small, medium and large customers
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm, and kW

Workforce Education and Training

Common Problem	Common Metric
Leveraging effective partnerships	Number of partnerships by sector (defined by curriculum developed jointly + agreement)
Penetration of training and diversity of participants	Number of participants by sector Percent of participation relative to eligible target population for curriculum Percent of disadvantaged participants trained (identified by zip code and/or census tract)
Impact of training	Number of participants who report they applied the training annually Number of projects implemented in applying the training annually

Codes and Standards (C&S)

Common Problem	Common Metric
Capturing energy savings	Annual gas, electric, and demand savings
Activity in advocating for codes and standards tied to adoption in CA	Annual number of case studies Annual number of case studies used to implement adopted codes and standards

Common Problem	Common Metric
Local government participation and success in adoption of reach codes	Annual number of local government Reach Codes implemented (joint utility and regional energy network effort)
Activity in advocating for codes and standards tied to adoption at the federal level	Annual number of federal standards adopted for which a utility advocated

Emerging Technologies (ET) Program

Common Problem	Common Metric
Savings are not being tracked	Annual number of technologies that have moved from the ET program: <ul style="list-style-type: none"> -into the portfolio, with associated dates and kW and kWh (estimated and achieved) net and gross savings. -directly into code, with associated dates and kW and kWh (estimated and achieved) net and gross savings. -first into the portfolio, then into code, with associated dates and kW and kWh (estimated and achieved) net and gross savings.
Input from other groups is not being tracked	Annual number of recommendations received from/recommendations implemented from: <ul style="list-style-type: none"> -C&S/code readiness -industry groups -architect/implementer/builders groups -other ET programs -zero net energy implementation teams
Output from ET is not explicitly aligned with long-term goals	Annual number of ET projects and technologies aligned with specific statewide goals List of ET projects and their statewide goal alignment

Common Problem	Common Metric
ET project results are not always aligned with work paper requirements	Percentage of ET-originated work papers requiring additional information before submission
ET event success is not tracked	Metric measuring either the knowledge acquisition or increased activity of participants after events
ET has not increased the focus on market studies as recommended by evaluation results	Percent of ET projects that include a market and barrier identification study
ET is not utilizing other programs to confront barriers to market penetration	Annual number of WE&T programs created around ET projects Annual number of marketing, education, and outreach programs created around ET projects

4. Proceeding schedule for metrics-related activities

As indicated in the scoping memo for this proceeding issued April 14, 2017, as well as earlier in this ruling, metrics-related issues are expected to be addressed between now and July 2017.

Commission staff will host a workshop on May 26, 2017 in the Golden Gate Room at the Commission's headquarters in San Francisco. Once a Commission-sponsored workshop on metrics takes place and the program administrators file and serve revised proposed metrics and associated targets on June 26, 2017, all parties will have an opportunity to comment on the revised metrics and targets.

Parties are invited to file and serve comments on the revised metrics and any metrics-related issues by no later than July 10, 2017. Reply comments may be filed and served by no later than July 17, 2017.

All of the dates associated with metrics-related issues in the Business Plans are summarized in the table that follows.

Date	Item/Event
May 26, 2017	<u>Workshop</u> : Sector-level business plan metrics
June 2017	Additional informal workshops, meetings at CAEECC or hosted by program administrators, if desired, to discuss metrics and associated targets
June 26, 2017	Program administrators file revised metric proposals, along with suggested targets
July 10, 2017	Parties file and serve comments on revised metrics and targets
July 17, 2017	Parties file and serve reply comments on revised metrics and targets

IT IS RULED:

1. All program administrators who filed energy efficiency business plans in January 2017 shall file and serve responses to the applicable questions included in Attachment A to this ruling by no later than May 22, 2017.

2. A workshop will be held on May 26, 2017 in the Commission’s Golden Gate Room in San Francisco to discuss program metrics proposed by the program administrators, as well as the sector-level metrics proposed in this ruling.

3. Program administrators and parties to these proceedings are invited to consider conducting informal discussions at the California Energy Efficiency Coordinating Council or another forum hosted by the program administrators in June 2017.

4. Program administrators who filed energy efficiency business plans in January 2017 shall file and serve revised proposed metrics, along with suggested targets, by no later than June 26, 2017.

