

Decision 18-10-008 October 11, 2018

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

And Related Matters.

Application 17-01-014

Application 17-01-015

Application 17-01-016

Application 17-01-017

**DECISION ADDRESSING WORKFORCE REQUIREMENTS AND
THIRD-PARTY CONTRACT TERMS AND CONDITIONS**

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DECISION ADDRESSING WORKFORCE REQUIREMENTS AND THIRD-PARTY CONTRACT TERMS AND CONDITIONS

Summary

This decision addresses workforce standards required to be applied by all energy efficiency program administrators (PAs) to all programs meeting certain size and measure criteria in their business plan portfolios. The workforce standards are applied to large non-residential projects involving heating, ventilation, and air-conditioning measures, as well as lighting controls. These are intended as a starting point for potentially more far-reaching requirements in the future, in coordination with the evaluation and adoption by the California Energy Commission of a "responsible contractor policy" as set forth by Senate Bill (SB) 350 (DeLeon, 2015). The workforce standards are required to be included in the first round of third-party solicitations that begin after issuance of this decision, and in place for non-third-party or other new or pre-existing programs by July 1, 2019. In addition, we request a stakeholder process to begin in mid-2020 to discuss potential extension of the workforce standards or implementation of new standards, after consideration of experience with the standards required in this decision.

In addition, the decision sets forth the provisions of required standard and modifiable terms and conditions that utility program administrators must include in their contracts with third-party designers and implementers of energy efficiency programs within their business plan portfolios. The utilities are required to include all of the proposed standard contract terms included in their joint motion for adoption of the terms, including those not specifically discussed herein. Any additional terms included by utilities, including modifiable terms, must not conflict or otherwise undermine the meaning or intent of the standard

and modifiable terms adopted in this decision. The modifiable terms are also the starting point for negotiation, and may only be modified by mutual agreement of the utility and the third party. Non-utility PAs are also encouraged to utilize these contract terms.

The standard terms and conditions addressed herein include:

- Performance assurance and bonding
- Financial statements
- Background checks
- Termination for convenience (which is eliminated by this decision)
- Termination or modification in response to Commission order.

The modifiable terms and conditions addressed herein include:

- Payment terms and incentive structure
- Progress and evaluation metrics
- Intellectual property
- Definition of small business enterprises
- Provisions related to disadvantaged workers
- Coordination with other PAs.

This proceeding remains open.

1. Background

In October 2015, the Commission adopted Decision (D.) 15-10-028, which established a “Rolling Portfolio” process for regularly reviewing and revising energy efficiency program administrators’ portfolios.

In August 2016, the Commission adopted D.16-08-019, providing further guidance on rolling portfolio elements including changes to third party programs and their administration.

D.16-08-019 also directed the investor-owned utility (IOU) energy efficiency PAs, Marin Clean Energy (MCE), and existing or new regional energy networks (RENs) to file business plan proposals for the 2018-2025 period by

January 15, 2017. Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCalGas), MCE, the San Francisco Bay Area REN (BayREN), Southern California REN (SoCalREN), and Tri-County REN (3C-REN) all filed timely business plan applications that were addressed (approved or modified) in D.18-05-041.

D.18-05-041 committed to a further opportunity for comment on certain workforce requirements for the overall energy efficiency business plan portfolios of all PAs. An Administrative Law Judge (ALJ) ruling was issued July 9, 2018, seeking additional comment from parties on the potential workforce standards. Timely comments were received from the following 26 parties: AGC, Inc.; the Association of Bay Area Governments (ABAG) on behalf of BayREN; Big Sky Electric, Inc.; the California Association of Sheet Metal and Air Conditioning Contractors, National Association (CAL SMACNA); the California Efficiency + Demand Management Council (CEDMC); CLEAResult; the Coalition for Energy Efficiency (CEE); Cold Craft, Inc.; Collins Electrical Company (Collins); County of Ventura on behalf of the Tri-County Regional Energy Network (3C-REN); Electric Service & Supply Company of Pasadena(ESSCO); Foothill Air Conditioning and Heating, Inc. (Foothill); the Institute of Heating and Air Conditioning Industries (IHACI); Joint Committee on Energy and Environmental Policy (JCEEP); MCE; Morrow-Meadows Corporation; Nest Labs, Inc.; O'Bryant Electric Inc. (O'Bryant); the Office of Ratepayer Advocates (ORA), now called the California Office of the Public Advocate (Cal PA); On Target Electric, Inc. (On Target); PG&E; SDG&E; Sierra Club; Small Business Utility Advocates (SBUA); SCE; SoCalGas; and Stockman's Energy Inc. (Stockman's).

Timely reply comments were received from AGC; Atlas Heating and Air Conditioning Co. (Atlas); CEDMC; CEE; CLEAResult; Cold Craft; IHACI; California State Labor Management Cooperation Committee for the International Brotherhood of Electrical Workers and the National Electrical Contractors Association (LMCC for IBEW/NECA); Natural Resource Defense Council (NRDC), Greenlining Institute, and MCE, jointly; Nest; ORA (Cal PA); SBUA; SCE; SoCalGas; and The Utility Reform Network (TURN).

In addition, the Commission also separately adopted D.18-01-004, addressing the process for third party solicitations in the energy efficiency rolling portfolio framework in more detail.

D.18-01-004, among other things, required the utility PAs to file a motion proposing the standard and modifiable contract terms and conditions to be applied to their third-party solicitations. SDG&E, SoCalGas, SCE, and PG&E filed a joint motion on March 19, 2018 with their proposed standard and modifiable third-party contract terms.

Timely responses to the March 19, 2018 Joint Motion were filed by CEDMC, CLEAResult, CEE, County of Los Angeles on behalf of SoCalREN, MCE, ORA, Oracle Utilities (Oracle), SBUA, and TURN.

The utility PAs filed a joint reply to the comments from the above parties on April 13, 2018.

2. Workforce Requirements

Reflecting the discussion in D.18-05-041, an ALJ ruling was issued for comment on July 9, 2018 which proposed two workforce standards to be applied to all energy efficiency projects funded by ratepayers that meet the criteria as described in the ruling. This means these requirements are proposed to apply to programs designed and implemented by third parties, as well as to programs

designed and implemented by program administrators, including IOUs, RENs, and CCAs.

The two standards proposed are in the areas of heating, ventilation, and air conditioning (HVAC), and lighting controls projects.

2.1. General Applicability of Workforce Requirement

The workforce standards in the July 9, 2018 ALJ Ruling were proposed to apply to larger non-residential projects involving HVAC and lighting controls measures, as a starting point, while acknowledging that the California Energy Commission (CEC) is tasked with developing an overall "responsible contractor policy" as part of its responsibilities under SB 350.

This section discusses parties' general response to the concept of the imposition of workforce standards at all, and whether they can be expected to improve installation quality and/or levels of energy savings delivered if the standards are applied. The comments also touch on the potential impact on disadvantaged workers in the State.

2.1.1. Comments of Parties

Nearly all parties filing comments on the proposed standards in the July 9, 2018 ALJ ruling would like to see modifications, with some parties suggesting that workforce standards should not be imposed at all. While a number of commenters had recommendations about specific aspects of the proposed standards, which will be discussed further below, the general overall response tended to fall into one of three categories: 1) parties generally supporting the Commission imposing prescriptive standards, using a progressive or tiered approach such as that suggested by CEE, where more stringent requirements are applied to larger and more complex projects; 2) parties supporting a more conceptual approach based on knowledge, skills,

and abilities (KSAs) relevant to the project needs; and 3) parties preferring that the Commission not impose workforce standards at all at this time.

Related to the first category of proponents, the CEE proposal is for the following approach:

For Heating, Ventilation and Air Conditioning Projects

Tier 1 Residential HVAC Projects: For HVAC incentives greater than \$500 and installed in residential buildings other than hotels and motels, (1) at least 50% of workers on the jobsite installing the ratepayer-subsidized project shall be graduates of relevant state-approved apprenticeship programs; or (2) at least 75% of workers on the jobsite shall have at least two years of experience installing HVAC systems and shall either (a) have industry-recognized certification or training specific to installation of the technology being installed or (b) be enrolled in or have graduated from a relevant state-certified apprenticeship program. This requirement shall not apply to Projects solely involving thermostat change outs. This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of HVAC equipment unless proof of installation is required to receive the incentive or the manufacturer, distributor, or retailer installs or contracts for the installation of the measure.

Tier 2 Nonresidential HVAC Projects: For HVAC incentives greater than \$500 and installed in nonresidential buildings or hotels or motels, (1) at least 60% of workers on the jobsite installing the ratepayer-subsidized project shall be graduates of relevant state-approved apprenticeship programs; or (2) at least 75% of workers on the jobsite shall have at least five years of experience installing HVAC systems and 100% of the workers installing the ratepayer-subsidized project shall either (a) have industry-recognized certification or credentialed training specific to installation of the technology being installed or (b) be enrolled in or have graduated from a relevant state-certified apprenticeship program. This requirement shall not apply to Projects solely involving

thermostat change outs. This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of HVAC equipment unless proof of installation of the HVAC measure is required to receive the incentive or the manufacturer, distributor, or retailer installs or contracts for the installation of the measure.

Tier 3 Very Large HVAC Projects: Where a program provides an individual project, or group of projects within the same building or building complex, more than \$100,000 total in ratepayer-funded assistance for the installation, modification, repair or maintenance of HVAC-related energy efficiency measures, the program shall require this work to be performed by a “skilled and trained workforce” as that term is defined in Public Contract Code § 2601.

For Lighting Controls Projects

Where a program provides an individual project, or group of projects within the same building or building complex, more than \$500 total in ratepayer-funded assistance for the installation, modification, repair or maintenance of lighting control systems, the program shall require the contractor, project supervisor and at least 50% of the workers installing lighting controls to be California Advanced Lighting Controls Training Program (CALCTP) certified installers. This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of lighting controls unless proof of installation of the lighting control is required to receive the incentive or the manufacturer, distributor, or retailer installs or contracts for the installation of the measure.¹

Parties whose comments generally support this proposal include CEE, Sierra Club, CAL SMACNA, JCEEP, ORA, and most of the individual contractors filing comments. Most of these parties suggest that there should be standards

¹ CEE August 6, 2018 comments at 3-4.

applied to residential projects as well as non-residential, in order to reach the maximum number of projects, and that the dollar threshold should generally be much smaller than proposed in the ALJ ruling, to capture the majority of projects in the marketplace. ORA also suggests that there will likely be spillover effects on non-ratepayer-funded projects because of the imposition of standards in these energy efficiency projects.

CEE also includes in its comment a recommendation for reliance on requirements for a "skilled and trained workforce" as included in Public Utilities Code 388.2 and applied to state projects. CEE also cites to numerous other provisions of California law applying this concept in other contexts.

IHACI agrees with the concept of a skilled and trained workforce, but does not find the definition appropriate to be applied in this context without further detailed development of the definition.

Nest supports the application of standards only to large non-residential projects, and would like self-installed projects exempted if the threshold is dropped lower. SBUA also supports application only to large projects.

A number of the above parties also suggest that if there is a project size threshold, it should be based on the size of the incentive reserved in the program, rather than the total project cost, since the total incentive amount may be much easier to determine.

The KSA approach was originally proposed by NRDC earlier in the proceeding,² and is supported generally by CEDMC. The basic structure of the NRDC recommendation is that a non-financially-interested independent entity

² See September 25, 2017 comments of NRDC at 7-9.

that is knowledgeable on the matter (*e.g.*, a state agency or joint agencies), should identify KSAs for a set of end uses or programs for the 2018 solicitations only. This is suggested as an interim measure until such time as the CEC adopts the responsible contractor policy as required by SB 350. NRDC is also focused on ensuring data collection to inform future action on these issues.

CEDMC is concerned that additional workforce standards will impose costs on the market, and that single-credential standards should be avoided in favor of criteria-based requirements. NRDC filed joint reply comments with Greenlining and MCE, generally supporting the concept that program implementers have an opportunity to demonstrate equivalent KSAs to whatever might be required by the Commission in a workforce standard.

Those who are not convinced that workforce requirements will result in significant project energy savings improvements include the PAs: MCE, SCE, and SDG&E, though SCE supports the lighting controls standard. The PAs generally support the approach in the IOUs' joint proposal for standard and modifiable contract terms (discussed in Sections 3 and 4 of this decision), to allow third-party implementers to propose workforce standards that would be applicable to each program approach proposed. Presumably, that would give the PAs flexibility to determine the workforce standards applicable to their own programs as well.

IHACI comments that there is no such thing as a workforce quality standard, but that there are quality installation standards, such as those of the Air Conditioning Contractors of America or the American Society of Heating, Refrigeration, and Air Conditioning Engineers. IHACI also suggests that the Commission look to the results of the Western HVAC Performance Alliance

(WHPA) workforce, education, and training recommendations, which were developed by industry stakeholders, for the HVAC project requirements.

Finally, several parties commented that the imposition of any kind of workforce requirements could create barriers for disadvantaged workers. BayREN, CEDMC, SDG&E, and SCE are concerned about this impact, with SCE citing an evaluation study referring to both the financial and hiring barriers that could be created. BayREN also specifically mentions not only tuition barriers for the training requirements, but also geographic barriers since many training opportunities are available only or primarily in metropolitan areas.

CEE, CAL SMACNA, and Sierra Club do not believe that the standards will create barriers for disadvantaged workers, and also point out that the percentage requirements for each job site recommended by CEE should alleviate this concern.

2.1.2. Discussion

We appreciate the thoughtful and constructive proposals, and the diversity of viewpoints, from all parties on how best to design and impose workforce standards to help improve installation quality in the areas of HVAC and lighting controls projects. This entire effort by the Commission is designed to make a start toward workforce requirements, where more stringent or more broadly applicable requirements may be structured and phased in in the future. While the Commission has expressed an interest in this area for a number of years, it remains elusive how to craft workforce standards that begin to make improvements in installation quality while ensuring the availability of appropriately-trained workers and monitoring progress toward improved energy savings.

At this time, the Commission does not have experience with the practical implications of requiring workforce standards, and several studies cited by parties in their comments notwithstanding, does not see clear and convincing evidence showing direct correlation between workforce standards and increased energy savings. However, intuitively, better workforce training and quality installation requirements should lead to improved savings results over time, as well as increased availability of technicians with the proper training and skills. We also agree with the comments of CEDMC that the advent of more pay-for-performance and normalized metered energy consumption programs that inherently reward savings performance should also be considered in combination with application of workforce requirements.

We especially appreciate the tiered proposal of CEE; this is generally the direction we would like to go, with different basic requirements for different types of project sizes and complexities. However, in order to gain experience with the practical implications of imposing these standards, we prefer to start by phasing in the standards, starting with larger non-residential projects only, rather than adopt all of the requirements proposed by CEE all at once.

We will require the standard we adopt here to be included in the requirements for third-party solicitations that are released after the issuance of this decision, as well as non-third-party programs and other existing programs by no later than July 1, 2019. We will then ask the program administrators to make proposals to extend or augment these standards no later than their next business plan filings and based on experience with the requirements of this decision.

We also agree with the recommendation by CEE, also supported by CEDMC and others, to base the project size thresholds on incentive dollars

reserved, rather than total project cost. We will discuss the exact incentive size thresholds further in the discussion of the specific HVAC and lighting controls standards below, with a basis in the recent project data provided by the PAs.

The aspects of CEE's proposal related to requirements for certain percentages of workers on job sites with certain credentials could be difficult to administer. Conceptually, the approach has merit, since it appears the intent is not to require that every last worker on each project have every certification or knowledge and experience, but to ensure that there is sufficient expertise among the team to ensure a quality installation. However, since we are applying our requirements for now only in the non-residential setting for larger projects, as discussed further below, we will leave the requirements we impose applicable to all workers involved in the installation of the ratepayer-funded projects to which we apply these standards.

We are also concerned that these requirements not create barriers to disadvantaged worker participation in the programs. We hope that, over time, the requirements should point a clearer path for apprentices and other entry-level workers to obtain higher-paying and more responsible positions. We also are less concerned about this impact since we are only currently applying the requirements to larger non-residential projects at this time, which represents only a subset of the market.

Finally, we are interested in CEE's more comprehensive proposal about a "skilled and trained workforce" and will look to the CEC's responsible contractor policy being developed as set forth in SB 350 to see if there are more specific requirements that could be taken from this concept and applied in the context of these standards for energy efficiency projects.

