

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED
8-03-15
04:59 PM

Order Instituting Rulemaking to Develop a
Successor to Existing Net Energy Metering
Tariffs Pursuant to Public Utilities Code
Section 2827.1, and to Address Other Issues
Related to Net Energy Metering.

Rulemaking 14-07-002
(Filed July 10, 2014)

**PROPOSAL FOR ALTERNATIVE FOR GROWTH IN DISADVANTAGED
COMMUNITIES OF THE INTERSTATE RENEWABLE ENERGY COUNCIL, INC.**

Erica Schroeder McConnell
Jason B. Keyes
KEYES, FOX & WIEDMAN LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Telephone: (510) 314-8206
(510) 314-8203
E-mail: emcconnell@kfwlaw.com
jkeyes@kfwlaw.com

Attorneys for INTERSTATE
RENEWABLE ENERGY COUNCIL, INC.

August 3, 2015

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop a
Successor to Existing Net Energy Metering
Tariffs Pursuant to Public Utilities Code
Section 2827.1, and to Address Other Issues
Related to Net Energy Metering.

Rulemaking 14-07-002
(Filed July 10, 2014)

**PROPOSAL FOR ALTERNATIVE FOR GROWTH IN DISADVANTAGED
COMMUNITIES OF THE INTERSTATE RENEWABLE ENERGY COUNCIL, INC.**

On June 4, 2015, Administrative Law Judge Simon issued a Ruling (1) Accepting into the Record Energy Division Staff Papers on the AB 327 Successor Tariff or Contract; (2) Seeking Party Proposals for the Successor Tariff or Contract; (3) Setting a Partial Schedule for Further Activities in this Proceeding (ALJ Ruling), which stated, among other things, that parties must file proposals for a successor standard contract or tariff to net energy metering (NEM), including any proposed alternatives for growth in “disadvantaged communities,” by July 2, 2015. In a June 23, 2015 Ruling, the Assigned Commissioner extended the due date for proposals to August 3, 2015. Accordingly, the Interstate Renewable Energy Council, Inc. (IREC) hereby submits its CleanCARE program proposal as our proposed alternative for growth in “disadvantaged communities.”

IREC is a 501(c)(3) non-partisan, non-profit organization working nationally to expand and simplify consumer access to reliable and affordable distributed clean energy by: (1) developing and advancing regulatory policy innovations; (2) generating and promoting national model rules, standards, and best practices; and (3) providing workforce training, education, and credentialing. IREC works independently from renewable energy industries, trade associations, technologies, and advocacy organizations; and, though we promote the creation of robust, competitive clean energy markets, IREC does not have a financial stake in those markets.

Grounded in the latest research and objective analysis, IREC’s work helps inform and guide fact-based regulatory decision-making and workforce development efforts. Through collaborative partnerships with diverse stakeholders, IREC seeks to build consensus and achieve workable solutions to create a sustainable and economically strong clean energy future. The scope of IREC's work includes expanding programs that facilitate consumers’ ability to host a renewable energy system to directly self-supply energy needs or provide energy to the grid, and implementing shared renewable energy programs to expand options for consumers that cannot host a renewable energy system.

As explained below, IREC is not submitting a proposal for the standard NEM successor tariff or contract, but rather only a proposed alternative for growth in “disadvantaged communities.” IREC has included our updated CleanCARE program proposal as **Attachment 1**. In addition, we have included our financial analysis supporting CleanCARE as **Attachment 2**.

I. Standard NEM Successor Tariff or Contract

IREC is not proposing a standard NEM successor tariff or contract. We submit only our CleanCARE program proposal as an alternative mechanism designed for growth in “disadvantaged communities.” As discussed in more detail below, and in **Attachments 1 and 2**, CleanCARE relies on the NEM bill credit mechanism and currently assumes that NEM bill credits will be valued at the participant’s retail rate. IREC suggests that retail rate-based NEM should continue to be used, at least within the limited CleanCARE program, in order to facilitate growth in disadvantaged communities. Nonetheless, once IREC has been able to review other parties’ successor tariff or contract proposals, we may submit additional analyses of the CleanCARE mechanism in our September 1, 2015 comments that evaluate other proposed paradigms besides the current retail rate-based NEM and demonstrate their impact on the

effectiveness of CleanCARE.