5. All parties may file and serve comments on the revised metrics and targets, as well as any other comments on metrics, by no later than July 10, 2017.

6. All parties may file and serve reply comments on metrics issues by no later than July 17, 2017.

Dated May 10, 2017, at San Francisco, California.

/s/ JULIE A. FITCH
Julie A. Fitch
Administrative Law Judge

Attachment A - Questions for Business Plan Proponents

Note: Responses to the questions in Attachment A are due from the business plan proponents, which include existing program administrators and prospective program administrators, to be filed and served no later than May 22, 2017.

Contents

I.	Questions applicable to all prospective Program Administrators (PAs)	1
II.	Questions applicable to all investor owned utilities (IOUs)	1
III.	Questions applicable to San Francisco Bay Area Regional Energy Network (BayREN)	1
IV.	Questions applicable to Local Government Sustainable Energy Coalition (LGSEC)	2
V.	Questions applicable to Pacific Gas and Electric Company (PG&E)	3
VI.	Questions applicable to San Diego Gas & Electric Company (SDG&E).....	5
VII.	Questions applicable to Southern California Edison (SCE)	7
VIII.	Questions Applicable to Southern California Gas Company (SoCalGas).....	10
IX.	Questions Applicable to Southern California Regional Energy Network (SoCalREN).....	11

I. Questions applicable to all prospective Program Administrators (PAs)

1. Demonstrate in a quantitative way, via table or graphic, how the proposed metrics cumulatively are useful and effective indicators of each PA's likely achievement of targeted energy efficiency program uptake and overall savings goals.
2. Provide the number of multi-family units and multi-family properties in your respective geographic areas.

II. Questions applicable to all investor owned utilities (IOUs)

A. Regarding metrics

3. What metric would best ensure that projects provide actionable data to complete work papers?
4. What metric would best ensure that projects provide information required by incentive programs or codes and standards?

B. Workforce Education and Training (WE&T)

5. How does the number of training partners indicate how well the spectrum of entities involved in the workforce is covered?
6. Please provide more information on how all targets involving percentage increases were developed or determined.

III. Questions applicable to San Francisco Bay Area Regional Energy Network (BayREN)

A. Residential Sector

7. Please complete the highlighted sections of this metric and effects table for the multi-family sector in BayREN's geographic area.

GOAL: Increase savings from MF properties						
Intervention Strategies	Metric	Baseline	Metric Source	Short Term Target (1-3 years)	Mid Term Target (4-6 years)	Long Term Target (7-9 years)
Technical Assistance and Tools Financial Solutions New Models	Electricity savings from MF customers	8.5 Gross GWh/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
	Gas savings from MF customers	0.33 Gross MM Therms/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
Indicators						
Number of MF participants in energy efficiency programs (Customers for single meters and buildings for master-metered)						

B. Public Sector

- How will the stated metrics -- program tracking data and surveys -- measure success of the intervention strategies? More specifically, how does BayREN propose to attribute resource savings to the proposed non-resource programs?

C. WE&T

- What workforce metrics are proposed for Residential and Public Sectors?

IV. Questions applicable to Local Government Sustainable Energy Coalition (LGSEC)

- Please identify the “economic impact metrics” that LGSEC will use to track the success of its expanded funding and financing options, as mentioned in Table 4 (page 17).
- How do “diversification of savings and outcomes,” “spillage,” and “training/outreach metrics” provide insight into the success of LGSEC’s strategy of providing “transparent, common metrics for evaluation and reporting of LGP programs” as shown in Table 4 (page 17)?

12. How will “diversification of savings and outcomes,” “spillage,” and “training/outreach metrics,” as mentioned in Table 4 (page 17), be measured and tracked?
13. How will the “ability [of] jurisdictions [...] to engage in energy efficiency,” as described in Table 4 (page 19), be measured and tracked?
14. How will the proposed metrics of “aggregated processes and systems,” “LGP SW Admin economies of scale,” and “transparency” be quantified and tracked for the purpose of monitoring the success of the stated desired market effects of demonstrating “sector diversity, market penetration, [...]” in Table 4 (page 21)?

