June 18, 2015

Advice Letters:

- PG&E 3567-G/4592-E
- SDG&E 2705-E/2361-G
- SCE 3179-E & SCG 4765-G

Subject: Energy Division Disposition on Above Referenced Advice Letters

Dear Ms. Allen and Mr. Cheng,

The following Advice Letters are approved with an effective date of March 25, 2015:

- Pacific, Gas, and Electric (PG&E) Advice Letter 3567-G/4592-E
- San Diego Gas and Electric (SDG&E) 2705-E/2361-G
- Southern California Edison (SCE) 3179-E
- Southern California Gas Company (SCG) 4765-G

The rationale for the disposition of these advice letters is provided below. While each utility filed a separate Advice Letter as listed above, they are identical in nature; PG&E has submitted all four Advice Letters on behalf of the four investor owned utilities identified above, hereafter identified as the “Joint Utilities”.

Background

The Joint Utilities were directed, in Decision (D.)12-11-015, to hire an expert consultant to develop a comprehensive approach for statewide workforce, education, and training (WE&T) strategies for their energy efficiency programs, in line with the goals of the Strategic Plan\(^1\) and the March 2011 WE&T Needs Assessment\(^2\). In May of 2014 the WE&T statewide recommendations were completed and publicized, hereafter described as the “Guidance Plan”\(^3\).

On February 23, 2015 the Joint Utilities, filed the four Advice Letters listed above in conformance with Decision (D.)14-10-046, which required the Joint Utilities to file a Tier 2 advice letter describing which of the WE&T recommendations included in the Guidance Plan they will initiate in 2015. The Joint Utilities were also directed via the same Decision to provide a Program Implementation Plan (PIP), and attach the Guidance Plan including a table of the recommendations with descriptions of which recommendations the Joint Utilities will implement in 2015. The utilities included these documents as Attachment 1 and 2 in their advice letter filing.

The Joint Utilities’ Advice Letters Were Protested

Three parties protested the Joint Utilities’ Advice Letters. On March 23, 2015 the Joint Utilities replied to protests. On April 14, 2015 one of the original protesting parties filed a response the Joint Utilities’ reply. A summary of each party’s protest, the Joint Utilities’ reply, and the response to the reply is summarized in Attachment A of this disposition letter.

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\(^{1}\) California Public Utilities Commission, *California Energy Efficiency Strategic Plan* (Updated 2011)


The Joint Utilities’ Advice Letters were Suspended to Allow Time for Review of Protests

The Joint Utilities’ Advice Letter was suspended on March 23rd to allow Energy Division staff time to review protests.

Energy Division Considered Party Protests in Light of Direction Provided to the Joint Utilities

D.14-10-046 provided guidance to the Joint Utilities for filing this Advice Letter. More specifically, the California Public Utilities Commission (CPUC) directed the utilities as such:

“The IOUs provide little information as to how they will incorporate the recommendations resulting from the expert entity they hired to “help design a comprehensive approach to the WE&T issues inherent in the EE portfolios” as directed by D.12-11-015. We direct the IOUs to file a Tier 3 (sic) AL to Energy Division within 120 days of the date this Decision mails. The AL should include a copy of the WE&T recommendations as an attachment, describe which recommendations the IOUs will initiate in 2015, and provide a program implementation plan.” (p. 102)

Energy Division (ED) Staff reviewed the Joint Utilities’ Advice Letter Filing and find that it is in conformance with the direction provided by the CPUC.

Staff acknowledges that the Advice Letter is in compliance with the CPUC’s direction and recognizes that parties brought up significant concerns with regard to the Joint Utilities’ WE&T strategies described in the Advice Letter generally. The protests provide comments that require higher level policy considerations that are not within the purview of Energy Division’s authority. We therefore dismiss, without prejudice, these protests with respect to their bearing on the disposition of the Joint Utilities’ Advice Letter. We recognize that parties’ protests and accompanying comments are now a matter of public record and may be referenced in future policy considerations of the utilities’ WE&T related program strategies. Specifically, these issues may be raised in Phase 3 of the current energy efficiency proceeding which will deal directly with program implementation policies.4

The Joint Utilities’ WE&T Advice Letter is Approved

Energy Division reviewed the Joint Utilities’ Advice Letter and related party protests and, by this disposition, approves the Advice Letters as identified above.

The Joint Utilities’ Advice Letters; PG&E 3567-G/4592-E, SDG&E 2705-E/2361-G, SCE 3179-E, and SCG 4765-G are approved with an effective date of March 25, 2015.

Sincerely,

Edward Randolph
Director, Energy Division

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ATTACHMENT A

Summary of Protests to the Joint Investor Owned Utilities’ (IOU) Advice Letter (AL) for 2015 Workforce, Education & Training Activities (with IOU response as sub-bullets)

**National Association of Energy Service Companies (NAESCO) Protest**

- Opposes Building Performance Institute (BPI) accreditation for Advanced Home Upgrade projects because it will increase costs without proof of effectiveness
  - The IOUs partially adopt BPI certification requirements by maintaining the current program requirement of at least one BPI certified profession on staff. Currently in place for Advance Home Upgrade Program
- Concerned that the IOUs Heating Ventilation & Air Conditioning (HVAC) Quality Installation / Quality Maintenance requirements will exclude trade school programs and other nationally accredited training programs
  - The AL does not exclude existing Industry recognized certifications or training. The language in the AL is intended to be inclusive of all existing quality training pathways.
- Suggests charging fees for and broadcasting pre-recorded training classes may result in exclusion of small businesses from participating in energy center trainings and/or reduce the quality of trainings offered
  - Broadcasting training over the internet is becoming common practice. The IOUs do not intend to charge fees for all their classes but will assess this practice on a case by case basis based on impact on participation and cost-effectiveness.
- Concerned that establishing prevailing wage and targeted hiring practices will increase labor costs for some energy efficiency (EE) programs and reduce overall portfolio cost-effectiveness
  - The IOUs are currently conducting a feasibility analysis that will provide data on need, positive, and negative impacts of this practice would have on specific programs
- Disagrees with IOU participation in confidential online quality job reporting tools until the CPUC establishes a legal framework for this action
  - The IOUs are currently conducting a feasibility analysis that will provide data on need, positive, and negative impacts of this practice would have on specific programs

**Greenlining Protest**

- States that the AL fails to address key recommendations on the inclusion of disadvantaged workers.
  - The IOUs are hiring a consultant to help develop a statewide approach that is responsive to the intent of recommendations and is compliant with regulatory, financial, legal, and other requirements.
- Concerned that the IOU proposed 2015 PIP Addendum does not identify incumbent workers and excludes Energy Savings Assistance (ESA) Program workers in the HVAC Sector Strategy activities.
  - The HVAC sector strategy will target incumbent workers and is designed to be inclusive. ESA program workers are welcome to participate.
- States that the WE&T PIP addendum does not contain actual relevant details of current and future activities.
  - The IOUs are in compliance with the directives included in the guidance decision to describe activities they plan to “initiate” in 2015. Currently the IOUs are waiting for the completion of several studies to consider broader implementation of feasible Don Vial Center (DVC) needs assessment recommendations.
- Disagrees with the IOU’s stakeholder engagement proposal
  - The IOUs will hold future stakeholder engagement forums similar to the January 2015 forum in addition to quarterly WE&T taskforce meeting (not really happening)
• Concerned that activities identified as “Explore in 2016 and Beyond” are not included in the Program Implementation Plan (PIP) Addendum
  • Ordering Paragraph 17 of the guidance decision ordered an AL to include a PIP that identifies WE&T activities for 2015 only.

**Labor Management Cooperation Committee’s (LMCC) Protest**

• Indicates that the AL fails to meaningfully implement DVC recommendations and is inconsistent with the Guidance Plan recommendations, particularly in the delayed implementation of the “demand-pull” workforce quality incentives for advanced lighting controls and other EE construction and installation projects.
• Claims that the IOU’s efforts to complete current studies is unnecessary to immediately adopt requirements for the CALCTP certification for contractors working on rate-payer subsidized advanced lighting control projects
  • The IOUs are not calling for additional studies to delay implementation of DNV recommendations. These studies pre-existed and were identified as part of the PCG process (IOUs and CPUC evaluation) staff as needed to help inform future WE&T efforts.

**LMCC Response to Joint Utilities’ Reply**

LMCC protested the IOU’s AL because it described a need to complete three existing studies rather than achieve the following DVC recommendations:

• Meaningfully implement the DVC Guidance Plan recommendations for initiating “demand-pull” workforce quality incentives for advanced lighting controls.
• Require California Advanced Lighting Controls Training certification for contractors installing advance lighting measures within utility EE programs.

LMCC’s Response provided a critique of the three studies being conducted that the Joint Utilities’ claim as needed to inform future utility WE&T activities:

*California Advanced Lighting Control Training Program (CALCTP) and Lighting Manufacturer Training Assessment:* The utilities state this study is needed to demonstrate the effectiveness of CALCTP training relative to what is available via lighting manufacturers and that the CALCTP training is more robust than available manufacturer trainings. LMCC disagrees with the need for this study because:

• No support or explanation is provided for why CALCTP must be demonstrated as more robust than existing trainings.
• The study is not needed because the DVC recommendations do not include replacing mandatory manufacturer training with CALCTP training and it is already clear that CALCTP training is more robust and comprehensive than narrower manufacture training focused on only specific products.
• The lack of enforceable training requirements has resulted in substantial lost energy savings as stated in the DVC Guidance Plan and CALCTP certification would address this energy savings gap.
• This study is only useful in determining if manufacturer training is sufficient for their own products and to determine if manufacturer training is comparable to CALCTP training for particular installations.