CEE and ORA/Cal PA also suggested in comments on the proposed decision various ways in which the Commission could consider evaluating the success of the workforce standards included in this decision. In particular, CEE suggested requesting that the California Energy Efficiency Coordinating Council (CAEECC) initiate a stakeholder process to discuss and vet the potential for further application of workforce standards adopted in this decision, or others in the future. We agree with this idea and will ask that CAEECC convene a stakeholder process, no later than July 1, 2020, to consider further application of workforce standards beyond those adopted in this decision. This will allow time for consideration of experience with the standards required herein. If consensus is reached on further application and/or additional standards, any of the PAs may bring us a proposal by no later than January 31, 2021, for further consideration in any appropriate energy efficiency rulemaking proceeding or business plan application proceeding that is open at that time.

2.2. HVAC Standard

The standard proposed in the July 9, 2018 ALJ ruling for HVAC projects is described in this section. The standard was proposed to apply only to HVAC projects that are installed in a non-residential building or facility. The standard would also only apply to projects where the total project cost exceeds \$200,000. In addition, only projects where the incentive is paid to an entity other than a manufacturer, distributor, or retailer of HVAC equipment would be subject to the requirements. However, the standard would still apply to any installation or maintenance contractors hired by manufacturers, distributors, or retailers.

If a project met the above criteria, the requirement would be that it be installed by journeymen with five or more years of experience or apprentices currently enrolled in or having completed a federal or California apprenticeship

program. The intent was that a qualifying apprenticeship program may be union or non-union.

2.2.1. Project and Size Applicability

This section addresses whether there should be a project size threshold for applicability of the workforce standards in HVAC, and if so, how the threshold should be defined. As already discussed above, we intend to apply a project size threshold based on the amount of the project incentive reserved, since it will be readily identifiable. Here we identify the size incentive project to which this standard will be applied.

2.2.1.1. Comments of Parties

Most parties commenting on the size threshold wanted to see a change, either to the dollar level or the way it is applied, or both. Sierra Club, CEE, and CAL SMACNA all argued that the thresholds should apply based on incentives reserved, not total project cost, with which we have already agreed.

BayREN comments that larger projects are better able to absorb additional labor costs that may come from the imposition of the standards, relative to smaller projects. CEDMC also agrees that incentives are the appropriate measure of project size, rather than total project cost.

CEE and Sierra Club prefer the standards to apply to all projects reserving incentives of \$500 or more, with more stringent requirements applying to projects with incentives over \$100,000. SBUA feels that cost thresholds, however defined, should be a short-term solution and will need to shift over time.

Most instructive for this purpose were the statistics filed by the IOUs about the number of projects in the past few years with total project costs in various categories.

Table 1 below shows the total project costs for which incentives were paid by all four IOUs in 2016 for HVAC projects in all sectors, since this is the most recent year for which all IOUs had usable data. This data acts as an illustration. MCE and BayREN also filed project totals, which were much smaller, owing to their smaller geographic reach.

Table 1. HVAC Measure Projects by IOU in 2016

Total Project Cost Category	PG&E	SCE	SDG&E	SoCalGas
\$0-\$10,000	1,905	15,732	11,515	8
\$10,001-\$50,000	232	1,489	633	16
\$50,001-\$100,000	38	106	15	8
\$100,001-\$150,000	9	34	6	7
\$150,001-\$200,000	5	20	2	4
\$200,001-\$250,000	6	7	3	1
\$250,001-\$400,000	14	8	5	2
\$400,001-\$700,000	10	13	2	4
Over \$700,000	18	16	3	2
Total	1,937	17,425	12,184	52

2.2.1.2. Discussion

Based on the data in Table 1, which includes residential projects, it appears that the majority of the largest non-residential HVAC projects could be captured by applying the standard when the project incentive amount is \$3,000 or more. We reach this conclusion by assuming that a rule of thumb is that incentive costs may be roughly 20-40 percent of total project costs, on average. Based on the data above, \$3,000 appears to be a reasonable threshold to set for now, since it likely would capture all of the projects with a total project cost of \$10,000 or more, and probably a reasonable percentage of those with total project costs under \$10,000. We will consider applying the standard to the remaining smaller

non-residential projects once we gain experience with imposing these requirements on the larger projects.

2.2.2. Applicability to Upstream and Midstream Actors

This section addresses whether the HVAC project standard should be applied to upstream and midstream recipients of incentive funds, including manufacturers, distributors, and retailers and their sub-contractors. The ALJ Ruling proposed not to apply the workforce standards to any projects where the incentives are paid to manufacturers, distributors, or retailers.

2.2.2.1. Comments of Parties

CEE, Sierra Club, and CAL SMACNA do not believe an exemption is reasonable because the focus of the workforce standards should be on ensuring proper installation, regardless of how it is accomplished.

CLEAResult and IHACI, on the other hand, point out that these upstream and midstream actors are not directly involved in equipment installation, especially in commercial settings, and therefore this standard would apply to workers outside of their scope of control.

BayREN points out that they are not aware of any manufacturers, distributors, or retailers that install equipment without the use of a separate installation contractor, to which the standard would apply.

SCE agrees with the exemption for upstream and midstream actors because their programs are aimed at encouraging stocking and upselling of high-efficiency equipment, but not focused on installation practices.

CEDMC also agrees with the market transformation focus of upstream and midstream incentives, thus keeping an exemption from the standards for those types of programs.

2.2.2.2. Discussion

We affirm the proposal to exempt incentive payments paid directly to manufacturers, distributors, and retailers, where these entities do not contract directly for installation or maintenance services, from compliance with the workforce standards in this decision. This is a practical distinction and not a philosophical one. Most programs where incentives are paid to these upstream and midstream actors are aimed at the stocking and selling of high-efficiency equipment, leading to market transformation, as pointed out by SCE. This is a valid market intervention strategy but not one that touches on installation practices implicated by the workforce standard here.

2.2.3. Definition of Journey-Level or Apprenticeship

This section addresses the definition of journeyman or apprentice, and whether the HVAC standard should apply these definitions. The proposed requirement for a journeyman to have five years of experience or more is also discussed below.

2.2.3.1. Comments of Parties

AGC supports the requirement that workers be currently enrolled in or graduates of apprenticeship programs. However, they are concerned about the definition of "journeymen" being potentially less meaningful, encouraging us to specify what training requirements or certifications are needed for a non-apprenticeship graduate to satisfy the requirement, besides five years of experience. They suggest looking to the skilled and trained workforce requirements that apply to school projects and design-build projects in California.

BayREN is also concerned about the definition of "journeyman" and suggests it should include not only the definition held by the Department of

Industrial Relations, but also the Contractor's State Licensing Board (CSLB) definition, which defines "journey-level experience" as applying "to a person who has completed an apprenticeship program or is an experienced worker, not a trainee, and is fully qualified and able to perform a specific trade without supervision."

Several parties also comment that the term "journeyman" should be replaced with a more gender-neutral term reflecting the diversity of experienced workers in the industry.

Numerous parties also pointed out that it is possible to have an experienced technician with five years of experience complete a poor installation, while an apprentice with almost no experience could accomplish an excellent quality job. SCE points out that not all jobs require someone with five years of experience.

CEE and Sierra Club suggest combining an experience and a training requirement, with two years required for residential projects and five years for non-residential, similar to that proposed originally in the ALJ ruling.

CAL SMACNA, Cold Craft, Foothill, and JCEEP support the five-year experience requirement plus a state-approved apprenticeship, with training and experience.

CEE and Sierra Club are also strongly supportive of the apprenticeship requirement, stating that such apprenticeship programs are the only training programs that provide the full range of knowledge, skills, and abilities needed to properly install HVAC systems.

2.2.3.2. Discussion

As described above, at least initially, we will only apply these workforce standards to larger non-residential projects. Therefore, we find it reasonable to

require certain experience or credential criteria to all workers participating in the projects. Thus, we endorse the proposal in the ALJ Ruling that there should be several options for satisfying the workforce requirements. The first is that the worker may be a graduate of or be enrolled in a state-sponsored apprenticeship program. There is no union assumption associated with this criterion. An apprenticeship program may be union or non-union.

The second option is for a worker to have five or more years of experience operating as a journey level technician. We agree with those parties that suggest that the definition of "journey" level experience should be either the one defined by the California Department of Industrial Relations or the CSLB.

Thus, the requirements are that a worker installing an HVAC system or component for purposes of these workforce standards must have met at least one of the following criteria:

1. Completed an accredited HVAC apprenticeship.
2. Be enrolled in an accredited HVAC apprenticeship.
3. Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations, passed a practical and written HVAC system installation competency test, and received credentialed training specific to the installation of the technology being installed.³
- Have a C-20 HVAC contractor license from the California Contractor's State Licensing Board.⁴

³ Department of Industrial Relations definition, See Title 8, California Code of Regulations, Section 205.

⁴ See CSLB definition of "journeyman."

2.3. Specific Lighting Controls Standard

In the area of lighting projects, the proposed workforce standard was designed to apply only to projects installed in non-residential buildings or facilities that involve the installation, modification, or maintenance of lighting controls. Such projects may or may not also include lighting fixture installation. The standard was proposed only to apply to projects with a total project cost that exceeds \$100,000, which may include the costs of both controls and fixtures. As long as there were some controls involved, either controls installation, modification, or maintenance, the workforce standard would apply. In addition, the standard would apply only to projects where incentives are paid to entities other than manufacturers, distributors, or retailers of lighting controls. However, the standard would still apply to any installation contractors hired by manufacturers, distributors, or retailers.

For all projects that meet the criteria described above, the requirement would be that the projects shall be installed by workers that have been certified by the California Advanced Lighting Controls Training Program (CALCTP).

2.3.1. Certification Provider

This section addresses whether it is appropriate to consider other training and certification programs, instead of or in addition to, CALCTP.

2.3.1.1. Comments of Parties

CEE and Sierra Club represent that CALCTP installer certification is the only credential identified by stakeholders in this proceeding that includes the proper combination of field experience, hands-on and classroom instruction, and competency testing. They also represent that the certification training is widely available.

CALCTP is also supported, to one degree or another, by Collins, Big Sky, Morrow-Meadows, O'Bryant, and Stockman's Energy. These are mostly contractors with lighting project experience.

Big Sky states in its comments that it is not currently a CALCTP-certified contractor, but has long considered sending its workers to the certification program. If the Commission were to require the certification, Big Sky represents that it would take the steps necessary to qualify, pointing out that the program is readily available and requires only a modest investment of time to become certified.

BayREN opposes the CALCTP requirement, stating that it may inflate project costs, and is unnecessary and cost-prohibitive, especially for smaller contractors, and may represent a barrier to entry for disadvantaged workers.

CLEAResult argues that this certification requirement is duplicative of the CEC's building standards requirements.

CEDMC and SDG&E say this requirement is not supported by the evaluation literature and CALCTP should not be the only certification provider, if such certification is required. SCE supports including the CALCTP certification requirement, but also agrees that they should not be the only authorized provider, instead recommending inclusion of lighting control manufacturer training for installers as an option.

CEDMC specifically recommends allowing the Certified Lighting Controls Professional accreditation through the International Association of Lighting Management Companies, as well as the Certified Lighting Efficiency Professional credential through the Association of Energy Engineers. CLEAResult recommends including at least the National Lighting Contractors Association of America (NLCAA) certification, since it complies with the CEC's Acceptance

Testing Certification requirements under Title 24. CLEAResult generally recommends deference to the CEC's acceptance testing requirements for both lighting and HVAC.

2.3.1.2. Discussion

Based on the representations of numerous contractors and organizations, it appears as though the CALCTP certification is widely respected and accepted as an appropriate certification credential for lighting controls. We would like to be able to broaden the requirements to include multiple training and certification programs. However, it appears as though the other recommendations are not exactly on point for our purposes at this time. The NLCAA certification appears to apply to acceptance testing only, and not installation of lighting controls. The other recommendations, including manufacturer-based certifications, are likely not as rigorous as the standards offered by CALCTP.

Thus, for now, we will limit the requirements to the CALCTP certification, since we are still only applying the requirements to large projects. Should other certifications become more widely available, we will consider them in the future and/or look to the requirements that the CEC may consider appropriate as part of the responsible contractor policy under development in response to SB 350. The CEC's acceptance testing requirements may be the appropriate model for us to utilize in the future as we apply workforce requirements to larger numbers of projects over time. We will look to the CEC's responsible contractor policy as a guide in the future. In the meantime, if a program administrator becomes aware of a certification program with characteristics comparable to CALCTP (not including manufacturer-specific certifications or training programs), they may file a Tier 2 advice letter seeking to add a new certification or training provider to this standard. We also request that, prior to a PA submitting the advice letter,

that the CAEECC convene a stakeholder discussion about the proposed new certification for lighting controls.

2.3.2. Project Size Applicability

This section discusses the appropriate project size to which the lighting controls workforce certification requirement should be applied. The ALJ Ruling proposed to apply the requirement to projects with a total cost of \$100,000 or more.

2.3.2.1. Comments of Parties

Many parties, including most of the contractors, Sierra Club, CEE, 3C-REN, and SCE, comment that the size threshold is too large and will miss most of the projects. CEE suggests a \$500 threshold. SCE suggests not having a threshold or having it based on project design. CEDMC agrees with a large project size threshold, and BayREN states that it depends on how the project size threshold is developed. CLEAResult continues to suggest adherence to the CEC's acceptance testing requirements. Several individual contractors suggest that a \$30,000 total project cost is the appropriate threshold.

Here, as with the HVAC project size threshold question, it is instructive to look at the project data provided by the utility PAs from the last year for which there is good data, 2016. That lighting controls project information for all sectors is presented in Table 2 below.

Table 2. Projects Involving Lighting Controls by IOU in 2016

Total Project Cost Category	PG&E	SCE	SDG&E
\$0-\$10,000	0	3,595	137
\$10,001-\$50,000	0	59	2
\$50,001-\$100,000	1	9	0
\$100,001-\$150,000	1	5	0
\$150,001-\$200,000	0	3	0

\$200,001-\$250,000	1	1	0
\$250,001-\$300,000	0	3	0
\$300,001-\$500,000	1	0	0
Over \$500,000	1	0	0
Total	5	3,675	139

We note that here, as with the HVAC projects, many parties, including CEDMC, made the argument that if there is a project size threshold imposed, it should be based on total incentive reserved, rather than total project cost, since the incentive amount is a more objectively available value.

2.3.2.2. Discussion

Here again we agree that incentive amount by project is the appropriate way to determine the threshold project size. Based on the data in Table 2, there are many fewer lighting controls projects than HVAC projects, and it is unlikely that many of them occur in the residential sector. Assuming, as we did for the HVAC projects, that incentives reserved are usually in the vicinity of 20-40 percent of total project costs, it appears that an incentive amount of \$2,000 would be appropriate, capturing some of the smaller projects and all of the larger projects involving lighting controls in non-residential settings. Since our purpose, as with the HVAC-related standards, is to gain experience by phasing in the standards starting with the largest and most complex projects, we will capture the right market with this level of incentive threshold and will reevaluate whether to include smaller projects no later than the next business plan applications.

2.3.3. Applicability to Upstream and Midstream Actors

This section addresses whether the lighting controls standard should be applied to upstream and midstream recipients of incentive funds, including manufacturers, distributors, and retailers and their sub-contractors. The ALJ

Ruling proposed not to apply the workforce standards to any projects where the incentives are paid to manufacturers, distributors, or retailers.

2.3.3.1. Comments of Parties

The comments of parties on this topic are similar to the analogous proposal for the HVAC standard.

BayREN points out that self-installation of lighting controls projects is low, so exempting manufacturers, distributors, and retailers does not risk missing much of the market. CLEAResult maintains that these upstream and midstream actors are not usually directly involved in equipment installation, as with HVAC projects.

Meanwhile, CEE and Sierra Club feel that exempting these upstream and midstream actors misses the point of ensuring proper installation, regardless of the actor performing the work.

CEDMC continues to focus on the likelihood that programs aimed at upstream and midstream actors are likely market transformative in nature and intended to encourage the stocking and selling of higher-efficiency products.

2.3.3.2. Discussion

As with the HVAC standards, we affirm the proposal to exempt incentive payments paid directly to manufacturers, distributors, and retailers where those entities do not separately contract for installation or maintenance services, from compliance with the workforce standards in this decision. This is a practical distinction and not a philosophical one. Most programs where incentives are paid to these upstream and midstream actors are aimed at the stocking and selling of high-efficiency equipment, leading to market transformation, as pointed out by CEDMC. This is a valid market intervention strategy but not one that touches on installation practices implicated by the workforce standard here.