V. Questions applicable to Pacific Gas and Electric Company (PG&E)

A. Portfolio

15. Pursuant to Ordering Paragraph 13 of D.16-08-019, PA Business Plans were to include the objectives and metrics that will be met through each statewide or third-party program or subprogram, whether a solicitation will be conducted, and the functional activities that are proposed to be conducted statewide. Do PG&E’s proposed objectives apply uniformly to each and every third-party and statewide program and subprogram? What are the metrics that will be met with each and every third-party and statewide program and subprogram?

B. Residential Sector

16. Multi-family sector mid- and long-term metrics are listed as “TBD.” Please provide multi-family sector mid- and long-term metrics, with reference to PG&E’s experience in and knowledge of progress made to date in the multi-family sector.
17. One of PG&E’s goals is to “increase customers’ ability to manage energy,” however this is not tied to any measurable outcome in terms of energy savings and PG&E defers metrics development to occur in the first three years of the business plan. Please provide a metric that links energy management for Residential customers to savings PG&E expects to achieve from energy management technologies (EMTs), with reference to prior experience with

existing EMTs and PG&E's knowledge of its customer base vis a vis AMI data.

C. Commercial Sector

18. What are the objectives and metrics for third party Commercial sector programs?

D. Public Sector

19. How will PG&E collect information about and quantify "an increase in energy savings actions, both inside and outside of traditional program models" (page 26)?
20. Could a metric for Intervention 2 (page 28) be constructed with higher granularity than the proposed "whether all public sector customers have access and can share data with a third party, and [...] whether all public sector customers have the ability to access community-wide data" (emphases added)? How can this binary metric be tracked year-to-year to show improvement?
21. Why does Intervention 3 (page 30-31), proposing to use data analytics, have no accompanying metrics to gauge success of the intervention? Please provide a potential metric for this intervention.
22. How will PG&E quantify "whether public sector customers have the assistance they need in the short-term to take action in identifying energy efficiency opportunities, moving energy efficiency projects forward, or otherwise completing an energy efficiency activity" (page 32)?
23. Regarding the proposed metric for Intervention 5 (page 35), can PG&E show a direct correlation between an increase in customers taking energy efficiency actions and the implied attribution to the PA's involvement in overcoming cost barriers through loans, rebates, and incentives? Assuming an increase in actions, how will the impacts of program financing be segregated from, e.g., increased awareness, increased budget, and shifting management priorities?
24. How will PG&E collect information about and quantify "increased engagement of communities in energy efficiency outside of traditional programs" (page 37)?
25. Why are the measurements cited as useful for tracking success of each intervention strategy (namely, intervention 1: energy savings

actions; intervention 4: customers have the needed assistance to identify EE opportunities and implement programs; intervention 5: customers taking EE actions and have access to financing; intervention 6: engagement of communities in EE outside traditional programs) not listed as metrics in Table 4.18?

26. How do the metrics listed for “all interventions,” consisting of resource savings and operational efficiency, serve to verify the success of each intervention, especially interventions 1, 4, 5, and 6?

VI. Questions applicable to San Diego Gas & Electric Company (SDG&E)

A. Third Party Programs / Solicitation Plan

27. On Page 22 the business plan cites only “illustrative” performance metrics that include increased savings and reduced costs. Page 22 states that performance metrics will be “finalized with the implementer.” Please clarify: will strategies and metrics be included in the request for proposals, or will they be proposed by implementers, or will they be developed by a stakeholder group, or something else?

B. Residential Sector

28. Visits to online platform:
- What is the basis for selecting 18,000, 24,000 and 30,000 visits?
 - What is expected uptake from visits?
 - Does this level of participation justify cost? How?
 - Should repeat visits be tracked separately from first time visits? Why or why not?
29. Behavior program enrollments:
- Provide current enrollment in behavior programs.
 - Explain the reasoning for the selection of 5 percent increases year-over-year as reasonable.
30. Property manager training tools: Specify a minimum threshold for success in ‘establishing a usage baseline.’
31. Provide missing metric source and targets for “implement new training tools for tenants and resulting tenant engagement.”
32. Number of new approaches partnering with retailers and manufacturers: this metric does not clearly reflect the success of the

strategy, nor the volume of effort since a “new approach” would be difficult to quantify.