*WE&T Skill Standards for IOU Resource Program Study by CPUC and Opinion Dynamics Corporation:* The IOUs and CPUC state that this study is needed to provide more concrete direction for particular recommendations that refer to the concept of job quality in order to provide a common definition of job quality needed to consider recommendations for job quality requirements such as prevailing wage, etc.). LMCC states they disagree with the need for this study for the following reasons:
• The IOUs are mixing concerns over quality installations with creation of quality job. CALCTP certification would promote installations in a manner that returns greater energy savings.

• The IOUs claim the study is needed to gauge effect of job quality requirements on making the program exclusive rather than inclusive; LMCC states, “Contractors whose workers do not have demonstrable skills and training in advanced lighting control installations may claim requirement is exclusive but this type of exclusivity is not what the Commission’s goals WE&T goals for inclusion are intending to address.”

• LMCC supports evaluation of IOU EE programs to determine if they are supporting the creation of quality jobs and are consistent with the CPUC’s WE&T inclusion objectives but this should be an ongoing evaluation and not a prerequisite for CALCTP certification objectives.

SCE and SDG&E Advance Lighting and Control Systems Pilot Program: The IOUs state this study is needed to assure data-driven policy decisions. LMCC states they disagree with the need for this study for the following reasons:

• DVC’s recommendation to require CLCTP certification is data driven based on case studies, qualitative evidence, and prior studies.

• This study is duplicative of past studies and unlikely to provide any additional information critical to implementing CALCTP requirements. The only additional information this study seems to provide is a comparative evaluation of lighting control equipment installation by contractors who have received training from the manufacturer of that equipment.”

LMCC concludes its response to the IOU protest reply by rejecting the IOU’s claim that NAESCO’s protest supports delaying implementation of mandatory certification requirements for EE programs generally. LMCC asserts that NAESCO objected only to requiring BPI certification requirements for Energy Upgrade California Advanced Home Upgrade Projects and establishing prevailing wages and targeted hire goals on the grounds of increased program costs.
February 23, 2015

Advice 3567-G/4592-E
(Pacific Gas and Electric Company – U 39-M)

Advice 2705-E/2361-G
(San Diego Gas & Electric Company – U 902-M)

Advice 3179-E
(Southern California Edison Company – U 338-E)

Advice 4765-G
(Southern California Gas Company – U 904-G)

Public Utilities Commission of the State of California


Pacific Gas and Electric Company (PG&E), on behalf of itself, San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and Southern California Gas Company (SoCalGas), together the Investor Owned Utilities (IOUs), submit for filing this Tier 2 Advice Letter in compliance with Commission Decision (D.) 14-10-046, Ordering Paragraph (OP) 17, to describe the Statewide Energy Efficiency (EE) Workforce Education and Training (WE&T) consultant recommendations (Recommendations) that the IOUs will initiate in 2015 and to provide a program implementation plan (PIP).

Attachment 1 is a Crosswalk that lists the Recommendations and indicates which Recommendations the IOU will initiate in 2015, as discussed below.¹

Attachment 2 contains the Statewide WE&T PIP Addendum describing the work that the IOUs have completed, have initiated in 2015, or will initiate in 2015 in response to the Recommendations.

¹ The Recommendations have been re-numbered in the Crosswalk attachment for ease of reference in this Advice Letter.
Background

On September 18, 2008, the Commission adopted California’s first Long-Term Energy Efficiency Strategic Plan (Strategic Plan). The Strategic Plan called for a Needs Assessment for WE&T in order to “more thoroughly define, initiate and drive long-term WE&T development and strategic planning” (pg 75). In November 2009, the IOUs contracted with the University of California, Berkeley, now the Donald Vial Center for Labor in the Green Economy (DVC), to complete the Needs Assessment study. The study was completed in March 2011.

In D.12-11-015, Decision Approving 2013-2014 Energy Efficiency Programs and Budgets, the IOUs were ordered to hire an expert entity to develop a comprehensive approach to WE&T for the EE programs, in line with the goals in the Strategic Plan and the Needs Assessment recommendations. Through a competitive solicitation process and with the help of a network of stakeholders, the IOUs issued a Request for Proposal for a consultant to develop that comprehensive approach. On May 30, 2013, the contract was awarded to DVC. On May 2, 2014, DVC finalized its recommendations in the document Workforce Issues and Energy Efficiency Programs: A Plan for California’s Utilities (Guidance Plan).

In D.14-10-046, Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets, the IOUs were directed to file a Tier 2 advice letter describing which of the Recommendations would be initiated in 2015, provide a PIP, and attach the Guidance Plan. In Decision 14-10-046, the Commission approved funding for WE&T and other EE programs for program year 2015 based on the IOUs’ approved portfolio budgets from 2013-2014.

On January 16, 2015, the IOUs hosted a Stakeholder Engagement Forum to review and solicit feedback on the IOUs’ 2015 efforts regarding the Recommendations. As a result of that feedback, the IOUs modified and clarified their approach on a number of Recommendations, including defining disadvantaged workers, work quality standards, and responsible contractor policies.

Due to the size of DVC’s Guidance Plan, the IOUs are including the following link for parties to access the full Guidance Plan, rather than attaching a copy to this advice letter:

2 OP 34.
3 Deadline of March 30, 2013 to hire a consultant or expert entity was extended to May 31, 2013, by letter from the Commission’s Executive Director dated March 29, 2013.
4 OP 17. The IOUs are complying with OP 17 in filing this as a Tier 2 Advice Letter. The Commission issued D.15-01-002 on January 9, 2015, correcting the text on p. 102 stating that the IOUs are to file a Tier 2 rather than a Tier 3 advice letter (p. 9).
IOUs’ Proposal

The IOUs agree with many of the Recommendations as proposed. The IOU WE&T team met with several external stakeholders, internal stakeholders, and EE Programs staff to discuss the details of implementing the Recommendations. The following outlines where the IOUs see opportunities and how to best move forward on the Recommendations in 2015 and beyond.

IOUs’ Approach

As with any plan of significant scope and impact, many steps are required to achieve quality results. These steps include, but are not limited to, conducting market research, data collection, data review, stakeholder engagement, establishing working groups, soliciting Requests for Proposals (RFPs), awarding contracts, evaluating current efforts, and reviewing funding sources.

In some cases, the upfront work leading to implementation of the project or Recommendation is relatively simple and short in duration, while in other cases, it can be very lengthy, yet critical to the success of the project. The IOUs clarify that the initiation activities in 2015 may not result in full adoption of projects based on limitations and/or required steps toward full adoption. Moreover, as the IOUs receive new information subsequent to the initiation of data collection for specific Recommendations, the IOUs may recommend to adopt, partially adopt, or not move forward with such Recommendations.

The IOUs selected the Recommendations to initiate in 2015 based on the considerations listed below. These considerations are based on IOU expertise and familiarity in business management, energy savings, program administration and regulatory requirements for its EE portfolio, to complement DVC’s expertise in workforce development.

Regulatory Requirements

The IOUs are accountable to the Commission and must work within the parameters set by the Commission. Those parameters include specific goals, objectives, success metrics, and directives to make EE the IOUs’ highest priority procurement resource while ensuring a cost-effective portfolio. Any new activity must align with such parameters and be within the scope of the IOUs’ authorized activities.

Alignment with Current Activities and External Organizations

Many of the Recommendations align with current IOU activities and are being implemented to some degree. IOUs are soliciting stakeholder input to assist in determining how some of the Recommendations align across the IOUs’ and stakeholders’ goals and objectives. For example, the IOUs are currently working with organizations that support low-income/disadvantaged communities, whose
primary mission may not be delivering energy savings. The IOUs are also working with the Division of Apprenticeship Standards (DAS) to identify apprenticeship tracks and programs that best align with EE program objectives.

Marketplace
As EE Program administrators, the IOUs must evaluate program changes within the larger context of the marketplace, including impact on customer participation and the availability of contractors. For example, should there be an exception policy for a given requirement for small scale contractors given market conditions? Are there a sufficient number of contractors certified to do work and deliver on the energy savings if a certification requirement is created?

Financial
The IOUs are expected to deliver portfolio results and must follow Commission directives, including, but not limited to, assigned goal objectives, stakeholder engagement, and cost-effectiveness. Any Recommendation with limited data may have financial impacts and require investigation to plan for adoption or implementation.

Contracting
There are several contracting considerations that the IOUs must take into account, including contract status (e.g., many contracts are already in place with defined budgets, limiting the possibility of immediate changes), impact to administrative costs, and the appropriate contracting method (RFP or direct award) based on each IOU's sourcing policies.