3. Standard Terms and Conditions for Third Party Contracts

The IOUs jointly proposed a set of standard contract terms on March 19, 2018, as required by D.18-01-004, to be applied to new third-party contracts that will be solicited beginning in late 2018.

The standard terms are addressed in this section. If a particular proposed term is not discussed in this section, the IOUs are still required to include the term in the standard contract. All other terms must be considered modifiable or negotiable. Non-utility PAs are also encouraged to apply these standard contract terms to their contracts with third parties, to the extent relevant and feasible.

3.1. Performance Assurance and Bonding

Section A of the proposed standard contract terms addresses basic eligibility issues, including Section A.2 addressing requirements for performance assurance and bonding.

3.1.1. IOU Proposal

The IOU proposed term (A.2.) related to performance assurance and bonding reads as follows:

Performance Assurance; Bonding. At all times during the performance of the Services, Implementer represents, warrants, and covenants that it has and shall, and shall cause each Implementer Party to, obtain and maintain, at its sole cost and expense, all bonding requirements of the California State License Board, as may be applicable. Implementer shall also maintain any payment and/or performance assurances as may be requested by Company during the performance of the Services.

3.1.2. Comments of Parties

CEDMC, in its comments, raised a concern that the need for performance assurance or bonding requirements may not be necessary, depending on the

nature of the work and scope of services. They did agree, however, that these requirements are appropriate for implementers providing direct install services.

3.1.3. Discussion

We agree with CEDMC that the requirements in this section are applicable to direct install services, but not necessarily all other types of scopes of third parties. Thus, we rephrase the contract term as follows:

Performance Assurance; Bonding. At all times during the performance of the Services, Implementer represents, warrants, and covenants that it has and shall, and shall cause each Implementer Party to, obtain and maintain, at its sole cost and expense, all bonding requirements of the California State License Board, as may be applicable. Regardless of the specific services provided, Implementer shall also maintain any payment and/or performance assurances as may be requested by Company during the performance of the Services.

For other types of services provided by third parties, performance assurance and bonding requirements should be negotiable depending on the type of service.

3.2. Financial Statements

Section A of the proposed standard contract terms addresses basic eligibility issues, including Section A.5 addressing requirements for financial statements.

3.2.1. IOU Proposal

The IOU proposed term (A.5.) related to financial statements reads as follows:

Financial Statements. Implementer shall deliver financial statements on an annual basis or as may be reasonably requested by Company from time to time. Such financial statements shall be for the most recent accounting period and

prepared in accordance with generally-accepted accounting principles.

3.2.2. Comments of Parties

CEDMC's comments suggest a slight amendment to the IOU proposal to allow for audited or reviewed financial statements or documents, since some organizations may not do full financial statements or audits, but have documentation and official reviews that serve the same purpose. CEDMC also points out that such information should be kept confidential by the IOU.

3.2.3. Discussion

We agree with CEDMC that the most recently available audited documents or statements would be the most relevant. In addition, confidentiality of this information is also appropriate, though the Commission staff may request such information be provided to us, under the provisions of Section 583, if confidentiality is necessary and asserted by the IOU.

Thus, the standard term should be amended to read as follows:

Financial Statements. Implementer shall deliver financial statements on an annual basis or as may be reasonably requested by Company from time to time. Such financial statements or documents shall be for the most recently available audited or reviewed~~accounting~~ period and prepared in accordance with generally-accepted accounting principles. Company shall keep such information confidential if requested by Implementer, except provision to the Commission may be required from time to time under confidentiality procedures, where applicable.

3.3. Background Checks

This section relates to Section B.2 of the standard terms proposed by the IOUs, relating to safety requirements, specifically required background checks for third parties and their employees and/or representatives.

3.3.1. IOU Proposal

The IOU proposal for this provision is as follows:

2. Background Checks.

- (a) Implementer hereby represents, warrants and certifies that any personnel of any Implementer or Implementer Party, and their representatives and agents, having or requiring access to Company's assets, premises, customer property, data or systems ("Covered Personnel") shall have successfully passed (a) a pre-employment background screening on each such individual, which screening may include, among others things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of hire, and (b) a drug screen, which may include the Substance Abuse and Mental Health Administration's five categories of drugs, also known as the "SAMHSA 5."
- (b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Implementer permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of hire, or at any time after the individual's date of hire, for any of the following ("Serious Offense"): (i) a "serious felony" as defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 475, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 *et seq.*), or racketeering (such as, but no limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations (RICO) Statute (19 U.S.C. Sections 1961-1968)).

3.3.2. Comments of Parties

CEE comments that these background check terms are overly broad. Categorical prohibition of hiring of all persons convicted of any of the crimes listed, without further assessment of the relationship to the job to be performed, appears overly restrictive. According to CEE, these provisions may lead to discriminatory practices in violation of employment laws. In particular, CEE would not like these provisions to result in precluding the hiring of previously incarcerated persons.

CEDMC comments that the background check provisions should be applicable only to the services to be rendered, and not so broad as to prohibit software companies, among others, from assigning workers with no access to customer premises or data. As an alternative, CEDMC recommends exempting software companies from some of these provisions.

Oracle's comments express concerns that these provisions would be nearly impossible for software companies to comply with, since they may have employees all over the world who work with data or software that still may come under the definition of "covered personnel."

Oracle is also concerned that the provisions would require employers to monitor their employees in an ongoing fashion in ways that are not feasible. Their comments also point out that some of the references to California laws may not be applicable to criminal behavior in other countries. Finally, Oracle is concerned that a seven-year time horizon for background checks is unreasonably long and not viable for many companies.

CLEAResult is also concerned about the background check provisions serving as a disincentive to customers, contractors, and vendors, and comments that the costs may be prohibitive to many implementation companies, especially

larger ones. They recommend focusing these requirements on Implementer personnel with access to customer or IOU facilities only. In addition, they comment that the drug testing requirements should be restricted to personnel who operate heavy machinery or other job-relevant restrictions, rather than being applied to all personnel associated with the contract.

ORA agrees that the background check provisions should be applicable to personnel with access to customer or IOU facilities only.

SBUA comments that very few businesses have the resources to conduct pre-employment background checks, and therefore this provision will prevent a large number of small businesses from putting forward proposals. SBUA recommends that it is unnecessary to perform these background checks prior to employment, and even after employment the requirement should only apply to individuals with access to customer data or premises. In addition, SBUA argues that the list of offenses for which an individual may be banned from accessing data or premises is overbroad, and should be limited to those that are directly relevant to the employee's job function.

3.3.3. Discussion

We agree with the commenters that the IOU requirements are overly broad and may restrict the ability of businesses to provide services for energy efficiency. In addition, some of the provisions conflict with our desire to provide more employment opportunities for disadvantaged workers, as further discussed later in this decision.

For public and customer safety and security purposes, however, it is reasonable to restrict access to customer premises and data to employees or contractors that have passed certain background checks. These need not have been conducted prior to employment, however. And they need not include drug

testing unless there is a public or customer safety risk associated with the exact function to be performed by the employee or representative. Thus, drug testing should not be part of the standard term and should be applied only in negotiable circumstances relevant to the service being delivered under the contract.

Instead, we will require the utility PAs to require background checks of the nature described in the proposed standard term only for third party employees or representatives who have direct contact with IOU facilities or assets, and/or access to customer premises. Those background checks need only be performed before the employee or representative comes into contact with the IOU assets or premises, or customer premises.

In addition, employees or representatives of software companies working on programming or other products to support programs, where there is no access to individual customer premises, need not be subject to background checks at all.

Finally, with respect to Oracle's comment about references only to California's Penal Code that may not be offenses in other states or countries, our reading of the term is that it makes reference to the California statutes, but requires the background check on similar offenses to be interpreted as applying to any offenses similar to the California ones listed, regardless of the location of the employee or representative. Thus, we generalize the "serious felony" definition, but leave the other references to the California Penal Code as illustrative but not exhaustive.

In sum, we amend the standard term to read as follows:

2. Background Checks.

- (a) Implementer hereby represents, warrants and certifies that any personnel of any Implementer or Implementer Party, and their representatives and agents, having or

requiring access to Company's assets, premises, customer property, ("Covered Personnel") shall have successfully passed ~~(a) a pre-employment background screening on each such individual prior to receiving access, which screening may include, among others things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of hire assignment to the project, and (b) a drug screen, which may include the Substance Abuse and Mental Health Administration's five categories of drugs, also known as the "SAMHSA 5."~~

- (b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Implementer permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of assignment to the project hire, or at any time after the individual's date of assignment to the project hire, for any of the following ("Serious Offense"):
- (i) a "serious felony" as similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or
 - (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 475, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations (RICO) Statute (19 U.S.C. Sections 1961-1968)).

3.4. Termination for Convenience

Section D of the proposed standard contract terms governs termination provisions, such as termination for default, cause, convenience, in the event of a Commission change in policy, and at the conclusion of work. The IOUs propose

a standard term that would allow “termination for convenience” as Section D.3. of the standard terms, at the IOU’s sole discretion for any reason.

3.4.1. IOU Proposal

The IOU proposed term related to termination for convenience reads as follows (Section D.3.):

Termination for Convenience. Company shall have the right to terminate this Agreement or all or any portion of the Services at any time, in its sole convenience, exercisable in its sole and absolute discretion and without cause, upon twenty (20) days’ written notice to Implementer. Upon Company’s exercise of such termination rights, the following shall apply:

- (a) Company shall be liable to Implementer only for the compensation earned on Services satisfactorily performed prior to the effective date of termination, plus documented and verifiable costs (such as demobilization costs) reasonably incurred by Implementer in terminating the Services. Implementer shall mitigate its damages to minimize its claim, if any, against Company.
- (b) Notwithstanding anything contained in this Section [___], in no event shall Company be liable for lost or anticipated profits or overhead on uncompleted portions of the Services. Implementer shall not enter into any agreement, commitments or subcontracts that would incur significant cancellation or termination costs without prior written approval of Company, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by Company under this Section [___]. Also as a condition precedent to the payment of any cancellation or termination charges by Company under this Section[___], Implementer shall have delivered to Company any and all reports, drawings, documents and deliverables prepared for Company before the effective date of such cancellation or termination.

- (c) Provisions of this Section [___] shall be Implementer's sole remedy resulting from Company's termination for convenience hereunder.

3.4.2. Comments of Parties

CEDMC comments that the "termination for convenience" term be eliminated entirely due to the disproportionate burden it places on potential contractors. They state that it represents unbounded risk to a contractor and does not align with efforts in the solicitations to support a viable third-party market for energy efficiency services. CEDMC argues that a functioning, productive, and effective market must have some level of reasonable certainty about future revenues and resource needs to make investments necessary to successfully deliver energy efficiency services. CEDMC also recommends that while this term itself should be eliminated entirely, some of its provisions for compensation terms should be applied to the term discussed in the next section, with respect to termination or modification in response to a Commission order.

Oracle comments that this provision is completely unworkable for software companies, where contracts usually entail prepaid subscriptions that are renewed in an agreed-upon timeframe. Oracle represents that this structure exists because software products are already built in full before they are delivered to the IOU, so it would be unworkable for the IOU to expect retroactive repayment or otherwise take possession of any services already rendered. CEDMC's comments with respect to software arrangements mirror those of Oracle.

CLEAResult comments that termination for convenience is very difficult for contractors to manage, and should only be allowable in some circumstances, such as 1) when providing both suitable time to cure potential reasons for termination; 2) to provide a path for arbitration or mediation; and 3) to provide a

reasonable means for a provider to recover lost investments that were made in good faith or were made as a requirement of delivering on the original contract. CLEAResult has recent experience with termination for convenience in California and recommends that this term be eliminated or replaced with a requirement for arbitration or mediation, in which any party could seek reasonable cost recovery for their lost investments due to termination, in addition to the proposed reasonable costs of shutting programs down. Finally, CLEAResult recommends there be no difference between terms for termination for convenience and termination because of a Commission order.

3.4.3. Discussion

We agree with most of the parties commenting that this open-ended provision for termination for convenience, which effectively allows termination for any or no reason, has no place in a standard contract for energy efficiency services. Our purpose in emphasizing third party designed and implemented programs was to utilize the expertise and capacity in the competitive market for energy efficiency services in California that has been built over the past several decades. Imposing such a one-sided contract term would force legitimate and effective businesses in this space to weigh the risks of even bidding on utility energy efficiency contracts in a way that does not support extension and maturing of the market. Termination for cause and for changes in Commission policy may still be required, but any company that enters into a good faith contract with a utility for services has a right to expect that they will be paid for services rendered over the length of the contract fairly won, even if a utility management decision ultimately later de-emphasizes that particular service. While there is no reasonable expectation of renewal or extension in all circumstances, there should be a reasonable expectation that a contractor may

finish and be paid for services under an executed contract without threat of arbitrary termination and loss of expenses or profit. For these reasons, the “termination for convenience” provision of the standard contract shall be eliminated entirely.

3.5. Termination/Modification of Commission Order

This proposed term included by the IOUs involves actions in the event that the Commission changes policy or directives in an order that would affect an existing contract with a third party.

3.5.1. IOU Proposal

The joint IOU proposal includes as Section D.4. the following term for termination or modification by Commission order:

Termination/Modification by CPUC Order. This Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission (CPUC), as may be determined by Company in its sole discretion. The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case Company shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such CPUC order or directive. Under no circumstance shall Implementer or any subcontractor be entitled to any compensation for any costs, expenses, lost profit or damages incurred by Implementer or any subcontractor as a result of any change, modification, or termination of this Agreement under this Section [___].

3.5.2. Comments on Parties

As mentioned above, both CEDMC and CLEAResult, in their comments on termination for convenience, suggested that those provisions for compensation be applied in the circumstances where a contract must be terminated or modified in response to changed Commission policy or order.

SBUA comments that the balance of risk is weighted too heavily on the contractors and not the utilities. In particular, they are concerned that small contractors are unable to bear the costs incurred when a program is substantially modified or terminated by order of the Commission, and thus may forego participation in the solicitations altogether rather than risk their financial viability. Thus, SBUA recommends cost sharing in these circumstances.

Oracle is concerned about the portion of the provision that states that “under no circumstance shall Implementer or any subcontractor be entitled to any compensation for any costs, expenses, lost profit or damages incurred by Implementer or any subcontractor as a result of any change, modification, or termination of this Agreement” calling this a “blank check” from the vendor to the utility.

SBUA, in its comments on the proposed decision, suggests that not only should third parties have the option to request arbitration or mediation, the utilities should also be required to engage in such options in good faith.

3.5.3. Discussion

On this issue, we agree with the parties who suggested that Commission orders or changes in policy should not automatically result in a unilateral ability of the IOU to terminate or otherwise modify the agreement entered into in good faith under different circumstances. We agree that the contractor should have the ability, in these circumstances, to adjust its approach to comply with the Commission’s order, or, in the event that is not possible, to recover costs reasonably incurred under the terms of the agreement.

Thus, we will take the suggestion of CEDMC and CLEAResult and apply the provisions for compensation that were suggested by the IOUs under their proposed “termination for convenience” term, and apply those to the

circumstances related to Commission orders. In addition, we will require that an arbitration or mediation provision be added, to allow for negotiation between the third parties and the IOUs in the event of a change in Commission order or policy. We agree with SBUA that this requirement also includes the requirement that the utilities engage in mediation or arbitration in good faith. Thus, the amended term should read as follows:

Termination/Modification by CPUC Order. This Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission ("CPUC")), ~~as may be determined by Company in its sole discretion.~~ The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case Company shall have the right to change, modify or terminate this Agreement to be consistent with such CPUC order or directive. ~~Under no circumstance shall Implementer or any subcontractor be entitled to any compensation for any costs, expenses, lost profit or damages incurred by Implementer or any subcontractor as a result of any change, modification, or termination of this Agreement under this Section [____].~~

- (a) Company shall be liable to Implementer ~~only~~ for the compensation earned on Services satisfactorily performed prior to the effective date of termination, plus documented and verifiable costs (such as demobilization costs) reasonably incurred by Implementer in terminating the Services. Implementer shall mitigate its damages to minimize its claim, if any, against Company.
- (b) Notwithstanding anything contained in this Section [____], in no event shall Company be liable for lost or anticipated profits or overhead on uncompleted portions of the Services. Implementer shall not enter into any agreement, commitments or subcontracts that would incur significant cancellation or termination costs without prior written approval of Company, and such written approval shall be a condition precedent to the payment of any cancellation

or termination charges by Company under this Section [____]. Also as a condition precedent to the payment of any cancellation or termination charges by Company under this Section[____], Implementer shall have delivered to Company any and all reports, drawings, documents and deliverables prepared for Company before the effective date of such cancellation or termination.