- a. What are examples of “new approaches” that would be reported?
- b. Why does SDG&E believe this metric reflects success more accurately than a count of product-types or sales volume?

C. Commercial Sector

33. For the commercial sector metric ‘percent of small/lease customers.’ This may increase simply because other commercial participation drops off.
 - a. Why not track number of small/lease customers participating and percentage increase year-over-year?
 - b. What is the current percent of commercial participating customers that are small and lease?
 - c. Will the metric be calculated as the percent of commercial participants that are small and lease, or does it represent growth in the number of small commercial participants?
 - d. What about a customer with many sites? Are these considered one or many ‘customers’ in the database?
34. For the proposed metric ‘Landlords enrolled in programs:’
 - a. What does it mean to be enrolled in a program?
 - b. If a landlord received energy reports or received an audit but did not adopt any measures – are they ‘enrolled’?
 - c. How many landlords are currently enrolled in programs, to determine the baseline?
35. For metric ‘Number of realized recommendations’ for conversion of online platform – what recommendations are these referring to?
36. The residential sector metrics are related to strategies, but commercial metrics are related to barriers. The first two Commercial sector metrics are based on growth in enrollments – please clarify the baseline quantity.

D. Public Sector

37. How does SDG&E propose to measure the first metric listed in Figure 4.25, “Determine and deliver leaderships ‘tool kit’?”

38. As the “absolute number of [public] sector-wide implemented EE measures” will only indicate public sector adoption, how will SDG&E measure and track the stated outcome of private sector impacts resulting from demonstrating the value of energy efficiency through public sector customers (page 125 and Figure 4.25)?

VII. Questions applicable to Southern California Edison (SCE)

A. Residential Sector

39. Please complete the highlighted sections of this metric and effects table for the multi-family sector in your service territory:

GOAL: Increase savings from MF properties						
Intervention Strategies	Metric	Baseline	Metric Source	Short Term Target (1-3 years)	Mid Term Target (4-6 years)	Long Term Target (7-9 years)
Technical Assistance and Tools	Electricity savings from MF customers	8.5 Gross GWh/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
Financial Solutions						
New Models	Gas savings from MF customers	0.33 Gross MM Therms/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
Indicators						
Number of MF participants in energy efficiency programs (Customers for single meters and buildings for master-metered)						

B. Third Party/Commercial Sector (Small and Medium Business (SMB))

40. What are SCE’s objectives and metrics for the third party programs?

C. Public Sector

41. How does “the number of customers participating in EE programs,” cited as the metric in row 2 of Table 31, help measure and verify permanent modifications to customer practices?

D. Codes and Standards (C&S)

42. Expanded Subprograms: Some metrics require more detail. For instance, page 239 of the amended business plan says the metric is "milestones achieved." What are the milestones and how are they selected?

E. Emerging Technologies (ET)

43. Questions concerning the tracking metrics listed at the end of SCE's business plan, Appendix K:
 - a. Does "# of adoptions into C&S" include both technologies that move from ET to C&S and technologies that move from ET through the portfolio into C&S? Or are both of these pathways into C&S going to be quantified separately?
 - b. Explain the methodology and attribution method behind "Gross first-year kWh and kW saved" in detail.
 - c. Does "(Desired) Estimated energy savings" refer to predicted energy savings (ex-ante) or realized energy savings (ex-post)? Explain.
 - d. What metric tracks the Emerging Technologies Program and Technology Priority Map alignment with state goals such as SB 350 and Zero Net Energy?
44. Define "technologies," how that definition is related to a project, and how "technologies" will be tracked when transferred into the portfolio as deemed and custom measures.
 - a. How will the metric be reported?
 - b. How does SCE propose to benchmark the reporting over time to develop success criteria in the future?
45. Provide a list of technologies that have moved from ET directly into code, with associated dates and kW and kWh savings.
46. Provide a list of technologies that have moved from ET into the portfolio, with associated dates and kW and kWh savings.
47. Provide a list of technologies that have moved from ET first into the portfolio, then into code, with associated dates and kW and kWh savings.