Legal
There may be legal issues that need to be considered when evaluating the implementation of a Recommendation. For example, employees are not required by law to disclose their race and ethnicity to their employer, but may do so voluntarily. Further, employers may be precluded from applicable privacy laws from disclosing information regarding their employees to third parties, without their employees’ approval.5

Prioritizing Recommendations

The IOUs organized the Recommendations into the following four categories, and as indicated in Attachment 1:

5 For example, Article 1, Section 1 of the California Constitution recognizes a right to privacy. Case law and the California Labor Code have extended the right to privacy to employment records and data.
• **Current Activity and Initiate in 2015**
  These are activities that have already been implemented or will be initiated by the IOUs in 2015. Activities initiated in 2015 may not result in full adoption given limitations, issues identified through data collection, and required steps toward full adoption. Moreover, as the IOUs receive new information subsequent to the initiation of data collection for specific Recommendations, the IOUs may recommend to adopt, partially adopt, or not move forward with such Recommendations. The IOUs outline specific actions for these Recommendations in the 2015 WE&T PIP Addendum shown in Attachment 2.

• **Recommendations Requiring Regulatory Guidance**
  Full adoption of these Recommendations must be done in collaboration with other agencies as described more fully below.

• **Partial Adoption**
  The IOUs recommend revisions to these Recommendations as described more fully below.

• **Explore in 2016 or Beyond**
  These Recommendations will be evaluated and considered for implementation in future program years. IOUs will engage with WE&T stakeholders to present their plans for the remaining Recommendations based in part on the results of activities initiated in 2015.

**1. Current Activity and Initiate in 2015**

In compliance with D.14-10-046, the IOUs identified Recommendations that include activities already implemented within the current WE&T Program, as well as those Recommendations that could be initiated and possibly incorporated with minor expansion or modifications within the approved 2015 WE&T Program budget. The WE&T team also identified Recommendations that were priority issues for the WE&T Program, based on the considerations discussed above. These include:

• Adopting skill certification requirements for advanced lighting controls and HVAC Quality Installation and Quality Maintenance, and other available skill standards and certification guidance.
• Addressing EE skills building and fund training programs that connect disadvantaged workers to job and career pathways in EE.
• Investigating the demand for entry-level EE workers, career advancement paths, and regional needs to impact energy savings goals and inclusion goals.
• Engage a Peer Review Group of key workforce stakeholders and experts to advise the IOUs on the development of the skills-building portfolio in coordination with Phase II of the EE Rulemaking (R.) 13-11-005.
• Issue an RFP for projects to enhance EE content in the core curriculum for an accredited degree program for architects and engineers.

• Carry out a program to enhance EE skills for the key trades in the state certified apprenticeship system in partnership with the Community College Chancellor’s Office of Apprenticeship and the California Division of Apprenticeship Standards.

• Modify the Centergies training programs to develop market building offerings

• Hire a consultant to advise regarding the potential development of a workforce inclusion program to broaden access to living wage jobs and career pathways in EE for workers from disadvantaged communities.

• Evaluate the collection of data on job quality, workforce diversity and other measures that may be used to create a baseline to measure progress over time in developing a workforce inclusion program.

• Review and select from existing indicators of work quality, job quality and inclusion to help plan, implement and evaluate workforce initiatives and require certain data to be collected from contractors and subcontractors participating in select IOU EE programs.

The full list of Recommendations to be initiated in 2015 are identified in Attachment 1. Attachment 1 also includes a crosswalk to the section in the PIP where each of the identified Recommendations is addressed. The implementation plan for these Recommendations are outlined in Attachment 2 - 2015 WE&T PIP Addendum.

Upon approval of this advice letter, the IOUs will submit the 2015 WE&T PIP Addendum (Attachment 2) through the Commission’s PIP Addendum Process.

2. Recommendations Requiring Regulatory Guidance

The IOUs identified, in Attachment 1, the following Recommendations that require IOU collaboration with the Commission or other entities in order to implement.

Recommendation 1.3.2 - In workpapers, document contractor and worker competencies needed to meet savings assumptions used to estimate ex ante savings.

The IOUs work in conjunction with Commission Staff in development of workpapers. The IOUs will collaborate with Commission Staff and bring this Recommendation to the California Technical Forum for consideration within the parameters of their framework.

Additionally, the Commission Staff is currently managing studies that will provide guidance on how to approach this Recommendation. Opinion Dynamics Corporation (ODC) is conducting a multi-phase study titled “Statewide Skill
Standards for IOU Resource Programs Evaluation." The IOUs are engaged with and fully supportive of these efforts.

Recommendation 3.2.1 Adopt a specific definition of “disadvantaged worker” based on a combination of residence in a high unemployment zip code and/or meeting specific criteria of disadvantaged.

Feedback provided during the WE&T Stakeholder Engagement Forum suggested that the IOUs use existing definitions that are used by California agencies, including the California Workforce Investment Board (CWIB). The IOUs researched this definition and determined that the CWIB allows local and regional WIBs to adopt regionally-appropriate definitions. In general, the CWIB refers to the Federal Workforce Investment Agencies standards around dislocated workers.6

The IOUs gathered several definitions of “disadvantaged” from local and state government workforce agencies as well as from non-profit organizations who serve disadvantaged communities. “Disadvantaged” is typically defined to meet the mission of the organization, creating in some cases differences across departments in a single agency. While the final definition of “disadvantaged” worker is under the purview of the Commission, the IOUs propose the following working definition of disadvantaged worker for the purposes of evaluating WE&T programs:

An individual who is a resident of a high unemployment ZIP code:

Where the unemployment rate is either at least 150 percent of the median unemployment rate for the county; or at least 150 percent of the median unemployment rate for the state.

The IOUs propose to continue to work in 2015 to facilitate an official definition that may include income by ZIP code. Details are outlined in the 2015 WE&T PIP Addendum (Attachment 2).

Recommendation 4.3.3 Integrate and address inclusion as part of program reviews.

The Commission’s current review of IOUs programs do not address inclusion. Defining Program Review requirements is the purview of the Commission. The

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6 http://www.cwib.ca.gov/faq.htm#17: 17) What is the definition of an economically disadvantaged adult? The term "economically disadvantaged adult" was a category under the Job Training Partnership Act (JTPA) that no longer applies under WIA. WIA adult and dislocated worker programs do not have a means test for income; only youth programs use income as an eligibility criterion. For more information on WIA eligibility requirements, see the, Federal Register for August 11, 2000 Sections. 663.110 - 663.310 (adults and dislocated workers) and Sec. 664.200 (youth).
IOUs are willing to evaluate the concept of an inclusion policy to be applied to programs during 2015 as noted in Section 1, above. Once this work is completed and a proposal can be prepared, the IOUs propose to next engage and provide feedback to the Commission in addressing how this Recommendation should be implemented, including whether the cost effectiveness models or metrics will need to be revised to take into account inclusion.

3. Partial Adoption

The IOUs are currently implementing significant portions of two of the Recommendations, and propose revisions, as outlined below, that would allow for full adoption of the Recommendations.

**Responsible Contractor Policy**

**Recommendation 1.1 - Adopt a responsible contractor policy for use across all resource programs where contractors work directly with the IOU or where a customer receives an incentive for equipment or service.**

1.1.1 Require and verify that all firms (and subcontractors) working on ratepayer-subsidized projects meet pre-established, clearly defined minimum standards relating to contractor responsibility, including: all applicable licenses, bonding and insurance (including workers’ compensation), wage and labor law compliance, no OSHA violations, and permitting that includes passing code inspections.

The IOUs propose the following modification to this Recommendation:

**Revised Recommendation 1.1 - Adopt a responsible contractor policy for use across all resource programs where contractors work directly with the IOU.**

1.1.1 Require that all ratepayer-subsidized projects meet pre-established, clearly defined minimum standards relating to contractor responsibility, including: all applicable licenses, bonding and insurance (including workers’ compensation), wage and labor law compliance, OSHA compliance, and permitting that includes passing code inspections.

The IOUs propose the revision to the Recommendation to remove the requirement that the IOUs establish contractor policies for all situations where the customer receives an incentive for equipment or service and to remove the requirement for IOUs to verify that all firms (and subcontractors) working on ratepayer subsidized programs meet pre-established standards, including applicable laws.

Under California Public Utilities Code Section 399.4, the IOUs require that recipients of IOU program rebates (contractors or customers) certify that installations comply with any applicable permitting requirements and, if a contractor performed the
installation or improvement, that the contractor holds the appropriate license for the work performed.

The IOUs offer incentives at many points in the stream of commerce. Where the IOUs offer incentives to manufacturers to lower the cost of energy savings technologies at the point of sale, it is impractical for the IOUs to certify that the consumer is installing products in compliance with a responsible contractor policy and such certification is not required by Section 399.4. For example, for residential high efficiency light bulbs, the IOUs cannot certify that customers purchasing rebated lightbulbs from a local retailer install those lightbulbs in compliance with a responsible contractor policy, since the IOUs do not have a direct relationship with the individual purchasing those lightbulbs.

The IOU Codes and Standards Program assists the proper installation of energy efficiency measures by bodies with the appropriate authority and responsibility. The IOUs are committed to ensuring the proper installation of EE measures. For example, the IOUs' Statewide Codes and Standards Program team has worked extensively with the California Energy Commission in establishing the third party building commissioning protocols incorporated into the 2013 Title 24 Section 6 Energy Code.