- (c) Implementer shall have right to request arbitration or mediation to resolve particulars of the above provisions should they not result in reasonable compensation based on terms of original Agreement and Company shall be required to engage in mediation or arbitration in good faith upon such a request. Provisions of this Section [____] shall be Implementer's sole remedy resulting from Company's termination for convenience hereunder.

4. Modifiable Terms and Conditions

In addition to the standard contract terms and conditions proposed and discussed above, the IOUs also include a number of modifiable or negotiable terms and conditions for their contracts with third parties. Embedded within those modifiable terms are several items that the Commission required in D.18-01-004 that the IOUs address in their proposed contract terms. We discuss below the modifications to the proposed modifiable contract terms. Others not discussed should also be included by the utilities, but are subject to further negotiation individually with bidders.

4.1. Payment Terms and Incentive Structure

Section E of the IOUs' modifiable contract terms governs payment schedule and terms, including pay-for-performance payment provisions.

4.1.1. IOU Proposal

In Section E.1., the IOUs lay out the proposed terms for payment, including those where payment is on a performance basis. The terms are as follows (omitting Table 2 related to Payment Terms for brevity):

1. Payment Terms.

[Payment terms will vary based on the Program proposed, and the Company will evaluate bids, in part, on creative proposals that spread the risk of non-performance and deliver a quality and cost-effective program at a reasonable cost to ratepayers. Table 2 outlines some potential contract categories with potential associated payment schedules and payment terms, if applicable; however, the Company will evaluate payment terms based on the bid and the nature of the Program. Table 2 is not intended to be exhaustive, and additional or modified payment categories may be proposed in the filing and/or in specific agreements, as negotiated.

Company prefers Program Proposals that include a “pay for performance” fee structure component that conditions payments from Company to Implementer based on specific savings or other metrics that advance energy efficiency portfolio goals (*i.e.* Meter Based). These pay-for-performance models may include performance security in a form of cash or line (or letter) of credit to ensure that implementers are meeting key performance metrics such as energy savings and cost-effectiveness and that permit Company to draw against such performance security if certain performance conditions and/or KPIs [key performance indicators] are not met. Percentages of performance security and metrics will be negotiated between the Implementer and Company.

Program proposals with greater proportions of funds tied to the delivery of energy savings measured and verified post-installation will be preferred over program proposals that correlate performance to program activities (installations) associated with pre-installation savings estimates (deemed),

or proposals with large proportions of funds dedicated to Program Implementation activities that are not directly tied to energy savings, respectively.] {Comment: modifiable RFP Instructions}

4.1.2. Comments of Parties

TURN and ORA are concerned that any payment terms associated with energy savings clarify that the measure is “net lifecycle” energy savings, in keeping with the direction in D.18-05-041.

ORA also comments that the payment terms are not sufficiently standardized to encourage payment based on actual installed project performance.

CLEAResult, in its comments, is particularly concerned with the provisions included in the payment terms that require payment securities such as security, letters of credit, and performance bonds, which may be required in pay-for-performance models of contracts. CLEAResult is concerned that smaller companies may not be able to raise financing, performance insurance, or credit and thus could be shut out of the market if these mechanisms are required in all instances.

4.1.3. Discussion

TURN and ORA are correct that D.18-05-041 focuses energy efficiency savings on net lifecycle savings. Thus, anywhere in the contract terms where the term “energy savings” appears, it should be replaced with “net lifecycle energy savings.” We note, however, that this is the default starting point. There may be instances where contracts may deviate from this general presumption, for reasons of a particular program design. Thus, this provision is still negotiable between third parties and utilities. As stated in D.18-05-041, this approach is considered a “best practice” but not mandatory in all instances.

While we agree with ORA that it would be ideal to have more standardized payment terms for pay-for-performance programs that emphasize at least a portion of the payment based on delivered savings measured on an ex-post basis, we are convinced that it may be too difficult to derive those terms up front until such time as the bidder's proposed program structure is clear. This term may be able to evolve over time as we gain more experience with these types of contract structures. We envision that one such evolution may be a system under which Implementers are paid for time and materials while seeking and developing projects, but a greater portion of payments are based on delivered savings measured on an ex post basis.

On the CLEAResult point about payment security under a pay-for-performance structure, we agree that these types of requirements may not be applicable to all contractors. However, since the terms are negotiable, we will allow the IOUs to keep these terms in the modifiable section, since they may be applicable and important for certain types of program designs, though not necessarily others.

4.2. Progress and Evaluation Metrics

Section B of the IOU proposed modifiable terms addresses progress and evaluation metrics further discussed in this section.

4.2.1. IOU Proposal

The IOUs included, in their proposed modifiable terms, the following provisions associated with progress and evaluation metrics.

Progress and Evaluation Metrics

1. Final Implementation Plan.

The Parties shall finalize a Final Implementation Plan in accordance with the Draft Implementation Plan. The Final Implementation Plan will be posted to the relevant CPUC website by Company no later than sixty (60) days following the Effective Date of this Agreement. The Final Implementation Plan shall be consistent with the terms and conditions of the Agreement. {Comment: Term is subject to modification by Company and may be negotiated by Company and Bidder}

Implementer shall not be permitted to, nor shall Implementer permit or allow an Implementer Party to, commence the Services prior to both Parties' approval to the Final Implementation Plan. Company shall not be obligated to make any payment to Implementer under this Agreement prior to approval of the Final Implementation Plan. {Comment: Term is subject to modification by Company and may be negotiated by Company and Bidder}

2. Key Performance Indicators

Implementer shall use commercially reasonable efforts to meet the Key Performance Indicators (KPIs) for the Program attached hereto as Schedule [Comment: Schedule to be inserted based on the Proposal and negotiations between Implementer and Company]. Implementer shall provide to Company all documentation and accurate data needed to demonstrate compliance with each KPI and to calculate satisfaction of each KPI, at the frequency stipulated in the Final Implementation Plan or as reasonably requested by Company. Company shall review Implementer's performance in achieving each KPI once per calendar quarter or as otherwise deemed necessary by Company in its sole discretion. If Company determines, in its sole discretion, that Implementer does not meet one or more of its KPIs, then, in addition to and without limiting any and all remedies available to Company as provided in this Agreement, Implementer shall provide Company with

an action plan detailing the reasons why the KPI(s) were not achieved and the steps (and timeline for those steps) Implementer will take to remediate and achieve its KPI(s) in a timely manner. {Comment: Term is subject to modification by Company and may be negotiated by Company and Implementer, and will include a remediation timeframe for each KPI based on specific KPIs and contract type}

[In its Proposal, Bidder will be required to include a table of KPIs, which will be the primary means by which Company will assess Program performance on an ongoing basis. KPIs will be individually negotiated based on the specific Proposed Program features. Table 1 outlines a set of foundational KPIs applicable to all programs of several major contract types. The KPIs are subject to modification by Company and will be negotiated by Company and Bidder. Additional Implementer performance requirements to ensure KPIs are met may be negotiated between the Bidder and Company depending on the Program, including, but not limited to, true-up payments for not meeting savings KPIs or completing projects, right of Company to reduce or eliminate funding for program and payments, or in cases of material underperformance, right of Company to declare an event of default. {Comment: modifiable RFP Instructions} “KPIs” will be the primary means by which Company will assess Program performance on an ongoing basis.

Schedule [TBD]: Key Performance Indicators {Comment: Schedule to be included in Bidder’s Proposal and included in the Agreement, subject to modification by Company and may be negotiated by Company and Bidder}

4.2.2. Comments of Parties

ORA and TURN, in their comments, again focus on the need to align the key performance indicators in the third-party contracts with the required metrics now approved in D.18-05-041. In particular, both TURN and ORA are concerned that any performance indicators associated with energy savings clarify that the

metric is “net lifecycle” energy savings, which is in keeping with the direction in D.18-05-041.

CLEAResult’s comments on this section focused on the potential to create extended delays at the start of the contract if third parties are required to wait until the IOUs approve a Final Implementation Plan prior to starting any work. They point out that most contractors will have already gone through an extensive bidding and vetting process, and should be allowed to prepare for the program launch alongside development and approval of the Final Implementation Plan.

4.2.3. Discussion

TURN and ORA are correct that D.18-05-041 requires the savings metrics to evaluate net lifecycle energy savings. Thus, all key performance indicators (KPIs) that are associated with savings should include this qualification.

CLEAResult points out that implementers have no control over several portions of the proposed KPIs, and are thus subject to the utilities’ performance in those areas. We agree that this represents an unreasonable risk, and thus remove two instances of the phrase “in its sole discretion” from the first paragraph under section B.2. Implementers should have a dispute resolution or arbitration option if they are able to make the case that their achievement of KPIs not subject to utility performance has been improperly judged.

In addition, CLEAResult raises a reasonable point about overly constraining the commencement of program work after a contract has been awarded, by restricting work until after the implementation plans are finalized. We require that the IOUs remove this paragraph (the second paragraph under Section B.1. “Final Implementation Plan”).

4.3. Intellectual Property

The joint IOU proposal for modifiable terms contains Section H related to data collection and ownership requirements. We address in this section the portions related to ownership and use rights.

4.3.1. IOU Proposal

Section H.2. of the IOU proposed modifiable terms states as follows:

Ownership and Use Rights.

- a. Company Data. Unless otherwise expressly agreed to by the Parties, Company shall retain all of its rights, title and interest in Company's Data.
- b. Program Intellectual Property. Unless otherwise expressly agreed to by the Parties, any and all materials, information, or other work product created, prepared, accumulated or developed by Implementer or any Implementer Party under this Agreement with Program funds ("Program Intellectual Property"), including, without limitation, inventions, processes, templates, documents, drawings, computer programs, designs, calculations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be jointly owned by the Company and Program Participants, if any and without further consideration, on behalf and for the benefit of their respective customers. Program Intellectual Property will be owned by Company upon its creation. Implementer agrees to execute any such other documents or take other actions as Company may reasonably request to perfect Company's ownership in the Program Intellectual Property. Implementer and Implementer Parties shall retain no interest, title or ownership in any Program Intellectual Property and such Program Intellectual Property shall be used by Implementer and Implementer

Parties only to perform the obligations set forth hereunder. The Program Intellectual Property shall not be used for any purpose that is outside the direct scope of this Agreement, including, without limitation, for any commercial purposes in Implementer or an Implementer Party's general course of business, nor shall it be disclosed without the prior written consent of Company.

- c. Implementer's Pre-Existing Materials. If, and to the extent Implementer retains any preexisting ownership rights ("Implementer's Pre-Existing Materials") in any of the materials furnished to be used to create, develop, and prepare the Program Intellectual Property, Implementer hereby grants Company and the Program Participants on behalf of their respective customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Implementer or any Implementer Party for the sole purpose of using such Program Intellectual Property for the conduct of Company's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto. Unless otherwise expressly agreed to by the Parties, Implementer shall retain all of its rights, title and interest in Implementer's Pre-Existing Materials. Any and all claims to Implementer's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Program Intellectual Property must be expressly disclosed to Company prior to performing any Services under this Agreement.

4.3.2. Comment of Parties

Oracle is concerned about the intellectual property provisions not being well tailored to software companies with business models which, according to Oracle, "draw much of their value from the ability to develop relatively

standardized solutions across their entire customer base.” In this situation, it may not be feasible for a software company to isolate its intellectual property from a single utility program, nor would it relinquish legal ownership in this circumstance. Oracle also notes that existing contract language with California IOUs often allows for non-transferrable, non-exclusive, and non-sub-licensable rights for authorized users.

CLEAResult is also concerned about the provision that allows for IOU ownership of intellectual property “without limitation” even though this is a negotiable provision. In addition, CLEAResult objects to the limitation on use of intellectual property developed under the program outside of the direct scope of the contract, as well as restrictions on the use of pre-existing materials, stating that these provisions present barriers to efficiency and cost-effectiveness. CLEAResult also objects to the requirement that the third-party implementer disclose their pre-existing materials up front.

CEDMC points out that the contractual provisions should promote the use and development of materials that may leverage multiple purposes and sources of funding, and not strictly limit such sharing, in order not to disincentivize such opportunities. In addition, CEDMC is concerned about limiting the intellectual property developed to specific uses being a very expensive way to deploy programs. They recommend, instead, allowing more negotiation about these exact provisions.

4.3.3. Discussion

CLEAResult and CEDMC make important points about cost, efficiency, and effectiveness. Given that these terms are negotiable and modifiable, we prefer to remove the following phrases in order to ensure a level playing field for negotiation, depending on the exact scope of the services to be rendered under

the contract. Thus, in Section H.2.b. the phrases “without limitation” and “without further consideration” should be removed from the first sentence. We also agree with CEDMC that leveraging materials and sharing data beyond the scope of the agreement could become more important to ensuring cost-effective programs, as those requirements become increasingly difficult to meet over time.

Also, in Section H.2.b., the last two sentences should be removed, that read: “Implementer and Implementer Parties shall retain no interest, title or ownership in any Program Intellectual Property and such Program Intellectual Property shall be used by Implementer and Implementer Parties only to perform the obligations set forth hereunder. The Program Intellectual Property shall not be used for any purpose that is outside the direct scope of this Agreement, including, without limitation, for any commercial purpose in Implementer or an Implementer Party’s general course of business, nor shall it be disclosed without prior written consent of Company.”

Further, the Commission has an interest in utilizing intellectual property developed under the agreement if it can be useful to unlocking energy savings opportunities more broadly, even if held by the IOUs on behalf of ratepayers. We recognize that operationalizing this concept is a more complex task than can be undertaken in the context of these contract terms. It may be a topic appropriate for discussion among the CAEECC members for the future. In the meantime, we encourage the IOUs to consider bid evaluation criteria that could get at the degree to which the proposed program design develops data and intellectual property of value to the overall energy efficiency industry and would provide that information on an open platform to be readily utilized.

Finally, we understand CLEAResult's concern regarding the burden on an Implementer to pre-disclose its pre-existing materials at the beginning of a

contract. However, this provision also may serve to protect Implementers with intellectual property that they wish to retain, by making it clear up front which materials, data, or other work product the Implementer brings to the assignment. For this reason, we accept this portion of Section H.2.c as presented. However, in response to CLEAResult's comments on the proposed decision, we have clarified that pre-existing intellectual property that is modified during the course of an agreement under the energy efficiency business plans and a third-party contract complying with this decision, does not automatically become the property of the utility by virtue of even a small modification.

4.4. Definition of Small Business Enterprise

Section D of the proposed modifiable contract terms addresses the definition of diverse and disadvantaged business and employee terms, including small businesses, if applicable. Specifically, Section a.i. addresses the definition of Small Business Enterprise (SBE).

4.4.1. IOU Proposal

The IOU proposed term (D.a.i.) related to SBE definition reads as follows:

"SBE" means a "socially and economically disadvantaged small business concern" as defined in the Small Business Act (15 USC 631 *et seq.*).

4.4.2. Comments of Parties

SBUA is particularly concerned with this definition for SBEs, arguing that it is overly narrow. Specifically, SBUA argues that the federal definition requires that a business be owned by an individual or individuals who are both socially and economically disadvantaged, or by an Indian Tribe, or Native Hawaiian organization. SBUA argues that this definition is challenging and complex, and instead recommends replacing the SBE definition with a "small business"

definition referencing the Federal regulations that define "small business concern."

Alternatively, SBUA recommends that we could consider a California definition in the California Code of Regulations, which is simpler, requiring only that the small business have 100 or fewer employees and annual gross receipts of fifteen million dollars or less.

Finally, SBUA argues that making the SBE definition include the "socially disadvantaged" concept is also redundant, since the other modifiable terms include references to the Commission's General Order 156, relating to women-, minority-, LGBT-, and disabled veteran-owned businesses.

4.4.3. Discussion

We agree with SBUA that the SBE definition provided in the modifiable terms is overly narrow. The Diverse Business Enterprise definition offered as part of Section D of the modifiable terms is appropriate to cover that category, but other small businesses are also more appropriately designated in a broader category. To accomplish this, we prefer SBUA's recommendation to reference a California definition, rather than the more complex Federal version. Thus, we will require that SBEs be defined according to Title 2, Section 1896.12, of the California Code of Regulations.

The reference to General Order (GO) 156 then covers the special categories of small businesses in conjunction with this broader definition for the population overall.