48. What metric could best quantify coordination with other technology development actors such as EPIC, CalSEED, and RocketFund (others identified in the 2012 Technology Development Actors Study)?¹
This could be based on the number of projects that are passed from one program to the other, and the number of projects that come into ET from other sources such as industry and direct application. What metric would best ensure that projects provide actionable data to complete work papers?

F. Workforce Education and Training

49. Each metric's short term target states, "Evaluation criteria defined and measurement to establish baseline begins."
a. Is more information available regarding these targets / this timeline?
b. Does this indicate that it could take up to three years before measurement begins?
50. How do these metrics compare to previously-used sector metrics? Will any previously-used sector metrics be continued?
51. For "percent offerings that align with market needs:"
a. How will "market needs" be defined?
b. Will there be a process in place to shift this definition as market needs change, and what will that look like?
52. For "percent offerings that reach disadvantaged workers:"
a. Is there a working definition of "reach" and "disadvantaged"?
b. Is this intended to measure the percent of offerings that target specifically disadvantaged workers, or derived on an individual participant basis, perhaps by participants listing zip codes at check-in?
53. Provide more information on how "market penetration" will be measured, or suggested approaches to measuring market penetration.

1

http://calmac.org/publications/CALMAC_STUDY_ID_SCE0333.01_ETP_Technology_Development_Actors_final_report_12-14-2012.pdf

VIII. Questions Applicable to Southern California Gas Company (SoCalGas)

A. Public Sector

54. None of the metrics listed in Table 9 appear to measure customer engagement with the Intelligent Outreach and Financial Incentives intervention strategies. How will SoCalGas track the success of these strategies?
55. Could an additional metric and associated short-, mid-, and long-term targets be used to address Desired Outcome 1 on Table 9 that will allow SoCalGas to track increased and improved adoption by previously participating customers, e.g., facilities that had previously received individual measures going on to perform deeper retrofits?

B. Emerging Technologies

56. What metric tracks the Emerging Technologies Program and Technology Priority Map alignment with state goals such as SB 350 and Zero Net Energy?
57. Please define "technologies," how that definition is related to a project, and how "technologies" will be tracked when transferred into the portfolio as deemed and custom measures.
58. How will the metric be reported?
59. How does SoCalGas propose to benchmark the reporting over time, to develop success criteria in the future?
60. Please provide a list of technologies that have moved from ET directly into code, with associated dates and therm savings.
61. Please provide a list of technologies that have moved from ET into the portfolio, with associated dates and therm savings.
62. Please provide a list of technologies that have moved from ET first into the portfolio, then into code, with associated dates and therm savings.

63. What metric could best quantify coordination with other technology development actors such as EPIC, CalSEED, and RocketFund (others identified in the 2012 Technology Development Actors Study)?²
This could be based on the number of projects that are passed from one to the other, and the number of projects that come into ET from other sources such as industry and direct application.

C. Workforce Education and Training (WE&T)

64. How does the number of training partners indicate how well the spectrum of entities involved in the workforce is covered?
65. Please provide more information on how percent increase targets were developed or determined.

IX. Questions Applicable to Southern California Regional Energy Network (SoCalREN)

A. Residential

66. Please complete the highlighted sections of this metric and effects table for the multi-family sector in SoCalREN's geographic area:

2

http://calmac.org/publications/CALMAC_STUDY_ID_SCE0333.01_ETP_Technology_Development_Actors_final_report_12-14-2012.pdf

GOAL: Increase savings from MF properties						
Intervention Strategies	Metric	Baseline	Metric Source	Short Term Target (1-3 years)	Mid Term Target (4-6 years)	Long Term Target (7-9 years)
Technical Assistance and Tools Financial Solutions New Models	Electricity savings from MF customers	8.5 Gross GWh/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
	Gas savings from MF customers	0.33 Gross MM Therms/year ^a	Net ex ante savings from program databases	10% increase Determine mid- and long-term goals ^b	TBD ^b	TBD ^b
Indicators						
Number of MF participants in energy efficiency programs (Customers for single meters and buildings for master-metered)						

67. Please provide Multi-Family specific data for Table 17 “SoCalREN Residential Sector Goals, Intervention Strategies and Metrics.”

[End of Attachment A.]