It is not feasible for the IOUs to verify the work of all firms working on EE projects. “Verify” is a legal term of art, invoking a specific legal standard. This standard would likely add significant administrative and oversight costs as well as liability to the EE programs. Additionally, the IOUs are not the appropriate entity to enforce existing legal requirements, such as permitting, and OSHA standards; enforcement agencies already exist to enforce compliance with these legal requirements.

Building Performance Institute (BPI) Accreditation

*Recommendation 1.2 - Adopt specific skills certification requirements in conjunction with quality assessment activities for contractors and technicians working on ratepayer-subsidized EE projects.*

1.2.2 Energy Upgrade California Whole House [Energy Upgrade California® Home Upgrade Program]: Require BPI firm accreditation for all Advanced Path Whole House projects.

The IOUs propose the following modification to this Recommendation:

*Revised Recommendation 1.2 - Adopt specific skills certification requirements in conjunction with quality assessment activities for contractors and technicians working on ratepayer-subsidized EE projects.*
1.2.2 Energy Upgrade California® Home Upgrade Program: Require at least one BPI Certified Professional contractor on the Project Team for all Advanced Path projects.

The IOUs propose the revision to this Recommendation to clarify that one BPI Certified Professional contractor is required for all Advanced Path projects. This is consistent with the IOUs’ current administration of the Statewide Energy Upgrade California® Home Upgrade Program requiring all Advanced Path projects include at least one BPI Certified Professional. This program also requires all certification testing to be performed by a BPI Certified Professional.

In May 2014, BPI replaced its “firm accreditation” known as Accredited Contracting Company program (ACC) with the GoldStar Contractor (GSC) program. The IOUs’ current BPI Certified Professional requirement meets the energy efficiency savings and building science certification component of the GoldStar Contractor Tier 1 Standard. The IOUs’ current requirements assure that Home Upgrade participants receive quality technical advice regarding energy efficiency.

Many of the additional requirements of the GSC program center principally around business practices – not energy efficiency. Currently there are 10 GoldStar Contractors Statewide. GoldStar firm accreditation should be a contractor’s business decision and not an EE program participation requirement. As the market situation surrounding GoldStar Accreditation changes the IOUs are willing to reconsider the proposed Partial Adoption of this Recommendation.

4. Recommendations for Consideration in 2016 and Beyond

In 2016, the IOUs will engage with WE&T stakeholders to present their plans for the remaining Recommendations, identified in Attachment 1. For example, a current study of skill standards and requirements which includes additional examination of job and work quality recommendations will inform further action in later years.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than March 16, 2015, which is 21\textsuperscript{7} days after the date of this filing.

Protests must be submitted to:

Commission Energy Division  
ED Tariff Unit  
505 Van Ness Avenue, 4th Floor  
San Francisco, California 94102  
Facsimile: (415) 703-2200

\textsuperscript{7} 20 days falls on a Sunday.
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E and other IOUs either via E-mail or U.S. mail (and by facsimile, if possible) at the addresses shown below on the same date it is mailed or delivered to the Commission:

For PG&E:
Meredith Allen  
Senior Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, California 94177  
Facsimile: (415) 973-7226  
E-mail: PGETariffs@pge.com

For SDG&E:
Attn: Megan Caulson  
Regulatory Tariff Manager  
9305 Lightwave Avenue, SD 1190  
San Diego, CA 92123  
E-mail: MCaulson@semprautilities.com

For SCE:
Russell G. Worden  
Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: AdviceTariffManager@sce.com

Michael R. Hoover  
Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
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Facsimile: (415) 929-5544  
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For SoCalGas:
Sid Newsom  
Tariff Manager – GT14D6  
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Facsimile: (213) 244-4957  
E-mail: snewsom@semprautilities.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

**Effective Date**

The IOUs request that this Tier 2 Advice Letter be approved on regular notice with the effective date of March 25, 2015, which is 30 days from the filing date.

**Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.13-11-005. Each IOU will separately serve their General Order 96-B service lists. Address changes to the General Order 96-B service lists should be directed to the IOUs at the email addresses above.

For changes to any other service list, please contact the Commission’s Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PG&E at PGETariffs@pge.com and to the other IOUs at the addresses listed above. PG&E’s advice letter filings can also be accessed electronically at: http://www.pge.com/tariffs.

/S/  
Meredith Allen  
Senior Director, Regulatory Relations

cc: Service List R.13-11-005

Attachment 1 – Guidance Plan Recommendation Crosswalk  
Attachment 2 – 2015 WE&T PIP Addendum
Pacific Gas and Electric Company (ID U39 M)

**Utility type:**
- ☑ ELC
- ☑ GAS
- ☐ PLC
- ☐ HEAT
- ☐ WATER

**Contact Person:** Kingsley Cheng

**Phone #:** (415) 973-5265

**E-mail:** k2c0@pge.com and PGETariffs@pge.com

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**EXPLANATION OF UTILITY TYPE**

<table>
<thead>
<tr>
<th>ELC = Electric</th>
<th>GAS = Gas</th>
<th>PLC = Pipeline</th>
<th>HEAT = Heat</th>
<th>WATER = Water</th>
</tr>
</thead>
</table>

**Advice Letter (AL) #:** Advice 3567-G/4592-E


**Keywords (choose from CPUC listing):** Compliance

**AL filing type:** ☑ One-Time

**Tier:** 2

**Is AL requesting confidential treatment?** If so, what information is the utility seeking confidential treatment for: No

**Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information:**

---

**Resolution Required?** ☑ Yes

**Requested effective date:** March 25, 2015

**Estimated system annual revenue effect (%):** N/A

**Estimated system average rate effect (%):** N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

**Tariff schedules affected:** N/A

**Service affected and changes proposed:** N/A

**Pending advice letters that revise the same tariff sheets:** N/A

---

Protests, dispositions, and all other correspondence regarding this AL are due no later than 21 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

**California Public Utilities Commission**
**Energy Division**
EDTariff Unit
505 Van Ness Ave., 4th Flr.
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

**Pacific Gas and Electric Company**
**Attn: Meredith Allen**
**Senior Director, Regulatory Relations**
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

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1 The 20-day protest period concludes on a weekend, therefore, PG&E is moving this date to the following business day.
Attachment 1

Guidance Plan Recommendation Crosswalk
<table>
<thead>
<tr>
<th>General Recommendation</th>
<th>Specific Recommendation</th>
<th>IOU Proposal</th>
<th>PIP Addendum Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 RECOMMENDATIONS: LABOR DEMAND STRATEGIES FOR ENERGY SAVINGS</strong></td>
<td>1.1. Adopt a responsible contractor policy for use across all resource programs where contractors work directly with the IOU or where a customer receives an incentive for equipment or service.</td>
<td>1.1. Require and verify that all firms (and subcontractors) working on ratepayer-subsidized projects meet pre-established, clearly defined minimum standards relating to contractor responsibility, including: all applicable licenses, bonding and insurance (including workers’ compensation), wage and labor law compliance, no OSHA violations, and permitting that includes passing code inspections.</td>
<td>Partial Adoption</td>
</tr>
<tr>
<td></td>
<td><strong>Revised Recommendation:</strong> 1.1. Require that all ratepayer-subsidized projects meet pre-established, clearly defined minimum standards relating to contractor responsibility, including: all applicable licenses, bonding and insurance (including workers’ compensation), wage and labor law compliance, OSHA compliance, and permitting that includes passing code inspections.</td>
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<td></td>
<td>1.1.2 Pre-qualify all firms (and their subcontractors) meeting any of the following conditions: (1) have contract(s) with the IOU greater than $1,000,000; (2) implement individual projects with total costs greater than $100,000; or (3) participate in programs for which contractor pre-approval is required (e.g., HVAC QI/QM, EUC). In addition to the baseline requirements (A.1), pre-qualify firms based on:</td>
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<td>Explore in 2016+</td>
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<td></td>
<td>· History of performance requirement: (a) documented history of full compliance with state, health, safety, and work standards; and (b) references from five different clients for five similar past projects.</td>
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<td></td>
<td>· Skilled workforce requirement: 60 percent of jobsite workforce is comprised of journey persons or apprentices from a registered apprenticeship program in California, or other proof of skilled workforce.</td>
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<td></td>
<td>· OSHA requirement: 60 percent of jobsite workers are OSHA 10-hour General Industry Safety and Health Certified and at least one jobsite worker is OSHA 30-hour General Industry Safety and Health Certified.</td>
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<tr>
<td>1.2. Adopt specific skills certification requirements in conjunction with quality</td>
<td>1.2.1 <em>Advanced lighting controls systems:</em> Require California Advanced Lighting Controls Training Program (CALCTP) firm certification for contractors on all projects.</td>
<td></td>
<td>Current Activity/Initiate 2015</td>
</tr>
<tr>
<td>General Recommendation</td>
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<tr>
<td>assessment activities (see Exhibit 2.2 Decision Tree) for contractors and technicians working on ratepayer-subsidized EE projects.</td>
<td>1.2.2 Energy Upgrade California Whole House[ Energy Upgrade California ® Home Upgrade Program]: Require BPI firm accreditation for all Advanced Path Whole House projects. <strong>Revised Recommendation:</strong> 1.2.2 Energy Upgrade California ® Home Upgrade Program Require at least one BPI Certified Professional contractor on staff for all Advanced Path projects.</td>
<td>Partial Adoption</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1.2.3 HVAC Quality Installation and Quality Maintenance: Require graduation from a state-certified apprenticeship program, a 2-year degree in HVAC, or proof of comparable training and experience for jobsite HVAC technicians.</td>
<td></td>
<td>Centergies 2</td>
</tr>
<tr>
<td></td>
<td>1.2.4 Utilize US Department of Energy or the state of California skills standard and certification guidance, when/if available, to determine future skills standards and certifications for EE programs.</td>
<td>Current Activity/Initiate 2015</td>
<td>Centergies 3</td>
</tr>
<tr>
<td>1.3 Implement changes in the resource program design, planning, implementation, and evaluation process to create stronger incentives for the IOUs to promote work quality.</td>
<td>1.3.1 Document the competencies of contractors and workers in field tests for new EE measures.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1.3.2 In work papers, document contractor and worker competencies needed to meet savings assumptions used to estimate ex ante savings.</td>
<td>Require Regulatory Guidance</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1.3.3 In Program Implementation Plans (PIPs), describe contractor and worker competencies required for successful program implementation, and provide an explanation of how program design will ensure that participating contractors and workers meet competency requirements.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1.3.4 Improve quality assessment processes. Assign highly skilled technicians or certified inspectors to inspect EE measures to see if they meet technical specifications (see Exhibit 2.2 Decision Tree).</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1.3.5 Track the results of inspections by both contractor and measure.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### 2 RECOMMENDATIONS: LABOR SUPPLY STRATEGIES FOR ENERGY SAVINGS AND WORKFORCE INCLUSION