4.5. Provisions Related to Disadvantaged Workers

Section D.a.iii in the IOU proposed modifiable terms defines the term "disadvantaged worker" and section D.c. governs the third party's obligations with respect to disadvantaged worker requirements.

4.5.1. IOU Proposal

The IOU proposed modifiable terms read as follows:

“Disadvantaged Worker” means a worker that (1) has a referral from a collaborating community-based organization (CBO), state agency, or workforce investment board; or (2) lives in a ZIP code that is in the top 25% in one or more of the five socioeconomic indicators as defined in the California Office of Environmental Health Hazard Assessment’s CalEnviroScreen Tool. These socioeconomic indicators are educational attainment, housing burden, linguistic isolation, poverty, and unemployment.

Disadvantaged Workers

Implementer agrees to comply, and to require all Implementer Parties to comply, with the Disadvantaged Worker requirements set forth in the Final Implementation Plan. Implementer shall provide a copy of such requirements to each Implementer Party and report any Disadvantaged Worker information to the Company at the interval specified in the Agreement.

[In its Proposal, Bidder will be encouraged to include a section describing the manner by which their proposed program will provide Disadvantaged Workers with improved access to career opportunities in the energy efficiency industry for programs that directly involve the installation, modification, repair, or maintenance of EE [energy efficiency] equipment. If Bidder is selected to engage in further contract negotiations with the Company, Company and Bidder will negotiate the requirements necessary to support improved access to career opportunities in the energy efficiency industry by Disadvantaged Workers for each applicable Proposed Program that will be included in the Agreement, if Bidder and Company execute an Agreement.]

4.5.2. Comments of Parties

SoCalREN’s comments argue that the IOU definition is too general, particularly as related to the provision requiring a referral from a community-

based organization (CBO). In addition, SoCalREN is concerned that the CalEnviroScreen tool does not sufficiently address employment criteria, such as unemployment rates or barriers to employment. To rectify this situation, SoCalREN suggests that the CBO requirement be further specified to include workforce inclusion, environmental justice, or workforce education and training CBOs. In addition, SoCalREN recommends that the individuals defined as disadvantaged workers meet one or more of the following criteria: household income is below 50 percent of Area Median Income; recipient of public assistance; lacking a high school diploma or GED; previous involvement with the criminal justice system; custodial single parent; chronically unemployed; emancipated from the foster care system; limited English proficiency; or live in a high unemployment ZIP code that is in the top 25 of only the *unemployment* indicators of the CalEnviroScreen Tool.

SoCalREN also recommends that the provisions related to disadvantaged workers apply to all PAs, and not just IOUs. Further, they recommend changes to the outcome metrics related to disadvantaged workers.

CEE's comments are also concerned that the definition of disadvantaged worker is overly narrow and will not capture important segments of the population. CEE is concerned that CBOs are not defined, similar to SoCalREN, and that the IOU definition does not actually define the types of disadvantaged workers, but rather defines how they should be reached.

Thus, CEE proposes its own definition of disadvantaged worker, consisting of the following characteristics:

A. An individual:

1. Living in a household with an income at or below 80 percent of the statewide median income or with median household incomes at or below the threshold

- designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093, or
2. Facing barriers to employment (*e.g.*, veterans, those with disabilities, minority, homeless, foster youth who have aged out of the system or are emancipated, chronically unemployed, formerly incarcerated etc.), or
 3. Referred by a partnering organization that has a proven track record of training and providing career opportunities to disadvantaged workers.
- B. An individual who lives in an area designated by the California Environmental Protection Agency as a "Disadvantaged Community" pursuant to SB 525 (De Leon).
- C. An individual who lives in a zip code whose CalEnviroScreen socioeconomic characteristics meet at least one of the following factors:
1. Educational Attainment: Percent of the population over age 25 with less than a high school education.
 2. Housing Burdened Low Income Households: Percent of households in a census tract that are both low income (making less than 80% of the Housing and Urban Development Area Median Family Income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs).
 3. Linguistic Isolation: Percent limited English-speaking households.
 4. Poverty: Percent of the population living below two times the federal poverty level
 5. Income: Median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093.

6. Unemployment: Percent of the population over the age of 16 that is unemployed and eligible for the labor force.

CEE's comments also indicate concern about how the IOU's provisions will provide disadvantaged workers access to the jobs that the third-party energy efficiency programs might create. They recommend a number of additional provisions to ensure that third parties, in their program implementation plans, include information about the manner in which the programs will support job access for disadvantaged workers, such as the adoption of diversity and inclusion goals or entering partnerships with community colleges or other training organizations.

Further, CEE recommends that at least 50 percent of the program incentives that go to contractors be reserved for those that demonstrate a commitment to provide career pathways to disadvantaged workers in two ways: 1) entering into an agreement with an organization such as a community college or other training or apprenticeship program; and 2) adopting an inclusion goal to make a good faith effort that at least 20 percent of all new hires shall be composed of disadvantaged workers (while acknowledging that the good faith effort shall not require a contractor to violate any collective bargaining agreement).

Finally, CEE agrees with SoCalREN that the metrics associated with outcomes for disadvantaged workers are insufficient.

ORA also comments on the lack of outcome-based focus by the IOUs in this area, and recommends that the Commission include as a metric the percentage of disadvantaged workers employed by third parties under the contracts.

4.5.3. Discussion

In this area, we agree with the comments of CEE and SoCalREN that, at a minimum, the IOU modifiable terms and conditions should include a definition of what constitutes a disadvantaged worker, prior to indicating the manner in which third parties are required to seek out such employees or representatives. We agree with SoCalREN's definition, because it covers the important categories without being too prescriptive about the levels that individuals must attain within the categories. Thus, we will require the IOUs to replace Section D.a.iii. with the following definition:

“Disadvantaged Worker” means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

In addition, as suggested by CEE, we will require that third parties be encouraged to partner with training or apprenticeship programs such as community colleges and set goals for employment or partnership with disadvantaged workers, and be required to report on these efforts as part of their third party contracts, to support metrics and goals adopted in D.18-05-041 adopting the overall energy efficiency business plans and associated metrics. They will also be required to include a statement of their approach to inclusion of disadvantaged workers in their bid materials.

We stop short of requiring certain percentages or goals for these efforts here, but instead will include them in the overall metrics-related work associated with the business plans.

ORA, in its comments on the proposed decision, points out that there was no portfolio-level metric required by D.18-05-041 to track participation and utilization of disadvantaged workers in the business plan portfolios overall. Thus, we are adding a requirement that, in addition to tracking disadvantaged worker participation in training programs, the PAs should also track overall disadvantaged worker participation in the programs in their portfolio. At this stage, it should be proposed as an indicator and not a metric (a target is not required). PAs should propose the metric in their next annual budget advice letter, due in 2019.

In addition, we make it clear, in response to comments on the proposed decision by SCE and SDG&E, for purposes of reporting on metrics related to disadvantaged workers, the implementer's collection of personal information from individual workers beyond zip code shall be 1) strictly voluntary for the worker, 2) recorded in an anonymous manner, and 3) cannot be used as a reason to include or exclude particular workers from assignment to any projects funded as part of the energy efficiency business plans. When implementers seek information, it must be in a manner such that the workers do not feel compelled to provide any such personal information, particularly related to marital or parental status, involvement in the criminal justice system, and/or involvement with the foster care system. The exception to these statements is in instances where background checks are required.

We also clarify that the definition of "disadvantaged worker" in this context is related to the metric tracking requirements in D.18-05-041 Attachment

A. Disadvantaged workers are to be tracked with respect to the Workforce, Education, and Training metric in D.18-05-041 related to diversity of participants. We further clarify that the D.18-05-041 metric defined by “ID by zip code” refers not to the method by which the implementer determines which participants are disadvantaged, but rather indicates the level of geographic granularity by which reporting of these percentages is to be delivered.

4.6. Coordination with Other Program Administrators

This section addresses Section G of the modifiable terms and conditions included by the IOUs, intended to address coordination where there are multiple PAs operating in a single geographic area.

4.6.1. IOU Proposal

The IOU modifiable term states as follows: “Implementer shall coordinate with other Program Administrators [to be defined in the Agreement] administering energy efficiency programs in the same geographic area as Company. {Comment: placeholder for Agreement term}.”

4.6.2. Comments of Parties

MCE supports this term, but would like the Commission to clarify that the name and geographic area served by each PA be included in the third party solicitation materials, so that third parties know up front the PAs with whom they will be coordinating.

4.6.3. Discussion

MCE's suggestion is straightforward and should be implemented. Allowing third parties to have early awareness of such coordination requirements when preparing their bids is sensible. We will also require that if the Commission articulates additional rules in the future related to program coordination, that that information also be included in future solicitation materials. Thus, the final modifiable term should read:

Implementer shall coordinate with other Program Administrators [to be defined in the Agreement] administering energy efficiency programs in the same geographic area as Company. These other Program Administrators include:
[list PAs and geographic and program area overlaps]

The California Public Utilities Commission may develop further rules related to coordination between Program Administrators in the same geographic area, and any Implementer is required to comply with such rules.

5. Other Issues Raised by Parties Related to Standard or Modifiable Contract Provisions

In addition to the specific proposed contract provisions discussed above, TURN, ORA, and the IOUs raised several general issues related to the standard and modifiable contract terms.

5.1. Customer Incentives, Repository for All Program Rules, and Applicability of Other Commission Requirements

5.2. Discussion

On the issue of customer incentive payments and structure, we are sympathetic with the IOUs that it could be very difficult to specify this in any kind of standard manner, given that there are so many different types of program structures. However, we ask that, in their bidding materials, they

require that the third-party bidder explicitly define the amount and manner in which incentive payments will be made to customers, and on what basis. These provisions should be available to the members of the procurement review group at the time they are consulting with the IOUs on bid evaluation. We also state a general preference for incentive payment structures to customers that are increasingly based on verified savings, to the extent feasible.

We also agree with the IOUs and TURN that the Energy Efficiency Policy Manual could serve a useful purpose in being the repository for overall program rules set forth by the Commission. Commission staff indicates its desire to update the document, and will do so as soon as feasible. In the meantime, we agree with TURN that a general contractual provision that requires third parties to adhere to Commission policy and guidance for energy efficiency generally is a prudent step.

6. Comments on Proposed Decision

The proposed decision of ALJ Fitch in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were timely filed by the following parties: AGC; Atlas; Big Sky Electric; Cal PA; CEDMC; CEE; CLEAResult; Cold Craft; Collins; County of Los Angeles on behalf of SoCalREN; Foothill; IHACI; Morrow Meadows; O'Bryant; On Target; PG&E; SBUA; SCE; SDG&E; SoCalGas; and Stockman's.

Reply comments were timely filed by the following parties: BlueGreen Alliance; Cal PA (previously ORA); CAL SMACNA; CEDMC; CEE; IHACI; JCEEP; LMCC for IBEW-NECA; NRDC; Nest; SBUA; SCE; Sierra Club; and SoCalGas.

Numerous parties offered constructive suggestions for modification of individual provisions of the proposed decision. Those made are discussed throughout the text of the decision. This section also discusses some of the overarching comments from parties and the Commission's response.

ORA, now Cal PA, suggests that the Commission should set a timetable for evaluation of greater application of the workforce standards to residential projects and a quick mechanism to make this application operational relatively easily through an advice letter filing. CEE specifically suggests that the CAEECC be tasked with convening stakeholders, to discuss and vet further application of workforce standards. This suggestion is logical and we have implemented it in the text of the decision. We request that CAEECC begin discussion, no later than July 1, 2020, of possible further application of workforce standards beyond those adopted in this decision, after due consideration of parties' experiences with implementation of the standards required herein. If consensus is reached on further application and/or additional standards, any of the PAs may bring us a proposal by no later than January 31, 2021, for further consideration in any appropriate energy efficiency rulemaking proceeding or business plan application proceeding that is open at that time. We do not adopt the ORA suggestion for an advice letter process, however, as these issues are complex and we prefer consideration in a formal proceeding venue.

ORA/CalPA and CEE additionally recommend application of the workforce standards to all projects, including residential. This recommendation is shared by many of the individual contractors also filing comments on the proposed decision. We have declined to make this change because it would involve application of the standards to a much wider set of contractors and projects. While we agree with the comments that residential projects often suffer

from equivalent or worse quality shortcomings, we prefer to stick with our phased approach to the applicability of the standards. However, we have implemented CEE's alternative proposal, which is to apply the standards to HVAC projects reserving at least \$3,000 in incentives and lighting controls projects reserving at least \$2,000 in incentives. This should capture a large percentage more projects than the original proposal.

In addition, as pointed out by SoCalREN in its comments on the proposed decision, in at least some cases the customer has already selected a contractor for project work prior to program enrollment. It is not clear how to ensure contractor compliance with the workforce requirements in this decision, depending on the exact program design and delivery strategy. Thus, these are issues that will need to be worked through, especially in the residential sector, and we are not yet prepared to take on that task given all of the other competing priorities in the energy efficiency programs at this point in time.

ORA/Cal PA also suggests that the "experienced worker" path of qualification for the HVAC standards is unclear and that the five-year experience requirement will not necessarily ensure quality installations. CEE states a similar concern, and makes recommendations to modify the experience worker requirements to ensure the proper contractor license and some testing of installation knowledge and abilities. We have made these changes in the text of the decision.

ORA/Cal PA and CEE also share concern about the HVAC workforce requirements stating that an apprentice could be in HVAC "or a related field." To avoid confusion, this text has been eliminated.

CEE also suggests a modification to the findings and conclusions to avoid confusion about any union participation requirements associated with the

workforce standards in this decision. There are no such requirements, and we have made the change requested by CEE.

Turning to the other contract terms and conditions, all of the IOUs commented that the term of the background checks should be restored to seven years, instead of five recommended in the proposed decision, because seven years in the standard approach to background checks. We agree and have made this modification.

The IOUs also suggest reverting to their proposed definition of “disadvantaged worker” because the new requirements in the proposed definition such as those related to criminal justice background, single parent status, and involvement with the foster care system, would require collection of personal information. We agree with this concern, and therefore have made it clear in this decision that collection of such information would be strictly voluntary on the part of the worker and would be held in an anonymous manner to be reported in aggregated metrics. Workers would not be required to disclose such information.

SCE is also concerned that collection of such personal information could subject the IOUs to claims of discrimination, and that the California Fair Employment and Housing Act, the Fair Labor Standards Act, and other related laws prohibit or discourage such data collection. The comments state that asking a job applicant or employee certain questions is highly intrusive and not appropriate. SCE points out that many of the factors would be subject to self-reporting and not verifiable. Finally, SCE argues that according to this definition, a high-income individual with a minor infraction could be inappropriately counted as a disadvantaged worker.

We have modified the definition to address these concerns, and also clarify that we are content with voluntary self-reporting of this personal information, along with the requirement that the worker information be kept anonymously.

In addition, we have made a change suggested by CEE to the modifiable terms and conditions for the third-party contracts, to require third parties to include in their bids how they plan to address utilization of disadvantaged workers, though the manner in which they address these workers is still ultimately up to the contractor to propose. ORA also notes that there was no overall portfolio metric or indicator required in D.18-05-041 to track the utilization of disadvantaged workers. We have added the requirement here that the program administrators should propose such a metric (initially as an indicator only) in their next annual budget advice letters filed in 2019.

SCE also requests clarification of the meaning of a modifiable contract term. We clarify that the terms in Attachment B may be modified by mutual agreement between the PA and the third party. Attachment B is the standard starting point from which terms may depart by mutual agreement. Unilateral modifications by the utility are not permitted, though the utility may offer additional modifiable terms beyond those included in Attachment B. Even then, the modifiable terms may not be modified unilaterally, but only by mutual agreement between the utility and the third party.

CEDMC's comments suggest further limits on the requirements to background checks, to apply only to personnel with access to premises of customers and not merely data. This is reasonable and we have made this change to further reduce the burden, particularly on software companies.

In addition, CEDMC suggests modifications to the effective date for the workforce requirements to avoid disruption in programs already being

implemented or in development. CLEAResult, in its comments, suggests applicability starting July 1, 2019 for new solicitations and January 1, 2020 for other programs. We have split the difference in these revisions. The workforce requirements will apply to new third-party solicitations issued after the date of this decision, and to all other programs on July 1, 2019, to allow additional lead time for existing or renewed programs to comply with the requirements.

SoCalREN's comments suggest development of a standardized verification and enforcement procedure related to the workforce standards. While this may be a good idea and we encourage the PAs to explore it, we will not yet order it in this decision.

CLEAResult offers some minor changes to the standard contract terms related to subcontractor training and opportunity to cure deficiencies by the third party. We have made these changes. In addition, CLEAResult clarified its concern related to declare pre-existing intellectual property at the beginning of a contract as a risk that the utility could attempt to take ownership of that pre-existing intellectual property if even a small change was made during the course of a contract. We agree with this concern and have modified the language to make it clear that this is not appropriate.

Finally, CLEAResult raises a concern about the definition of Small Business Enterprise herein and the Commission's previous definition of small business customer related to its energy usage, determined previously in D.10-10-032 and being considered now in a pending Resolution before the Commission. Several parties agreed with this concern in their reply comments. We do not necessarily see the definition in this decision and the one in D.10-10-032 as mutually exclusive, since they were developed for different purposes. However, we do agree that it may be time for the Commission to

reevaluate the energy usage characteristics utilized in defining small business customers back in 2010. This will have to occur in another venue, however, most likely the current or a future energy efficiency rulemaking.

7. Assignment of Proceeding

Carla J. Peterman is the assigned Commissioner and Julie A. Fitch and Valerie U. Kao are the co-assigned ALJs in this proceeding.

Findings of Fact

1. The utility PAs filed a joint motion with proposed third-party standard and modifiable contract terms and conditions on March 19, 2018.
2. An ALJ ruling was issued July 9, 2018 proposing certain standard workforce requirements to apply to all PA and third-party programs, in the areas of HVAC and lighting controls projects.
3. Parties in this proceeding cite to numerous studies that suggest a link between workforce requirements and quality installation, but relatively few that establish a direct link to resulting increased energy savings.
4. Basing the application of workforce standards to large projects on the total incentive dollar amount reserved will be easier and more transparent than utilizing total project cost.
5. Applying an incentive size threshold for HVAC projects of \$3,000 or more and for lighting controls projects of \$2,000 or more will capture most of the largest projects in the non-residential market and allow the Commission to gain experience with these types of requirements.
6. Upstream and midstream actors in the HVAC and lighting controls markets, such as manufacturers, distributors, and retailers, are not typically involved in project installation, and more programs aimed at those actors are

focused on the stocking and selling of high-efficiency units rather than installation quality.

7. The California Department of Industrial Relations and the Contractors State Licensing Board both have definitions of journey-level work that are appropriate for consideration in the context of HVAC project workforce requirements.

8. Apprenticeship programs accredited by California or the federal government represent appropriate training, both classroom and in-field, for HVAC technicians.

9. CALCTP certification is the only current program providing training in lighting controls installation, and not just acceptance testing, in California.

10. Requiring the workforce standards in all third-party solicitations issued after the effective date of this decision by IOUs and all other new or renewed programs beginning July 1, 2019 will balance timely implementation and provide market certainty.

11. It is reasonable to ask the CAEECC to convene a stakeholder discussion by no later than July 1, 2020 to discuss the experience to date with the implementation of the workforce standards in this decision and whether or not these or additional standards should be extended to other types of programs or projects.

12. There is no requirement for union membership with respect to the workforce standards included in this decision.

13. Inclusion of a "termination for convenience" term in the standard contract term will discourage participation in the third-party solicitation process because it places too much risk on the third parties.

14. Third parties whose contracts are modified or terminated as a result of Commission action should have a fair right to compensation for services rendered and costs incurred under the terms of agreement.

15. D.18-05-041 requires energy savings to be measured on a net lifecycle basis, and thus any payment terms or evaluation metrics for third party contracts that are performance-based, based on energy savings, should be based on net lifecycle savings, unless there is a program-design-related reason to deviate from this, in which case it can be negotiated between the third party and the IOU.

16. Contract terms containing absolute statements such as "without limitation" and "without further consideration" related to intellectual property may create barriers to participation in third-party solicitations.

17. The California definition of Small Business Enterprise is contained in Title 2, Section 1896.12 of the California Code of Regulations.

18. It is appropriate to establish a definition of "disadvantaged worker" so that program administrators can design approaches to reach such individuals and report on associated metrics as required in D.18-05-041.

19. It will be helpful to third-party bidders to be aware at the beginning of a solicitation of the program administrators whose programs are operating in the geographic area they intend to serve.

Conclusions of Law

1. D.18-05-041 made a commitment to examine further the possibility of making certain workforce requirements to improve installation, modification, and maintenance, quality and energy savings associated with HVAC and lighting controls projects.

2. D.18-01-004 required the utility PAs to file a motion containing standard and modifiable contract terms for third parties bidding on contracts mandated by the decision.

3. It is reasonable to expect that requiring certain training or length of experience qualifications for workforce installing HVAC and lighting controls projects will, over time, lead to a larger number of technicians and companies seeking these certifications or training.

4. It is also reasonable to conclude that these training and certifications career paths could provide more opportunities for disadvantaged workers.

5. It is reasonable to expect that higher quality installations, modification, and maintenance of HVAC and lighting controls projects could lead to higher energy savings.

6. To gain experience with workforce requirements, it is reasonable to limit their application, at least initially, to large non-residential HVAC and lighting controls projects.

7. The Commission should impose workforce requirements for HVAC projects where the incentive reserved is \$3,000 or more.

8. The Commission should impose workforce requirements for lighting controls projects where the incentive reserved is \$2,000 or more.

9. The Commission should exempt projects from the workforce standards in situations where the incentives are paid to upstream and midstream actors, including manufacturers, distributors, and retailers, where these entities do not hire a separate contractor for installation or maintenance of the equipment.

10. The Commission should require all workers participating in installation, modification, and maintenance of HVAC measures on projects that meet the criteria outlined in this decision to meet one of the following criteria:

- Completed an accredited HVAC apprenticeship.
- Be enrolled in an accredited HVAC apprenticeship.
- Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations, passed a practical and written HVAC system installation competency test, and received credentialed training specific to the installation of the technology being installed.
- Has a C-20 HVAC contractor license from the California Contractor's State Licensing Board.
- All of the above requirements apply to all of the individuals that perform the installation work, not to the contracting firm itself.

11. The Commission should not endorse lighting training standards offered by manufacturers to meet the workforce standards adopted in this decision.

12. CALCTP certification should be required for technicians installing lighting controls projects that meet the criteria outlined in this decision.

13. The HVAC and lighting controls workforce requirements in this decision should be required to be applied to new third-party solicitations by the IOUs released after the date of this decision and to any new or renewed programs beginning no later than July 1, 2019.

14. Program administrators should be authorized to file a Tier 2 advice letter to propose to add lighting controls certification providers in the future in addition to CALCTP, as long as the certification program has characteristics equivalent to CALCTP (such as, not manufacturer-specific). It is reasonable to request that the CAEECC convene a stakeholder discussion about any additional lighting controls certification to be proposed prior the an advice letter being filed.

15. The Commission should request that the CAEECC convene a stakeholder process no later than July 1, 2020 to discuss experience with implementation of

the workforce standards and the potential to extend these or new standards to additional programs or projects. If consensus is reached, any PA is invited to make an additional proposal to the Commission by no later than January 1, 2021.

16. The standard contract term proposed by the IOU PAs related to performance assurance and bonding is appropriately applied only to third parties providing direct installation services. For other types of providers, the terms should be negotiable for mutual agreement.

17. The standard contract term related to financial statements should be broadened to allow for documents that are audited or reviewed in accordance with generally-accepted accounting principles, and should be kept confidential by the PA.

18. IOU-proposed terms on background checks of third party employees and contractors were overly broad and should be scaled back to be appropriate to the job task and to avoid potential for creating barriers for disadvantaged workers. Background checks need not have been conducted prior to employment, but should be required for those individuals who have access to customer premises.

19. Drug testing is an appropriate requirement only for some types of job functions and should be negotiable depending on the service being delivered under the third-party contract.

20. Employees or representatives of software companies working on programming or other products to support programs, where there is no access to customer premises, need not be subject to background checks.

21. The list of offenses which are not permitted for employees subject to background checks should be generalized to include offenses similar to those defined in California as a "serious felony."

22. IOUs should not be permitted to include a "termination for convenience" term in their standard contract terms.

23. The IOU standard contract term related to termination and/or modification as a result of a Commission order should include provisions that allow costs or expenses undertaken in good faith by the third party to be compensated under the terms of the agreement.

24. The option for a third party to request arbitration or mediation should be required for contract dispute resolution. The utilities should be required to engage in arbitration or mediation in good faith if requested by a third party.

25. Third parties should be allowed a 60-day period after receipt of written notice to cure any contract failure to achieve minimum performance requirements.

26. Any contract payment terms and evaluation metrics that are performance-based, based on energy savings, should be based on net lifecycle energy savings unless there is a program-design-related reason to deviate from this, in which case it can be negotiated between the third party and the utility.

27. It may be possible to standardize payment terms more fully in the future, as program structures evolve.

28. The date an Implementer may commence work should not be constrained by the date an Implementation Plan is finalized.

29. The phrases "without limitation" and "without further consideration" should be stricken from the third-party terms and conditions related to intellectual property. The utilities should not be authorized to further limit the use of intellectual property that may be developed as a result of third party energy efficiency contracts that may otherwise benefit the future delivery of energy efficiency programs.

30. Up front disclosure requirements for third parties to notify the PAs about their use of intellectual property already developed should serve to protect that entity's rights to the intellectual property.

31. It is appropriate to define Small Business Enterprise according to Title 2, Section 1896.12 of the California Code of Regulations. The diverse business requirements can then be covered by the GO 156 definitions set forth by the Commission.

32. The Commission should establish a definition of "disadvantaged worker" that includes an individual that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration for one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

33. The definitions of Small Business Enterprise and Disadvantaged Worker, while included in the modifiable terms and conditions for third-party contracts of IOUs, should be applied across all PA portfolios, to ensure consistent definition and tracking of metrics associated with these topics.

34. All program administrators should be required to file, in their 2019 annual budget advice letters, a portfolio-level indicator to track overall participation of disadvantaged workers in their business plan portfolios.

35. Third party program designers and implementers should be informed of the program administrator programs operating in their target geography or

market, and should be required to coordinate with all program administrator programs during the course of their activity.

36. Third-party bidders should be required to explicitly define the amount and manner in which incentive payments will be made to customers, and on what basis, in their program proposals. This material should be made available to the members of the procurement review groups at the time they are consulting with the utility PAs on bid evaluation.

37. All PAs should move toward incentive payment structures to customers that are based on verified savings, to the extent feasible, depending on the program design.

38. Utility PAs, and PAs generally, should require all of the third-party program designers and implementers to adhere to Commission policy and requirements for energy efficiency programs.

O R D E R

IT IS ORDERED that:

1. All energy efficiency program administrators shall require for any new third-party solicitations released after the date of this decision, and no later than July 1, 2019 for other new or renewed programs, all projects involving installation, modification, or maintenance of heating, ventilation, and air conditioning (HVAC) measures in non-residential buildings and reserving a project incentive of \$3,000 or more, to utilize installation technicians that meet one of the criteria below. This requirement shall not apply where the incentive is paid directly to a manufacturer, distributor, or retailer of HVAC equipment, unless the manufacturer, distributor, or retailer installs or contracts for the installation of the equipment

- a. Completed a California or federal accredited HVAC apprenticeship.
- b. Be enrolled in a California or federal accredited HVAC apprenticeship.
- c. Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations and passed a practical and written HVAC system installation competency test and received credentialed training specific to the installation of the technology being installed.
- d. Has a C-20 HVAC contractor license from the California State Contractor's Licensing Board.
- e. All of the above requirements apply to all of the individuals that perform the installation work, not to the contracting firm itself.

2. All energy efficiency program administrators shall require for new third-party solicitations released after the date of this decision and no later than July 1, 2019 for other new or renewed programs, for all projects involving installation of lighting controls measures in non-residential buildings and reserving a project incentive of \$2,000 or more to utilize installation technicians that have been certified by the California Advanced Lighting Controls Training Program (CALCTP). This requirement shall not apply where the incentive is paid directly to a manufacturer, distributor, or retailer of lighting controls, unless the manufacturer, distributor, or retailer installs or contracts for the installation of the lighting controls. A program administrator may file a Tier 2 advice letter proposing to add other lighting controls certification or training programs with characteristics equivalent to CALCTP (not including manufacturer-specific programs) to this requirement, after a stakeholder process has been convened through the California Energy Efficiency Coordinating Council.

3. The Commission will consider the responsible contractor policy being developed by the California Energy Commission pursuant to Senate Bill 350 (DeLeon, 2015) and the efficacy of the standards required in Ordering Paragraphs 1 and 2 above when evaluating the next round of energy efficiency business plan proposals and considering whether to expand the workforce requirements further.

4. We request that the California Energy Efficiency Coordinating Council convene stakeholder discussions no later than July 1, 2020 to discuss and vet experience with the workforce standards required in this decision and the potential for additional application of these standards or the introduction of new standards into the energy efficiency portfolios. If a stakeholder consensus is reached, a program administrator shall file a proposal for additional or expanded workforce standards by no later than January 1, 2021.

5. All energy efficiency program administrators, in their 2019 annual budget advice letter filings required by Decision 18-05-041, propose a common portfolio-level indicator to track disadvantaged worker participation in all programs in their business plan portfolios.

6. The utility program administrators (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Gas Company) shall, and other program administrators may, include as standard contract terms for third parties bidding to design and/or deliver energy efficiency programs under the energy efficiency rolling portfolio, as required by Decision 18-01-004, only those provisions included in Attachment A of this decision.

7. The utility program administrators (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company,

Southern California Gas Company) shall, and other program administrators may, include as modifiable or negotiable contract terms for third parties bidding to design and/or deliver energy efficiency programs under the energy efficiency rolling portfolio, as required by Decision 18-01-004, the terms included in Attachment B to this decision. Other negotiable contract terms may also be included, but those in Attachment B are required as the starting point for negotiations. The modifiable terms in Attachment B to this decision and any others put forward by the utilities may only be modified by mutual agreement between the utility program administrator and the third-party bidder.

8. All energy efficiency program administrators shall define Small Business Enterprises, for purposes of their energy efficiency portfolios, according to Title 2, Section 1896.12, of the California Code of Regulations.

9. All energy efficiency program administrators shall define "disadvantaged worker," for purposes of their energy efficiency portfolios and tracking metrics or indicators associated with them, as an individual that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool. Personal information about individual workers may only be collected on a voluntary basis, and may not be used as criteria to determine particular workers assigned to projects funded as part of the energy efficiency business plans.

10. All third parties bidding to design and/or implement energy efficiency programs for the utility energy efficiency program administrators (PAs) (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Gas Company) shall provide a definition of the amount and manner in which incentive payments will be made to customers, and on what basis, in their responsive bids. This information shall be made available by the utility PAs to the members of the procurement review group(s) consulting on evaluation of third-party bids.

11. All third parties operating under a contract to an energy efficiency program administrator as approved in Decision 18-05-041 and receiving ratepayer funding shall be required to abide by all Commission policies and guidance for energy efficiency programs.

This order is effective today.

Dated October 11, 2018, at San Francisco, California.

MICHAEL PICKER

President

CARLA J. PETERMAN

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

Commissioners

Attachment A

Standard Contract Terms and Conditions

A. Eligibility (Type of Business, License Requirements, Insurance and Bonding Requirements, Etc.)

1. Licensing. At all times during the performance of the Services, Implementer¹ represents, warrants and covenants that it has and shall, and shall cause each of its employees, agents, representatives, and subcontractors and all other persons performing the Services on behalf of the Implementer ("Implementer Party") to, obtain and maintain, at its sole cost and expense, all required licenses and registrations required for the operation of its business and the performance of the Services. Implementer shall promptly provide copies of such licenses and registrations to Company at the request of Company.
2. Performance Assurance; Bonding. At all times during the performance of the Services, Implementer providing any direct installation services represents, warrants and covenants that it has and shall, and shall cause each Implementer Party to, obtain and maintain, at its sole cost and expense, all bonding requirements of the California State License Board, as may be applicable. Implementer shall also maintain any payment and/or performance assurances as may be requested by Company during the performance of the Services.
3. Insurance. At all times during the performance of the Services, Implementer represents, warrants and covenants that it has and shall, and shall cause each Implementer Party to, obtain and maintain, at its sole cost and expense, the insurance coverage requirements specified in *[Insert IOU-specific Appendix containing insurance requirements to be developed by the parties based on the Scope of Work]*.
4. Good Standing. Implementer represents and warrants that (a) it is a *[corporation/limited liability company/partnership]* duly organized, validly existing and in good standing under the laws of the State of *[Insert State of organization]*, and (b) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to engage in the business it presently conducts and contemplates conducting, and is and will be duly licensed or qualified to do business and in good standing under the laws of the State of California and each other jurisdiction wherein the nature of its business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder.
5. Financial Statements. Implementer shall deliver financial statements on an annual basis or as may be reasonably requested by Company from time to time. Such financial statements or documents shall be for the most recently available audited or reviewed period and prepared in accordance with generally-accepted accounting principles. Company shall keep such information confidential if requested by Implementer, except provision to the Commission may be required from time to time under confidentiality procedures, where applicable.