<table>
<thead>
<tr>
<th>General Recommendation</th>
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<tr>
<td>2.1 Create a dedicated skills-building portfolio targeting both energy savings and workforce inclusion goals.</td>
<td>2.1.1 Implement the skills-building portfolio via two RFPs: one for the goal of energy savings and one for the goal of inclusion. The RFPs should be based on a sector strategy and career pathways framework, and partnerships with core training and education institutions.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 3 Connections 1</td>
</tr>
<tr>
<td>2.1.1.1 Administer RFP #1 to fund projects addressing EE skills-building. Projects to be funded include:</td>
<td>2.1.1.1.1 Sector strategies targeted at incumbent workers, built on regional partnerships and engagement of multiple employers. Allowable activities include curriculum and certification development, instructor training, and piloting of training for incumbent workers.</td>
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<tr>
<td>2.1.1.1.2 Collaborations with core education and training institutions (high schools, community colleges, state-certified apprenticeships, 4-year colleges and universities). Allowable activities include curriculum and certification development, instructor training, and piloting of new courses.</td>
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<tr>
<td>2.1.2. Adopt a priority setting process based on needs and opportunities to impact energy savings and inclusion goals.</td>
<td>2.1.2.1 For energy savings, the process should identify priority occupations, skills gaps, skills standards and certifications, and intervention strategies, and prioritize interventions by energy savings potential and scale of impact.</td>
<td>Explore in 2016+</td>
<td></td>
</tr>
<tr>
<td>2.1.2.2 For workforce inclusion, the process should identify the demand for entry-level EE workers, career advancement paths, and regional need, and prioritize programs with strong job placement track records.</td>
<td></td>
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<td>Planning 4</td>
</tr>
<tr>
<td>2.1.2.2.1 Inclusion sector strategies that leverage Workforce Investment Board (WIB) and other resources.</td>
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<td>2.1.2.2.2 9-12 educational partnerships with a career-technical and career development focus.</td>
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<tr>
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<tr>
<td>2.2 Create a dedicated skills-building portfolio targeting both energy savings and workforce inclusion goals.</td>
<td>2.2.1 Engage a Peer Review Group of key workforce stakeholders and experts to advise the IOUs on the development of the skills-building portfolio. 2.2.1.1 The role of the Peer Review Group (PRG) should be to:  · Participate in the design of the RFPs for the skills-building portfolio by identifying guiding principles and criteria for project selection;  · Provide input on appropriate metrics of success;  · Participate in review committee to select winning proposals;  · Advise the IOUs on the selection of staff or consultants to administer the RFPs;  · Provide ongoing input and feedback as needed throughout program implementation; and  · Offer feedback on program effectiveness upon completion. 2.2.1.2. Staff and/or consultants should have appropriate expertise, experience and relationships to administer the RFPs. Their role should be to:  · Draft RFPs based on the PRG’s guidance and priority-setting;  · Propose specific skills-building priorities for review by the PRG;  · Oversee the administration and review of the RFPs; and  · Support implementation, including helping to convene regional training partnerships, identifying opportunities to leverage other efforts, providing technical assistance, and carrying out field reviews.</td>
<td>Current Activity/Initiate 2015 for 2.2.1; Explore in 2016+ 2.2.1.1</td>
<td>Planning 2</td>
</tr>
<tr>
<td>2.2.2 Fund three phase-one programs that can begin in 2015.</td>
<td>2.2.2.1 Program #1: Issue an RFP for projects to enhance EE content in the core curricula for accredited degree programs for architects and engineers. 2.2.2.2 Program #2: Carry out a program to enhance and verify EE skills for the key trades in the state-certified apprenticeship system, via a partnership with the Community College Chancellor's Office of Apprenticeship and the California Division of Apprenticeship Standards. 2.2.2.3 Program #3: Issue an RFP for projects to support inclusion via pre-apprenticeship bridge programs to prepare entry-level EE workers or job-seekers for opportunities in higher skilled and higher wage employment in MUSH (municipalities, universities, schools, and hospitals) sector EE work, other skilled construction jobs, and/or further training. Model the RFP after the CWIB’s Prop. 39 RFP.</td>
<td>Current Activity/Initiate 2015 Centergies 4  Current Activity/Initiate 2015 Centergies 5  Explore in 2016+</td>
<td>Centergies 4  Centergies 5  N/A</td>
</tr>
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<tr>
<td>2.3 Modify WE&amp;T program for market building.</td>
<td>2.3.1 Modify Centergies market-building class design and delivery.</td>
<td>Current Activity/Initiate 2015</td>
<td>Centergies 6</td>
</tr>
<tr>
<td></td>
<td>2.3.1.1 Develop market-building offerings in coordination with ME&amp;O, skills-building portfolios, and resource programs.</td>
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<tr>
<td></td>
<td>2.3.1.2 Target classes to specific market-building audiences.</td>
<td>Current Activity/Initiate 2015</td>
<td>Centergies 7</td>
</tr>
<tr>
<td></td>
<td>2.3.1.3 Lower ratepayer costs by charging fees for classes where feasible, recording and broadcasting classes via an IOU joint WE&amp;T website, and lowering administrative expenditures.</td>
<td>Current Activity/Initiate 2015</td>
<td>Centergies 8</td>
</tr>
<tr>
<td>3 RECOMMENDATIONS: LABOR DEMAND STRATEGIES FOR WORKFORCE INCLUSION</td>
<td>3.1 Create a workforce inclusion program to broaden access to living wage jobs and career pathways in EE for workers from disadvantaged communities.</td>
<td></td>
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<tr>
<td></td>
<td>3.1.1 Add “workforce inclusion” as a factor in ranking proposals by third-party contractors in all EE solicitations.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 5</td>
</tr>
<tr>
<td></td>
<td>3.1.2 Adopt “first source” language in all EE contracts to create a formal link between training for disadvantaged workers and job opportunities through EE programs.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 6</td>
</tr>
<tr>
<td></td>
<td>3.1.3 Establish prevailing wages and targeted hire goals for all contractors and subcontractors that have a direct contracting relationship with the IOU or are pre-selected (e.g., Direct Install, government partnerships, third-party programs, and ESA programs).</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 7</td>
</tr>
<tr>
<td></td>
<td>3.1.4 Guide and encourage government partnerships, 3P programs, and contractors serving the MUSH (municipalities, universities, schools, and hospitals) sectors to adopt prevailing wage, apprenticeship standards, and targeted hire policies, which together can provide meaningful job and training opportunities for disadvantaged workers.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 7</td>
</tr>
<tr>
<td>3.2 Implement foundational activities to support the workforce inclusion program.</td>
<td>3.2.1 Adopt a specific definition of “disadvantaged worker” based on a combination of residence in a high unemployment zip code and/or meeting specific criteria of disadvantage.</td>
<td>Require Regulatory Guidance</td>
<td>Planning 12</td>
</tr>
<tr>
<td></td>
<td>3.2.2 Collect data on job quality, workforce diversity, and hiring of disadvantaged workers and the relative costs and benefits of inclusionary policies to create a baseline and measure progress over time</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 8</td>
</tr>
<tr>
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<tr>
<td>4 RECOMMENDATIONS: EVALUATION, MEASUREMENT &amp; VERIFICATION (EM&amp;V)</td>
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<tr>
<td><strong>4.1 Collect job quality and work quality data essential for planning, implementation, and evaluation of workforce initiatives.</strong></td>
<td>4.1.1 Select indicators of work quality, job quality, and inclusion based on a review of existing indicators and in consultation with labor force experts.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 9</td>
</tr>
<tr>
<td></td>
<td>4.1.2 Require all contractors and subcontractors that have a direct contracting relationship with the IOU and/or are pre-selected (e.g., Direct Install, Local Government Partnerships, third-party programs, and ESA programs) to report specified jobs and workforce data, via participation in a confidential online jobs reporting system based on certified payroll data.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 10</td>
</tr>
<tr>
<td></td>
<td>4.1.3 For contractors hired by customers, develop, test, and implement workforce data collection methods using &quot;best practice&quot; approaches.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.1.4 Collect data on indicators of work quality for measures and systems where quality assurance processes or demonstration and pilot projects have identified work quality problems.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.1.5 Develop “scorecard” reports on key program metrics using data from the online jobs reporting system and other sources and make them available to workforce stakeholders.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>4.2 Evaluate the costs and benefits of standards.</strong></td>
<td>4.2.1 Introduce workforce standards as requirements for EE resource programs, and carefully document and monitor the experience of initial introduction.</td>
<td>Current Activity/Initiate 2015</td>
<td>Planning 11</td>
</tr>
<tr>
<td></td>
<td>4.2.2 Use “quasi-experimental” approaches in conjunction with the introduction of standards system- wide to evaluate the benefits and costs of workforce standards, including standards for advanced lighting systems and HVAC QI/QM.</td>
<td>Explore in 2016+ Contingent on 4.2.1</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>4.3 Reform program planning, approval, and evaluation policies and processes to explicitly address work quality.</strong></td>
<td>4.3.1 Support a policy task force (or a subgroup of a larger task force) to develop work papers and assess reported savings in a way that captures the impact of work quality on projections of energy savings.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.3.2 Monitor ex post program review to address work quality. As work quality is introduced in quality assessments and program evaluations, explicitly include work quality in ex post program review.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.3.3 Integrate and address inclusion as part of program reviews.</td>
<td>Require Regulatory Guidance</td>
<td>N/A</td>
</tr>
<tr>
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<tr>
<td><strong>4.4 Develop full program theory, program performance metrics, and comprehensive EM&amp;V plans after specific recommendations are incorporated into Program Implementation Plans.</strong></td>
<td>4.4.1 Modify evaluation plans for EE resource programs to address indicators of quality of work and job quality, with priority given to those programs where poor work quality has been identified as an issue. Support explicit consideration of indicators of work quality for impact evaluations for the 2013-2014 program cycle.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.4.2 Review program evaluation plans for all skills-building projects whether implemented by IOU staff or third-party contractors. Ensure that all plans have appropriate data collection systems in place, have early feedback loops for program improvements, and include plans for attributing the results of programs to ratepayers when programs are jointly funded.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>4.4.3 Support an evaluation consultant pool and selection process that ensures that the selected consultants have the necessary expertise to evaluate the various workforce initiatives. This recommendation applies to the evaluations administered by the IOUs and by the CPUC Energy Division.</td>
<td>Explore in 2016+</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>5 RECOMMENDATIONS FOR THE CPUC AND OTHERS</strong></td>
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<tr>
<td><strong>5.1 All</strong></td>
<td>5.1.1 The CPUC should direct the IOUs to implement the recommendations in this Guidance Plan.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>5.2 Identification of EE skills standards and certifications, and EE training priorities.</strong></td>
<td>5.2.1 The California Energy Commission, under AB 758 authority, should convene a Statewide EE Workforce Steering Committee that includes the state’s workforce and energy agencies. See Appendix 3H for a full list of proposed steering committee member organizations. The Committee should:</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td></td>
<td>5.2.1.1 Provide guidance on the skills standards and certifications for ratepayer and publicly funded EE work.</td>
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<td>5.2.2 Establish priorities for training investments in the EE workforce statewide.</td>
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<tr>
<td><strong>5.3 Workforce Inclusion</strong></td>
<td>5.3.1 The CPUC should articulate specific objectives, benchmarks and strategies to guide IOU resource allocation for a workforce inclusion program.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>5.3.2 The CPUC should encourage the Regional Energy Networks to adopt a public sector targeted hire policy for MUSH customers. The CPUC should work with the IOUs to explore the feasibility of replicating this for IOU programs serving MUSH customers.</td>
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<tr>
<td>6 SUPPORTING ACTIVITIES</td>
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<td>6.1.2 The IOUs should establish a Peer Review Group for the WE&amp;T Skills Building Portfolios (see 2.2.1)</td>
<td>Explore in 2016+ (2.2.1)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>6.2 Development of a joint IOU WE&amp;T Website</strong></td>
<td>6.2.1 The IOUs should develop a join IOU WE&amp;T website to communicate WE&amp;T activities and plans, post requests for proposals, provide information on workforce requirements for the statewide EE programs, and report progress on WE&amp;T goals. The website should link to other relevant sites, including ME&amp;O, EDR, and ETCC.</td>
<td>Current Activity/Initiate 2015</td>
<td>Centergies 8</td>
</tr>
</tbody>
</table>
Attachment 2