B. Safety Requirements

1. Safety. During the term of this Agreement, Implementer represents, warrants and covenants that it shall, and shall cause each Implementer Party to:

¹ "Implementer" will be defined in the Agreement as the Third-Party Program implementer who is party to the Agreement.

- (a) abide by all applicable federal and state Occupational Safety and Health Administration requirements and other applicable federal, state, and local rules, regulations, codes and ordinances to safeguard persons and property from injury or damage;
- (b) abide by all applicable Company security procedures, rules and regulations and cooperate with Company security personnel whenever on Company's property;
- (c) abide by Company's standard safety program contract requirements as may be provided by Company to Implementer from time to time;
- (d) provide all necessary training to its employees, and require subcontractors to provide training to their employees, about the safety and health rules and standards required under this Agreement; and
- (e) have in place an effective Injury and Illness Prevention Program that meets the requirements all applicable laws and regulations, including but not limited to Section 6401.7 of the California Labor Code.

Additional safety requirements (including Company's standard safety program contract requirements) are set forth elsewhere in the Agreement, as applicable, and in Company's safety handbooks as may be provided by Company to Implementer from time to time.

2. Background Checks.

- (a) Implementer hereby represents, warrants and certifies that any personnel of Implementer or Implementer Party, and their representatives and agents, having or requiring access to Company's assets, premises, customer property, data or systems ("Covered Personnel") shall have successfully passed background screening on each such individual, prior to receiving access, which screening may include, among other things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of assignment to the project.
- (b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Implementer permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of assignment to the project, or at any time after the individual's date of, assignment to the project, for any of the following ("Serious Offense"): (i) a "serious felony," similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 476, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations (RICO) Statute (18 U.S.C. Sections 1961-1968)).
- (c) To the maximum extent permitted by applicable law, Implementer shall maintain documentation related to such background and drug screening for all Covered Personnel

and make it available to Company for audit if required pursuant to the audit provisions of this Agreement.

- (d) To the extent permitted by applicable law, Implementer shall notify Company if any of its Covered Personnel is charged with or convicted of a Serious Offense during the term of this Agreement. Implementer will also immediately prevent that employee, representative, or agent from performing any Services.
- 3. Fitness for Duty. Implementer shall ensure that all Covered Personnel report to work fit for their job. Covered Personnel may not consume alcohol while on duty and/or be under the influence of drugs or controlled substances that impair their ability to perform their work properly and safely. Implementer shall, and shall cause its subcontractors to, have policies in place that require their employees report to work in a condition that allows them to perform the work safely. For example, employees should not be operating equipment under medication that creates drowsiness.

C. Dispute Resolution Process

- 1. Disputes. Either Party may give the other Party written notice of any dispute which has not been resolved at a working level. Any dispute that cannot be resolved between Implementer's contract representative and Company's contract representative by good faith negotiation efforts shall be referred to a *[Insert IOU-specific level of authority]* of Company and an officer of Implementer for resolution. Within 20 calendar days after delivery of such notice, such persons shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If Company and Implementer cannot reach an agreement within a reasonable period of time (but in no event more than 30 calendar days), Company and Implementer shall have the right to pursue all rights and remedies that may be available at law or in equity. In particular, Implementer shall have right to request arbitration or mediation to resolve the dispute and Company shall be required to participate in arbitration or mediation in good faith. All negotiations and any mediation agreed to by the Parties are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and Section 1119 is incorporated herein by reference.
- 2. Governing Law. This Agreement shall be governed by the internal laws of the State of California, with reference to its conflict of laws principles.
- 3. Venue. In the event of any litigation to enforce or interpret any terms of this Agreement, such action shall be brought in a Superior Court of the State of California located in *[Insert IOU-specific County]* (or if the federal courts have exclusive jurisdiction over the subject matter of the dispute, in the U.S. District Court for the *[Northern/Central/Southern]* District of California), and the parties hereby submit to the exclusive jurisdiction of such courts.

D. Termination Process

- 1. Event of Default. An "Event of Default" shall mean, with respect to a Party ("Defaulting Party"), the occurrence of any one or more of the following:
 - (a) With respect to either Party:
 - (i) the failure to perform any material covenant, obligation, term or condition of this Agreement (except to the extent constituting a separate Event of

Default), including without limitation the failure to make, when due, any undisputed payment required to be made by such Party, if such failure is not remedied within thirty (30) calendar days of Notice of such breach by the Non-Defaulting Party;

- (ii) such Party becomes insolvent, generally does not pay its debts as they become due, makes a general assignment for the benefit of creditors, or commences any action seeking reorganization or receivership under any bankruptcy, insolvency, reorganization or similar law for the relief of creditors or affecting the rights or remedies of creditors generally; or
- (iii) such Party disaffirms, disclaims, rejects (in whole or in part), or challenges the validity of this Agreement.

(b) With respect to Implementer:

- (i) any representation or warranty made by Implementer or Implementer Party to any person or entity (including, without limitation, a member of the public, a customer of Company, or a governmental authority) or in this Agreement is false or misleading in any material respect when made or when deemed made or repeated if the representation or warranty is continuing in nature;
- (ii) any legal action is made or commenced against Implementer or Implementer Party which, in Company's opinion, may interfere with the performance of the Services;
- (iii) Implementer or any Implementer Party commits any material act of dishonesty, fraud, misuse of funds, or misrepresentation of Company's administration of this Agreement;
- (iv) Company becomes aware of a public safety issue arising out of or related to Implementer's or Implementer Party's administration or performance of this Agreement;
- (v) Implementer assigns, subcontracts, or transfers this Agreement or any right or interest herein except in accordance with Section [__];
- (vi) Implementer fails to maintain the insurance coverage required of it in accordance with Appendix [__];
- (vii) Implementer fails to satisfy the collateral requirements set forth in Section [__], including failure to post and maintain the performance assurance requirements set forth in this Agreement;
- (viii) Implementer breaches any obligation of confidentiality or its obligations under Section *[Insert Section Reference to Security Measures]*; or
- (ix) Implementer fails to achieve *[Insert Minimum Performance Requirements]* provided that such failure continues for sixty (60) days following receipt of written notice of such failure.

2. Termination for Cause. If an Event of Default shall have occurred with respect to a Party, the other Party (the "Non-Defaulting Party") shall have one or more of the following rights:

- (a) To designate by Notice, which will be effective no later than twenty (20) calendar days after the Notice is received, the early termination of this Agreement (an "Early Termination Date");
- (b) Withhold any payments due to the Defaulting Party under this Agreement;
- (c) Suspend performance of Services under this Agreement (but excluding, for the avoidance of doubt, the obligation to post and maintain [Security] in accordance with Section [_____] and the obligation to obtain and maintain the insurance requirements in accordance with Section [____]); and
- (d) To pursue all remedies available at law or in equity against the Defaulting Party (including monetary damages), except to the extent that such remedies are limited by the terms of this Agreement.

3. Termination/Modification by CPUC Order. This Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission ("CPUC"). The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case Company shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such CPUC order or directive.

- (a) Company shall be liable to Implementer for the compensation earned on services satisfactorily performed prior to the effective date of termination, plus documented and verifiable costs (such as demobilization costs) reasonably incurred by Implementer in terminating the services. Implementer shall mitigate its damages to minimize its claim, if any, against Company.
- (b) Notwithstanding anything contained in this Section [____], in no event shall Company be liable for lost or anticipated profits or overhead on uncompleted portions of the Services. Implementer shall not enter into any agreement, commitments or subcontracts that would incur significant cancellation or termination costs without prior written approval of Company, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by Company under this Section [____]. Also as a condition precedent to the payment of any cancellation or termination charges by Company under this Section [____], Implementer shall have delivered to Company any and all reports, drawings, documents and deliverables prepared for Company before the effective date of such cancellation or termination.
- (c) Implementer shall have right to request arbitration or mediation to resolve particulars of the above provisions should they not result in reasonable compensation based on terms of original Agreement and Company shall be required to engage in mediation or arbitration in good faith upon such a request (See Section C).

4. Conclusion of Work. Upon Company's termination of this Agreement for any reason, Implementer shall, and shall cause each Implementer Party to, bring the Services to an orderly conclusion as directed by Company. Implementer and each Implementer Party shall vacate the

worksite but shall not remove any material, plant or equipment thereon without the approval of Company. Company, at its option, may take possession of any portion of the Services paid for by Company.

Attachment B

Required Modifiable Contract Terms and Conditions

A. Workforce Standards and Quality Installation Procedures

1. Workforce Standards.

At all times during the term of the Agreement, Implementer¹ shall comply with, and shall cause its employees, agents, representatives, subcontractors, independent contractors, and all other persons performing the Services² on Implementer's behalf ("Implementer Party") to comply with, the workforce qualifications, certifications, standards and requirements set forth in Section [___] ("Workforce Standards"). The Workforce Standards shall be included in their entirety in Implementer's Final Implementation Plan.³ Prior to commencement of any Services, once per calendar year, and at any other time as may be requested by Company⁴, Implementer shall provide all documentation necessary to demonstrate to Company's reasonable satisfaction that Implementer has complied with the Workforce Standards. *{Comment: Term is subject to modification and may be negotiated by Company and Bidder⁵}*

[A Draft Implementation Plan⁶ will be negotiated as part of the Agreement and will include Workforce Standards. In its Proposal,⁷ Bidder will be required to include a section identifying all relevant workforce standards that Bidder deems applicable to the Proposed Program⁸, including any specific skills certification and/or broader occupational training and experience that would reduce the risk of lost net lifecycle energy savings from poor installation, modification, or maintenance of the energy efficiency measures that Bidder proposes to be included in the Agreement⁹ (the "Proposed Workforce Standards"). Bidder's Proposed Workforce Standards will be reviewed by the Company as part of the Proposal, and if Bidder is selected to participate in the RFP by Company, Company and Bidder will negotiate the final Workforce Standards for each Proposed Program that will be included in any Agreement, if Bidder and Company execute a final Agreement. The Commission has specifically required Workforce Standards for non-residential heating, ventilation, and air-conditioning projects and lighting controls projects, as set forth below. *{Comment: modifiable RFP Instructions}*

¹ "Implementer" will be defined in the Agreement as the Third-Party Program implementer who is party to the Agreement that will implement the contracted-for EE program ("Program").

² "Services" will be defined in the Agreement as all of the services, and any other work, performed by Implementer pursuant to the Agreement and any related purchase orders.

³ "Final Implementation Plan" will be defined in the Agreement and will identify milestones and deliverables Implementer is required to comply with.

⁴ "Company" will be defined in the Agreement as the Investor Owned Utility entering into the Agreement with Implementer.

⁵ "Bidder" will be defined in the Solicitations Instructions of the IOUs Request for Abstract (RFA) and/or Request for Proposal (RFP), as an entity submitting a program proposal in response to the IOU's RFA and/or RFP pursuant to solicitation process and requirements.

⁶ "Draft Implementation Plan" will be defined in the Agreement.

⁷ "Proposal" will be defined in the Company's request for proposals ("RFP") instructions ("Instructions") for the Proposed Program.

⁸ "Proposed Program" means that certain energy efficiency program that Company seeks Offers for pursuant to Company's RFP Instructions.

⁹ "Agreement" will be defined in the RFP Instructions and will be the agreement executed by Bidder and Company as a result of an RFP for a Proposed Program upon Company's final selection of Offers, and pursuant to the RFP process and requirements of the Proposed Program.

a. For Heating, Ventilation, and Air Conditioning (HVAC) Energy Efficiency Programs or Projects

For all Program Projects¹⁰ and for each Measure,¹¹ installed, modified, or maintained in a non-residential setting where the project is seeking an energy efficiency incentive of \$3,000 or more, Implementer shall ensure that each worker or technician involved in the project meets at least one of the following criteria:

- (1) Completed an accredited HVAC apprenticeship.
- (2) Is enrolled in an accredited HVAC apprenticeship.
- (3) Completed at least five years of work experience at the journey level according to the Department of Industrial Relations definition, Title 8, Section 205, of the California Code of Regulations, passed a practical and written HVAC system installation competency test, and received credentialed training specific to the installation of the technology being installed.
- (4) Has a C-20 HVAC contractor license issued by the California Contractor's State Licensing Board.

This standard shall not apply where the incentive is paid to any manufacturer, distributor, or retailer of HVAC equipment, unless the manufacturer, distributor, or retailer installs or contracts for the installation of the equipment.

{Comment: Further relevant standards beyond these requirements may be negotiated by Company and Bidder and Bidder will propose any further standards based on Program design, etc.}

b. For Advanced Lighting Control Programs or Projects:

For all Program Projects and for each Measure, installed in a non-residential setting where the project is seeking an energy efficiency incentive of \$2,000 or more, Implementer shall ensure that all workers or technicians involved in the project are certified by the California Advanced Lighting Controls Training Program (CALCTP). This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of lighting controls unless the manufacturer, distributor, or retailer installs or contracts for installation of the equipment.

{Comment: Further relevant standards beyond these requirements may be negotiated by Company and Bidder and Bidder will propose any further standards based on Program design, etc.}

2. Quality Assurance Procedures.

Implementer shall comply with the following requirements (the "Quality Assurance Procedures"): *[Comment: Quality Assurance Procedures to be negotiated after Proposal received.] {Comment: Term is subject to modification and may be negotiated by Company and Bidder}*

[In its Proposal, Bidder will be required to identify Quality Assurance Procedures that ensure that the Program Projects and Measures that are installed perform to minimum standards appropriate to the program proposed in the Proposal ("Minimum Qualifications")]. The Quality Assurance Procedures must be sufficiently robust to ensure that each Program Project, each Measure, and the Proposed Program complies with Applicable Law.¹² Additionally, Quality Assurance Procedures must include, but are not limited to: (i) industry standard best practices;

¹⁰ "Program Projects" will be defined in the Agreement.

¹¹ "Measure" will be defined in the Agreement.

¹² “Applicable Law” will be defined in the Agreement and will include all regulatory and legal requirements.

and (ii) procedures that ensure Measure functionality, customer satisfaction, and that the Minimum Qualifications are satisfied.] *{Comment: modifiable RFP Instructions}*

B. Progress and Evaluation Metrics

1. Final Implementation Plan.

The Parties shall finalize a Final Implementation Plan in accordance with the Draft Implementation Plan. The Final Implementation Plan will be posted to the relevant CPUC website by Company no later than sixty (60) days following the Effective Date of this Agreement. The Final Implementation Plan shall be consistent with the terms and conditions of the Agreement. *{Comment: Term is subject to modification and may be negotiated by Company and Bidder}*

2. Key Performance Indicators.

Implementer shall use commercially reasonable efforts to meet the Key Performance Indicators ("KPIs")¹³ for the Program attached hereto as Schedule *{Comment: Schedule to be inserted based on the Proposal and negotiations between Implementer and Company}*. Implementer shall provide to Company all documentation and accurate data needed to demonstrate compliance with each KPI and to calculate satisfaction of each KPI, at the frequency stipulated in the Final Implementation Plan or as reasonably requested by Company. Company shall review Implementer's performance in achieving each KPI once per calendar quarter or as otherwise deemed necessary by Company. If Company determines that Implementer does not meet one or more of its KPIs, then, in addition to and without limiting any and all remedies available to Company as provided in this Agreement, Implementer shall provide Company with an action plan detailing the reasons why the KPI(s) were not achieved and the steps (and timeline for those steps) Implementer will take to remediate and achieve its KPI(s) in a timely manner. *{Comment: Term is subject to modification and may be negotiated by Company and Implementer, and will include a remediation timeframe for each KPI based on specific KPIs and contract type}*

[In its Proposal, Bidder will be required to include a table of KPIs, which will be the primary means by which Company will assess Program performance on an ongoing basis. KPIs will be individually negotiated based on the specific Proposed Program features. Table 1 outlines a set of foundational KPIs applicable to all programs of several major contract types. The KPIs are subject to modification by Company and will be negotiated by Company and Bidder. Additional Implementer performance requirements to ensure KPIs are met may be negotiated between the Bidder and Company depending on the Program, including, but not limited to, true-up payments for not meeting savings KPIs or completing projects, right of Company to reduce or eliminate funding for program and payments, or in cases of material underperformance, right of Company to declare an event of default. *{Comment: modifiable RFP Instructions}*]

¹³ "KPIs" will be the primary means by which Company will assess Program performance on an ongoing basis.