2015 WE&T PIP Addendum
This form is to be used to document any required changes to the Program Implementation Plans (PIPs). The following are triggers that will require a PIP change:

1. Changes to eligibility rules
2. Changes affecting incentive levels
3. Fund shifts (indicate advice letter approval below if required)
4. Portfolio Budget and Other Commission-Directed Changes
5. Changes to Program Theory/Logic Models
6. Addition or elimination of programs and/or sub-programs (indicate advice letter approval below)
7. Changes in program targets
8. Change in sub-program approach - unless the IOUs submit logic models for the sub-programs (to be defined) with IOUs
9. Changes in incented measures
10. Changes in adopted PPMs/MTIs (indicate advice letter approval below if required)

Identify Specific Trigger (above) requiring the PIP change

4. Portfolio Budget and Other Commission-Directed Changes

Driver of Change:

In Commission Decision (D.) 14-10-046, Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets, the IOUs were directed to file a Tier 2 advice letter describing which of the Workforce Education and Training (WE&T) consultant recommendations would be initiated in 2015 and provide a program implementation plan. This PIP Addendum is hereby filed in the Joint WE&T Advice Letter filed on 2/23/2015 to comply with D.14-10-046, Ordering Paragraph 17 (PG&E Advice 3567-G/4592-E, SDG&E Advice 2705-E/2361-G, SCE Advice 3179-E, SoCalGas Advice 4765-G).

Description of Change (if advice letter approval required, indicate Commission resolution or approval and provide hyperlink to advice letter):

On May 2, 2014, the Donald Vial Center for Labor in the Green Economy (DVC), finalized its Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities (Guidance Plan). This PIP Addendum updates the approved 2013-2014 WE&T PIP to provide a description of activities that the Statewide WE&T Program has initiated or will initiate in 2015, in response to the DVC Guidance Plan recommendations.
Workforce Education & Training (WE&T) Program

2015 PIP Addendum

This Program Implementation Plan Addendum (PIP) outlines the IOUs’ 2015 initiatives and the scope of those initiatives in response to the recommendations presented by the Donald Vial Center for Labor in the Green Economy (DVC) in its Workforce Issues and Energy Efficiency Programs: A Plan for California’s Utilities (Guidance Plan).

This PIP Addendum updates the WE&T Sub-programs—Planning, Connections and Centergies. Note that some of the Recommendations exceed the scope of WE&T and may be relevant to one or more resource programs in the IOUs’ EE Portfolio, which is addressed centrally in this PIP Addendum for the WE&T PIP, rather than separately updating the PIP for all potentially impacted EE programs. Several recommendations called for changes to “all” energy efficiency programs; this level of scope may not be feasible. The IOUs are initiating some recommendations with a modified scope while staying true to the “spirit” of the recommendation. In many cases the IOUs will contract with outside groups to take action. For example, the IOUs are in the process of hiring an “inclusion consultant” to assist on many of the efforts around inclusion, such as prevailing wage, job quality and workforce standards.

Activities scheduled for Current Activity/Initiate 2015 are based upon current information and will be refined upon additional input and/or future decisions.

WE&T Planning Subprogram

1) Inclusion sector strategies that leverage Workforce Investment Boards (WIBs):

The IOUs will administer a Request for Proposal (RFP) for an “inclusion consultant” who will assist the IOUs in the development of an energy efficiency inclusion sector strategy. The IOUs will assess the landscape of inclusion as it relates to WE&T within the IOUs’
service territories, and outline appropriate potential partners for the IOUs with the goal of advancing inclusion goals and assessing the feasibility of the inclusion recommendations in the Guidance Plan. Additionally, IOUs will determine the optimal approach for moving the energy efficiency inclusion sector strategies forward.

2) Peer Review Group, Stakeholder Engagement and WE&T Task Force to advise the IOUs:

Stakeholder Engagement is part of the Rolling Portfolio process. In 2015, the IOUs will continue to engage with key EE workforce stakeholders and experts on WE&T program plans. This process includes discussions around utilizing Program Advisory Groups (PAGs) as well as the role of Peer Review Groups (PRGs). While the IOUs determine what Stakeholder Engagement looks like in the Rolling Portfolio cycle, they will utilize other forums such as the WE&T Taskforce to continue to engage with key workforce stakeholders and experts for updates, advice and guidance.

On January 16, 2015, the statewide IOU WE&T team voluntarily held a Stakeholder Engagement Forum to engage a set of stakeholders broader than the ones that served on the WE&T Guidance Plan Advisory Committee. This meeting provided stakeholders an opportunity to hear and provide feedback on the IOUs’ draft response to the Guidance Plan Recommendations prior to this filing. It also allowed stakeholders to hear one another’s concerns and support for various recommendations.

3) Sector strategies targeted at incumbent workers:

The IOUs will continue building upon current Sector Strategy efforts by establishing new or enhancing existing cross-cutting industry stakeholder teams to address specific EE workforce opportunities. The IOUs will help upgrade the knowledge, skills, and abilities of incumbent workers across trades, while engaging employers through strategic relationships with the Division of Apprenticeship Standards (DAS), California Community Colleges, and regional Workforce Investment Boards (WIBs).

One current effort is the Statewide WE&T HVAC Sector Strategy. A cross-functional IOU team is working with the Western HVAC Performance Alliance (WHPA) Commercial HVAC Sector Strategy Committee for the continued development and implementation of a comprehensive WE&T HVAC Sector Strategy as mandated by the CPUC in D.12-05-015. The WHPA is a collaboration of professionals representing the HVAC, energy efficiency, facility management, utilities and government formed to support the California Long-Term Energy Efficiency Strategic Plan (CLTEESP). As a result of industry feedback and guidance in 2014, the IOUs are focusing the Sector Strategy on Commercial Quality Maintenance and Installation (QI/QM) training, and Energy Efficiency Sales training for contractors and technicians, and will be working towards statewide implementation by year-end 2015.
Another Sector Strategy effort in development for statewide implementation is the Regional HVAC Sector Strategy, sponsored by the California Community College Chancellor's Office, which aims to sustain a pipeline of well-qualified students clearly targeted for HVAC jobs in the region, leveraging community college HVAC programs in nine Southern California counties. Through a holistic approach, this team will engage industry stakeholders to guide efforts, facilitate faculty professional development, establish consistencies in student learning outcomes, expand training labs, and integrate workforce investment board (WIB) capabilities for student assessment, support services and placement into employment. This strategy also aims to build a framework of stackable credentials that can provide pathways for industry-recognized certifications. While this effort is initially focused in Southern California, the IOUs will evaluate the potential for it to serve as a model for the rest of the state, expanding across multiple trades and community college energy efficiency education programs.

4) Job placement partnerships:

The IOUs will develop an EE career pathway framework for disadvantaged workers that identify pathways for at least three occupations. The pathways will outline a list of current and anticipated high-demand entry-level occupations related to energy efficiency and participating contractor needs.

To begin this process, the IOUs will assess workforce inclusion related activities. This assessment will define the inclusion requirement further so it can be implemented in a consistent manner across the IOUs, specifically:

- Define the scope of entry-level EE workers and associated trades,
- Define the career path for these entry-level position and define the additional training required to pursue these career advancement path,
- Identify links to existing EE programs to these entry-level positions and trades.

5) Add workforce inclusion as a factor in ranking proposals by third-party contractors:

In 2015 in conjunction with the Resource Programs, the IOUs will assess the feasibility of adding “workforce inclusion” as a factor in ranking proposals for implementation work by third party contractors for selected Resource Programs. Prior to broader program adoption, it will be necessary to test this methodology to better understand the implications of such an initiative. Some of the necessary criteria that need to be explored include legal and regulatory requirements in introducing such standards into awarding contracts to third party contractors.

6) Adopt “First Source Language”:
The IOUs have started working with relevant stakeholders to develop a simplified process in 2015 for including “First Source” language into Energy Efficiency contracts when appropriate and feasible. As a result of this work, first source language has already been or will be incorporated into relevant ESA contracts as well as the relevant program contracts in 2015 or 2016. The process will consider stakeholder needs, vendor education, and periodic monitoring requirements.

7) Prevailing Wage:

The IOUs will evaluate the impacts associated with implementing targeted hiring goals, prevailing wage and wage floors in the IOUs’ Resource Programs. The analysis will include documentation and data illustrating how worker circumstances and program operations are impacted by targeted hiring goals and by prevailing wage, a living wage, or wage floor agreement. Perspectives from impacted stakeholders (e.g. program implementers, contracting agencies and other internal and external stakeholders) will be taken into account.

8) Job Quality Data Collection:

The IOUs will evaluate best-in-class data reporting systems for collecting job and workforce data. The evaluation will detail how data might be used, success metrics, and the potential implications of implementation for the IOUs and their vendors. Factors would include, but are not be limited to, vendor acceptance, cost, employee privacy, and other potential impacts.

As a starting point, the IOUs will use the output from the CPUC-initiated “WE&T Skill Standards for IOU Resource Program” study by Opinion Dynamics Corporation (ODC) scheduled for completion July 30, 2015. The results of this work will allow the IOUs to better understand the consequences of this implementation. The proposed methodology must be properly vetted to address potential legal, regulatory and customer or supplier/employee confidentiality concerns.

9) Work quality, job quality, and inclusion indicators:

The “WE&T Skill Standards for IOU Resource Program” study by ODC is currently underway. The study will collect specific work quality and job quality data. The IOUs will use the findings of this study to assess the feasibility and methodology of collecting such work quality, job quality and inclusion indicators of better EE and workforce development outcomes.

10) Report specified jobs and workforce data:
As a part of the feasibility assessment from the “Job Quality Data Collection” section above, the IOUs will also identify how data might be used, identify metrics to quantify success, and outline any potential implications of implementation for the IOUs and vendors in reporting on jobs and workforce data. As in the Job Quality Data Collection section above, the results of this work will allow the IOUs to fully evaluate the impacts.

11) Introduce workforce standards as requirements for EE Resource Programs:

The IOUs are engaged and supportive of current CPUC-led studies evaluating workforce standards and potential modifications to EE programs. Studies that are currently in progress include “WE&T Skill Standards for IOU Resource Program,” “CALCTP Contractor Training Assessment,” and the “SCE and SDG&E Lighting Control Pilot Program.”

Workforce standards and requirements have yet to be defined and validated for integrating within the Resource Programs. The IOUs are awaiting the results and supporting these studies to facilitate appropriate next steps. The study objectives are noted below for reference:

- **WE&T Skill Standards for IOU Resource Program Study**

  The purpose of this multi-phase CPUC-managed study is to examine in depth some of the practical, logistical, and financial implications of specific work quality and job quality issues. Briefly, “job quality” refers to quality of the employment itself, like wages and career advancement opportunities. “Work quality” refers to installation quality or the quality of the execution of a task. In addition to inquiry into particular job quality and work quality issues, the study includes an examination of certification standards, contractor requirements, skill standards and training opportunities relevant to select programs. The scope of the study also includes examination of the relevant implications of introducing particular standards into EE programs via cost-benefit analyses of a small number of certification standards.

- **CALCTP and Lighting Manufacturer Contractor Training Assessment**

  The purpose of this study is to benchmark the scope and depth of lighting manufacturer and CALCTP training curriculum for the installation of lighting control systems. This study will include secondary and primary research, including a survey of lighting contractors, manufacturers and CALCTP participants. This study will also investigate how market actors will support the “lighting system commissioning process” (i.e., user acceptance) as required by the California Title-24 Section 6 Energy Code.

- **SCE and SDG&E Advanced Lighting and Control Systems Pilot Program**
SCE and SDG&E are jointly developing and implementing an Advanced Lighting Control Pilot program to encourage adoption of the latest lighting control technologies which offer substantial energy savings and collect contractor installation data, as it relates to lighting control systems. This pilot will provide valuable insight on work-quality and project performance for contractors of different training levels, types, and qualifications. This pilot is also designed to support the contractor data collection needs mandated in CPUC Decision 12-05-015.

12) Defining Disadvantaged Workers:

After receiving feedback during the WE&T Stakeholder Engagement Forum in January 2015, the IOUs researched existing definitions used by California agencies including the California Workforce Investment Board. The IOUs have gathered several definitions of “disadvantaged” from local and state government workforce agencies as well as from non-profit organizations who serve disadvantaged communities. The IOUs have discovered that there is not a consistent definition of disadvantaged worker. Some of these organizations have had difficulty defining, verifying and implementing a definition for disadvantaged workers for their programs. While the final definition of “disadvantaged” worker is under the purview of the CPUC, the IOUs propose the following working definition of disadvantaged worker for the purposes of evaluating WE&T programs:

An individual who is a resident of a high unemployment zip code: where the unemployment rate is either at least 150 percent of the median unemployment rate for the county; or at least 150 percent of the median unemployment rate for the state.

The IOUs propose to continue to work with stakeholders to facilitate an official definition that may include income by ZIP code. The IOUs will then propose the definition to the CPUC’s Energy Division for adoption into the IOU programs. The IOUs will provide an update on this effort at a future WE&T public meeting.