Schedule [TBD]: Key Performance Indicators *{Comment: Schedule to be included in Bidder's Proposal and included in the Agreement, subject to modification and may be negotiated by Company and Bidder}*

Table 1: Examples of Foundational KPIs

Category / Program Type		KPI	KPI Definition
Program Performance	For Resource Programs	Energy Savings (kWh, kW, Therms)	A comparison of net lifecycle energy savings achieved vs. net lifecycle energy savings required under the Agreement
		Project Pipeline Target (kWh, kW, Therms)	A comparison of net life cycle energy savings associated with future project pipeline in relation to the net life cycle energy savings required under the Agreement
		Schedule Adherence (committed/installed)	Actual number of [committed/installed] projects compared to the projected number of [committed/installed] projects as required under the Agreement
		Cost Management (TRC ratio) (Levelized cost)	The Total Resource Cost Test measures the net costs of a demand-side management program based on the total costs of the program, including both the participants and the utilities costs
		Cost Management (incentive/non-incentive)	[Incentive/non-incentive] spend based on paid [incentive/non-incentive] spend vs forecasted [incentive/non-incentive] spend
		Customer Satisfaction Rating	Measurement of Implementer's ability to respond to customer needs,

			number of complaints, resolution of complaints, flexibility, reporting accuracy and timeliness
	For Non-Resource Codes and Standards Programs	TBD	TBD
	For Workforce Education & Training Programs	TBD	TBD
	For Emerging Technology Programs	TBD	TBD
Implementer Administrative Performance	For all Programs	Invoicing and Billing Accuracy	TBD
		Program Data Quality	TBD
		Contract Compliance	TBD
Marketing Performance (as applicable)	Co-Branding	Brand Review Time	The total hours spent reviewing marketing materials submitted by Implementer or Implementer Parties
	Email	Unsubscribes or opt outs	The average unsubscribe rate across all email campaigns
		Spam (Complaints)	The average spam or complaint rate across all email campaigns
	Direct Mail	Unsubscribes or opt outs	[TBD]
	Telemarketing	Unsubscribes or opt outs	[TBD]
	SMS	Unsubscribes or opt outs	The average unsubscribe rate across all SMS campaigns

	Door-to-Door	Unsubscribes or opt outs	[TBD]
	Digital Media	TBD	TBD
	Social Media	TBD	TBD
	Website	TBD	TBD
Supply Chain Responsibility	All Programs	Safety Ratings	An evaluation of the Implementer's overall approach to safety and the quality of the Implementer's safety program
		Diverse Business Enterprises Spend	Measures spend performance with Diverse Business Enterprises
		Disadvantaged Worker Spend	TBD
		Hard to Reach and Disadvantaged Communities	TBD
		Sustainability Ratings	Evaluates the Implementer against environmental and sustainability practices and metrics.

3. Other Program Metrics.

Implementer shall provide to Company all documentation and data needed to calculate all Program Metrics¹⁴ set forth in the Final Implementation Plan, at the frequency stipulated in the Final Implementation Plan. Such data includes, but is not limited to, data in support of sector-level and portfolio-level metrics, as approved by the CPUC. *{Comment: Term is subject to modification and may be negotiated by Company and Bidder}*

C. **Contract Term/Length**

1. Term.

The “Term” of this Agreement shall commence upon the [Execution Date]¹⁵ and shall continue, unless terminated earlier in accordance with the terms of this Agreement, until [XX] *[For Agreements requiring CPUC Approval: [XX] years after the date upon which CPUC Approval occurs]. {Comment: Placeholder term for Agreement, subject to modification and may be negotiated by Company and Bidder}*

¹⁴ “Program Metrics” will be defined in the Agreement.

¹⁵ “Execution Date” to be defined as the date both parties have executed the Agreement.

“CPUC Approval” means a decision of the CPUC that (i) is final and no longer subject to appeal, which approves the Agreement in full and in the form presented on terms and conditions acceptable to Company in its sole discretion, including without limitation terms and conditions related to cost recovery and cost allocation of amounts paid to Implementer under the Agreement; (ii) does not contain conditions or modifications unacceptable to Company, in Company’s sole discretion; and (iii) finds that the Agreement satisfies the requirements in [Decision xx-xxx]. *{Comment: Placeholder term for Agreement, subject to modification and may be negotiated by Company and Bidder}*

D. Diverse and Disadvantaged Business and Employee Terms, Including Small Businesses, if Applicable

a. Definitions

- i. “SBE” means a “small business enterprise” as defined in Title 2, Section 1896.12, of the California Code of Regulations. *{Comment: placeholder for Agreement term}*
- ii. “Diverse Business Enterprise” means a diverse business enterprise, which shall consist of SBEs and women, minority, disabled veteran, lesbian, gay, bisexual, or transgender business enterprises, as more particularly set forth in CPUC General Order 156. *{Comment: placeholder for Agreement term}*
- iii. “Disadvantaged Worker” “Disadvantaged Worker” means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool. *{Comment: placeholder for Agreement term}*

b. Diverse Business Enterprises

Implementer agrees to comply, and to require all Implementer Parties to comply, with Company’s DBE policy as may be provided by Company from time to time. Implementer shall provide a copy of such policy to each Implementer Party and report any DBE information to Company at the interval specified in the policy. *{Comment: placeholder for Agreement term}*

[In its Proposal, each Bidder will be required to describe how it will comply with Company’s DBE policies, and the Parties may negotiate additional terms, as appropriate, for further compliance obligations.] *{Comment: modifiable RFP Instructions}*

c. Disadvantaged Workers

Implementer agrees to comply, and to require all Implementer Parties to comply, with the Disadvantaged Worker requirements set forth in the Final Implementation Plan. Implementer shall provide a copy of such requirements to each Implementer Party and report any Disadvantaged Worker information to Company at the interval specified in the Agreement. *{Comment: placeholder for Agreement term}*

[In its Proposal, Bidder shall include a section describing the manner by which their proposed program will provide Disadvantaged Workers with improved access to career opportunities in the energy efficiency industry for programs that directly involve the installation, modification, repair, or maintenance of EE equipment. If Bidder is selected to engage in further contract negotiations with the Company, Company and Bidder will negotiate the requirements necessary to support improved access to career opportunities in the energy efficiency industry by Disadvantaged Workers for each applicable Proposed Program that will be included in the Agreement, if Bidder and Company execute an Agreement.] *{Comment: modifiable RFP Instructions}*

E. Payment Schedule and Terms, Including Pay-for-Performance Payment Provisions

1. Payment Terms.

[Payment terms will vary based on the Program proposed, and the Company will evaluate bids, in part, on creative proposals that spread the risk of non-performance and deliver a quality and cost-effective program at a reasonable cost to ratepayers. Table 2 outlines some potential contract categories with potential associated payment schedules and payment terms, if applicable; however, the Company will evaluate payment terms based on the bid and the nature of the Program. Table 2 is not intended to be exhaustive, and additional or modified payment categories may be proposed in the filing and/or in specific agreements, as negotiated.]

Company prefers Program Proposals that include a “pay for performance” fee structure component that conditions payments from Company to Implementer based on specific savings or other metrics that advance energy efficiency portfolio goals (i.e. Meter Based). These pay-for-performance models may include performance security in a form of cash or line (or letter) of credit to ensure that implementers are meeting key performance metrics such as net lifecycle energy savings and cost-effectiveness and that permit Company to draw against such performance security if certain performance conditions and/or KPIs are not met. Percentages of performance security and metrics will be negotiated between the Implementer and Company.

Program proposals with greater proportions of funds tied to the delivery of net lifecycle energy savings measured and verified post-installation will be preferred over program proposals that correlate performance to program activities (installations) associated with pre-installation savings estimates (deemed), or proposals with large proportions of funds dedicated to Program Implementation activities that are not directly tied to net lifecycle energy savings, respectively.]

{Comment: modifiable RFP Instructions}

Table 2: Payment Terms

Contract Payment Category	Description	Proportion of Total Contract Value (%)	Contract Value by Category (\$)	Performance Security Rate (%)	Performance Security Amount (\$)
Program Implementation (A)	Funds paid to Implementers through monthly Time and Material invoicing for marketing, communications, and	A% [Implementer to Designate]	\$A = [Total Contract Value x A%]	AX% [IOU to Designate]	\$AX = [\$A x AX%]

	program administration activities				
Deemed Savings (B)	Payments in this category are dispersed to Implementers upon the successful completion and verification of program measure installations.	B% [Implementer to Designate]	\$B = [Total Contract Value x B%]	BX% [IOU to Designate]	\$BX = [\$B x BX%]
Custom Savings (C)	Payments to Implementers are tied to specific project installations and split between pre-installation customer commitment milestones and a post-installation measurement and verification (M&V) true-up of delivered net lifecycle energy savings. True-up provisions may include performance security to be posted by the Implementer.	C% [Implementer to Designate]	\$C = [Total Contract Value x C%]	CX% [IOU to Designate]	\$CX = [\$C x CX%]
Meter-Based Savings (D)	Payments to Implementers are tied to post installation measurement and verification of delivered net lifecycle energy savings at pre-determined measurement intervals. May include true-up provisions, as applicable, along with performance security to be posted by the Implementer.	D% [Implementer to Designate]	\$D = [Total Contract Value x D%]	DX% [IOU to Designate]	\$DX = [\$D x DX%]
		(A+B%+C%+D%)=1 00	SUM(\$A+\$B+\$C+\$D)		
				Performance Security Deposit (E)	SUM(\$AX+\$BX+\$CX+\$DX)

F. Measurement and Verification Requirements, including Guidelines about Normalized Metered Energy Consumption (NMEC) Design Requirements

Implementer shall:

- (a) Only enroll customers that qualify for Program services.
- (b) Comply with current policies, procedures, and other required documentation as required by Company;
- (c) Report Customer Participation Information¹⁶ to Company;
- (d) Work with Company's evaluation team to define Program-specific data collection and evaluability requirements, and in the case of NMEC,¹⁷ which independent variables shall be normalized. *{Comment: placeholder for Agreement term, subject to modification and may be negotiated by Company and Bidder}*

Throughout the Term, Company may identify new net lifecycle energy savings estimates, net-to-gross ratios, effective useful lives, or other values that may alter Program net lifecycle Energy Savings¹⁸. Implementer shall use modified values upon Company's request, provided Company modifies Implementer's Program budget and/or overall Program net lifecycle Energy Savings consistent with the requested change. Company will determine any budget increases or decreases in its sole discretion. *{Comment: placeholder for Agreement term, subject to modification and may be negotiated by Company and Bidder}*

For Programs claiming to-code savings:

Implementer shall comply with Applicable Law and work with Company to address elements in its Program designs and Implementation Plans, such as:

- (a) Identifying where to-code savings potential resides;
- (b) Specifying which equipment types, building types, geographical locations, and/or customer segments promise cost-effective to-code savings;
- (c) Describing the barriers that prevent code-compliant equipment replacements;
- (d) Explaining why natural turnover is not occurring within certain markets or for certain technologies; and
- (e) Detailing the program interventions that would effectively accelerate equipment turnover. *{Comment: placeholder for Agreement term}*

G. Coordination with Other Program Administrators

¹⁶ "Customer Participation Information" will be defined in the Agreement.

¹⁷ "NMEC" will be defined in the Agreement.

¹⁸ "Program Net Lifecycle Energy Savings" will be defined in the Agreement.

Implementer shall coordinate with other Program Administrators¹⁹ [to be defined in the Agreement] administering energy efficiency programs in the same geographic area as Company. These other Program Administrators include:

[list PAs and geographic and program are overlaps]

The California Public Utilities Commission may develop further rules related to coordination between Program Administrators in the same geographic area, and any Implementer is required to comply with such rules.

H. Data Collection and Ownership Requirements

1. “Company Data” shall mean all data or information provided by or on behalf of Company, including but not limited to, customer personally identifiable information; energy usage data relating to, of, or concerning, provided by or on behalf of any customers; all data or information input, information systems and technology, software, methods, forms, manual’s, and designs, transferred, uploaded, migrated, or otherwise sent by or on behalf of Company to Implementer as Company may approve of in advance and in writing (in each instance); account numbers, forecasts, and other similar information disclosed to or otherwise made available to Implementer. Company Data shall also include all data and materials provided by or made available to Implementer by Company’s licensors, including but not limited to, any and all survey responses, feedback, and reports subject to any limitations or restrictions set forth in the agreements between Company and their licensors.

Prior to Implementer receiving any Company Data, Implementer shall comply, and at all times thereafter continue to comply, in compliance with Company’s Data security policies set forth on Exhibit ____ (“Security Measures”) and pursuant to Company’s Confidentiality provisions in Section []. Company’s Data Security Measures and Confidentiality provisions require Implementer to adhere to reasonable administrative, technical, and physical safeguard protocols to protect the Company’s Data from unauthorized handling, access, destruction, use, modification or disclosure.] *{Comment: placeholder for Agreement term, each Company to add their own set of internal requirements}*

2. Ownership and Use Rights.

- a. Company Data. Unless otherwise expressly agreed to by the Parties, Company shall retain all of its rights, title and interest in Company’s Data. *{Comment: placeholder for Agreement term, each Company to add their own set of internal requirements}*
- b. Program Intellectual Property. Unless otherwise expressly agreed to by the Parties, any and all materials, information, or other work product created, prepared, accumulated or developed by Implementer or any Implementer Party under this Agreement with Program funds (“Program Intellectual Property”), including, , inventions, processes, templates, documents, drawings, computer programs, designs, calculations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be jointly owned by the Company and Program Participants²⁰, if any and

¹⁹ “Program Administrators” will be defined in the Agreement.

²⁰ “Program Participants” is defined as any other entity (including, without limitation, any other utility) providing funding under the Program.

without further consideration, on behalf and for the benefit of their respective customers. Program Intellectual Property will be owned by Company upon its creation. Implementer agrees to execute any such other documents or take other actions as Company may reasonably request to perfect Company's ownership in the Program Intellectual Property.

{Comment: placeholder for Agreement term, each Company to add their own set of internal requirements}

- c. Implementer's Pre-Existing Materials. If, and to the extent Implementer retains any preexisting ownership rights ("Implementer's Pre-Existing Materials") in any of the materials furnished to be used to create, develop, and prepare the Program Intellectual Property, Implementer hereby grants Company and the Program Participants on behalf of their respective customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Implementer or any Implementer Party for the sole purpose of using such Program Intellectual Property for the conduct of Company's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto. Unless otherwise expressly agreed to by the Parties, Implementer shall retain all of its rights, title and interest in Implementer's Pre-Existing Materials. Any and all claims to Implementer's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Program Intellectual Property must be expressly disclosed to Company prior to performing any Services under this Agreement. Any such Pre-Existing Material that is modified by work under this Agreement may not automatically be claimed as owned by Company. *{Comment: placeholder for Agreement term, each Company to add their own requirements. Subject to negotiation between Company and Bidder.}*

3. Billing, Energy Use, and Program Tracking Data.

Implementer shall comply with and timely cooperate with all CPUC directives, activities, and requests regarding the Program and Project evaluation, measurement, and verification (EM&V).

{Comment: placeholder for Agreement term, each Company to add their own requirements}

Implementer shall make available to Company upon demand, detailed descriptions of the program, data tracking systems, baseline conditions, and participant data, including financial assistance amounts. *{Comment: placeholder for Agreement term, each Company to add their own requirements}*

Implementer shall make available to Company any revisions to Implementer's program theory and logic model (PTLM) and results from its quality assurance procedures, and comply with all Company EM&V requirements, including reporting of progress and evaluation metrics.]

{Comment: placeholder for Agreement term, each Company to add their own requirements}

4. Access to Customer Sites.

Implementer shall be responsible for obtaining any and all access rights from customers and other third parties to the extent necessary to perform the Services. Implementer shall also procure any and all access rights from Implementer Parties, Customers and other third parties in order for Company and CPUC employees, representatives, designees and contractors to inspect the Services.

{Comment: placeholder for Agreement term, each Company to add their own requirement}