WE&T Connections Subprogram

1) Collaborations with core education and training institutions:

The IOUs will administer an RFP to identify an organization or organizations that can develop curriculum instructor training, and/or pilot new courses with high schools, community colleges, 4-year colleges, and universities. The selected proposal will be incorporated into the Connections Sub-Program in 2016.
Additionally in 2015, the IOUs will focus on approximately two (2) initiatives that may include, but are not limited to, direct collaborations with core education and training institutions. Outcomes from these collaborations can include curriculum review, curriculum development, trainings, and presentations by IOU experts as well as provision of in-kind services and resources, including access to facilities for contextualized learning.

To accomplish these activities, the IOUs will collaborate with core education and training institutions and other IOU programs and departments—human resources, corporate relations and community relations—that also serve these academic institutions and organizations.

2) Career-technical and career development Grade 9-12 educational partnerships:

PG&E, SCE, & SoCalGas will conduct an RFP in 2015 to identify and select an organization or organizations that can provide appropriate resources to Grade 9-12 educational institutions which have a focus on career-technical education and career development. The successful RFP will be incorporated into the Connections sub-Program in 2016.

Additionally in 2015, the IOUs will continue to work with Title 1 schools, the California Partnership Academies that have an energy and technology focus, and the California Regional Occupational Centers and Programs which serve disadvantaged communities.

**WE&T Centergies Subprogram**

1) Advanced Lighting Controls Systems skill certification requirements:

The IOUs are actively engaged in EM&V studies to evaluate the effectiveness and energy savings influence of lighting control certification training programs per CPUC Decision 12-05-015 Data Collection Requirements. As studies are underway (see item 11 Centergies section above), the IOUs will continue to support CALCTP contractor training and Acceptance Test training workshops to maintain stakeholder engagement and help ensure an adequate pipeline of CALCTP certified contractors are available. As study data becomes available, the IOUs plan to create a cross-functional team of CPUC Staff, Industry Stakeholders, and IOU WE&T and Resource Program representatives to evaluate the results from these studies and determine how to best address the implementation of this recommendation.

2) HVAC Quality Installation and Quality Maintenance Educational Requirements:
The IOUs will initiate the development and adoption of a minimum education/certification requirement for all contractors participating in Commercial QI/QM programs via a phased approach. This phased approach will ensure adequate research and data gathering, stakeholder engagement, consistent implementation, where applicable, and a process for ongoing WE&T support.

The IOUs will work with stakeholders, including the Western HVAC Performance Alliance (WHPA), to evaluate graduation from a state-certified apprenticeship program, completion of a 2-year degree in HVAC or comparable/commensurate training and experience as a proposed requirement. Part of the stakeholder work will include defining “comparable training and experience,” and guidance on effective and efficient implementation of these standards. Initial phases for 2015 include:

I. Creation of a cross-functional IOU team of WE&T and HVAC Resource Program representatives
II. Research and planning for potential impacts, educational offerings, and logistics
III. Obtaining CPUC ED approval on the approach
IV. Development of an implementation plan to be executed within a feasible timeframe.

3) Integrate US Department of Energy (DOE) skills standards:

Currently, the backbone of the DOE accreditation guidelines are a set of eight role-based Job Task Analyses (JTAs) that aim to catalog the knowledge, skills and abilities (KSAs) that a “Home Energy Professional” for single and multi-family homes needs to successfully perform his/her job safely and effectively. The IOUs will assemble a cross-functional team of WE&T and IOU Resource Program representatives to review and evaluate these JTAs for relevance in meeting California and Utility Energy Efficiency Program needs, and for integration into any program skills standards and/or certifications.

4) Enhance core curricula for architects and engineers

The IOUs plan to issue a contract in 2015 for a limited project focusing on enhancing EE knowledge and skills in the core curricula in up to 3 accredited architecture or engineering programs. The goal of the project is to arrive at a model that could be replicated into existing curricula. The utilities plan to award the contract in 2015 and will work with the successful supplier to develop a timeline for this effort.
5) Enhance and verify EE skills for key trades:

The IOUs will expand on current work with the Division of Apprenticeship Standards (DAS) to develop tailored curricula for 3 apprenticeship and/or journeyman upgrade training programs designed for implementation in 2016. The IOUs will collaborate with DAS counterparts at California Apprenticeship Council meetings in an effort to ensure statewide consistency while addressing specific regional needs through tailored curricula. The IOUs will work with DAS staff and regional training providers to determine where the IOUs can be most effective with the energy efficiency expertise and curriculum that they can provide.

On January 29, 2015 the IOUs presented at the California Apprenticeship Council’s (CAC) quarterly meeting at the request of the Division of Apprenticeship Standards. The purpose of this presentation was to introduce and identify ways where WE&T can work with the constituent members in a coordinated statewide fashion. This effort will build on the local and regional efforts the IOUs have engaged in with apprenticeship providers. Additionally, the goal was to begin to establish the nature of the collaborative effort required for a successful effort. The presentation was well-received by several DAS commissioners and CAC meeting attendees currently involved in developing apprenticeship training programs.

6) Develop market-building offerings:

WE&T will coordinate with Marketing, Education and Outreach (ME&O) to inform the development and marketing of WE&T market-building classes. ME&O will provide input to the WE&T program regarding trends in the energy efficiency marketplace. Marketing of WE&T offerings will occur at various geographical levels—local, regional, and statewide as appropriate to meet customer and stakeholder needs. WE&T will coordinate with ME&O to market courses to the right audience across the appropriate geographical level.

7) Target classes to specific audiences:

The IOUs will enhance efforts that target WE&T offerings to specific market-building audiences, by continuing to partner with ME&O, as well as other regional key stakeholder partners connected to these target audiences. Through these efforts, WE&T will target audiences such as C-level executives, contractors invested in skills-building training, apprenticeship programs, residential construction trades and whole home performance contractors. These targeted efforts will help deliver offerings that are relevant and meet the needs of business customers and trade professionals. The IOU
WE&T programs will enhance marketing collateral and other outreach materials to support these targeted efforts.

8) WE&T Operational Excellence

The IOU WE&T programs will continue seeking opportunities to lower costs in operational efficiencies in program implementation and administration. Currently, the IOU WE&T Programs comply with the Federal Reimbursement standards that act as a basis for California State Food and travel expenditures, and per Commission D.09-09-047, the IOUs will maintain compliance with these standards and remain within the 10 percent cap on total administrative activity costs.

In addition, the IOUs have initiated a process to develop a comprehensive statewide distance learning program, by marketing and broadcasting classes live and via simulcast across service territories. The IOUs are also evaluating statewide alignment in not only curriculum, but also a delivery platform for online/on-demand training. Online/on-demand training will allow not only for more participants, but also will allow people to fulfill prerequisites for more in-depth courses in a more cost-effective manner than attending an in-person course.

In evaluating the need for a dedicated WE&T website to communicate WE&T activities and plans, provide information on workforce requirements for the statewide EE programs, and report progress on WE&T goals, the CPUC currently provides public access to IOU performance, annual reports, and EE program implementation plans at their Energy Efficiency Statistics website (eestats.cpuc.ca.gov). Other workforce resources include: Energy Design Resources, a Statewide IOU sponsored website, currently links to WE&T and Codes and Standards coursework, as well as significant learning resources including the Emerging Technologies Coordinating Council, Energy Upgrade California®, California Advanced Homes and the Savings By Design program, among other possibilities.

For WE&T specific RFPs, IOUs are considering the existing Proposal Evaluation & Proposal Management Application (PEPMA) website (www.pepma-ca.com), used to post and track primarily IOU Third Party Program RFP solicitations, as a possible venue.
PG&E Gas and Electric  
Advice Filing List  
General Order 96-B, Section IV

AT&T  
Albion Power Company  
Alcantar & Kahl LLP  
Anderson & Poole  
BART  
Barkovich & Yap, Inc.  
Bartle Wells Associates  
Braun Blaising McLaughlin, P.C.  
California Cotton Ginners & Growers Assn  
California Energy Commission  
California Public Utilities Commission  
California State Association of Counties  
Calpine  
Casner, Steve  
Cenergy Power  
Center for Biological Diversity  
City of Palo Alto  
City of San Jose  
Clean Power  
Coast Economic Consulting  
Commercial Energy  
Cool Earth Solar, Inc.  
County of Tehama - Department of Public Works  
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Goodin, MacBride, Squeri, Schlotz & Ritchie  
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Los Angeles County Integrated Waste Management Task Force  
Los Angeles Dept of Water & Power  
MRW & Associates  
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Marin Energy Authority  
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Modesto Irrigation District  
Morgan Stanley  
NLine Energy, Inc.  
NRG Solar  
Nexant, Inc.  
Occidental Energy Marketing, Inc.  
OnGrid Solar  
Pacific Gas and Electric Company  
Praxair  
Regulatory & Cogeneration Service, Inc.  
SCD Energy Solutions  
SCE  
SDG&E and SoCalGas  
SPURR  
Seattle City Light  
Sempra Utilities  
SoCalGas  
Southern California Edison Company  
Spark Energy  
Sun Light & Power  
Sunshine Design  
Tecogen, Inc.  
Tiger Natural Gas, Inc.  
TransCanada  
Utility Cost Management  
Utility Power Solutions  
Utility Specialists  
Verizon  
Water and Energy Consulting  
Wellhead Electric Company  
Western Manufactured Housing Communities Association (WMA)  
YEP Energy