II. Alternative for Disadvantaged Communities

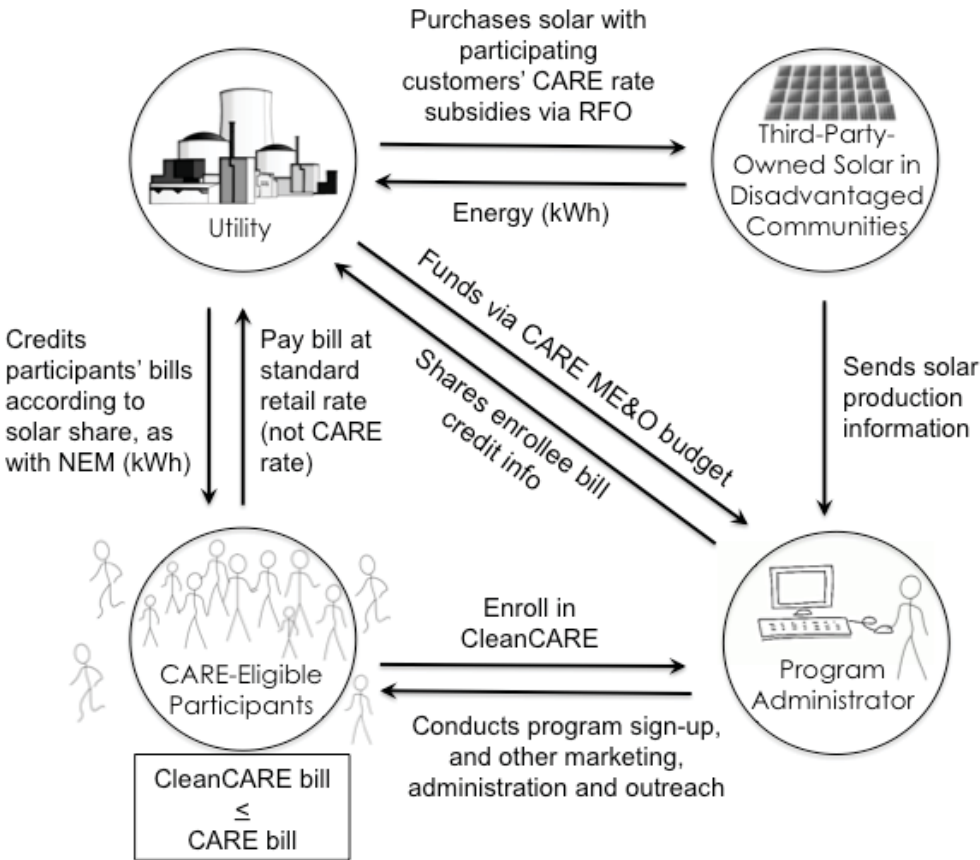
IREC proposes the CleanCARE program as an alternative for growth in disadvantaged communities. IREC initially submitted our CleanCARE proposal into this docket as part of our October 1, 2014 Comments on the Administrative Law Judge's Ruling Seeking Post-Workshop Comments. In addition, IREC presented on CleanCARE at the Commission's April 7, 2015 workshop focused on alternatives for "disadvantaged communities." In addition to providing this summary and the following responses to the Commission's questions below, IREC has provided an updated version of our CleanCARE proposal (**Attachment 1**) as well as analysis of CleanCARE's impact on customers incorporating the residential and California Alternate Rates for Energy (CARE) rates approved in Decision (D.) 15-07-001 (**Attachment 2**).

In short, CleanCARE would allow customers eligible for the CARE program to choose to redirect the funds associated with their CARE rate discounts toward purchasing renewable generation from a third-party developer, selected by the utility through a competitive bid process. CARE customers electing the CleanCARE option would move to the standard rate for their rate class and, through participation in the CleanCARE program, would offset a portion of their monthly bills through kilowatt-hour (kWh) bill credits. As a result, a CleanCARE customer would receive the equivalent or a lower bill than the customer would have seen under the standard CARE program rates. In this way, the CleanCARE option would increase opportunities for low-income households to participate in renewable energy programs while guaranteeing at least the bill discount available under the current CARE program. The impact on the IOUs' revenues would be *de minimis* since CleanCARE relies on differently allocating the existing bill discount funds within the CARE program. CleanCARE would begin as a five-megawatt pilot

program and, if successful, would gradually expand to serve more customers over time. In addition, CleanCARE would initially rely only on solar generation in order to keep the pilot program simple, and to leverage solar’s currently attractive value proposition and its ability to locate in both rural and more urbanized locations. Energy efficiency and other renewable resources could be incorporated in the future, however.

The basic framework for CleanCARE is shown in **Figure 1**.

Figure 1: Overview of CleanCARE Concept



Based on an initial exploration of census data, IREC expects that there is significant overlap between CARE enrollment and customers living in “disadvantaged communities,” as defined below, but recognizes that (1) some CARE customers do not live in these communities and (2) some customers in these communities are not eligible for the CARE program.

Nonetheless, IREC believes that CleanCARE would reach a significant customer segment in “disadvantaged communities” and thus would comply with the statutory mandate. In addition, CleanCARE would require that all of the renewable energy facilities associated with the program be located within “disadvantaged communities.” In this way, CleanCARE would also encourage local environmental, public health, economic, and job-related benefits in those communities. Finally, IREC proposes that one way to phase in CleanCARE would be first to target CARE customers living in “disadvantaged communities” and then expand the program from there, by allowing CARE customers outside of “disadvantaged communities” to participate, but still siting projects within disadvantaged communities.

Because CleanCARE relies on CARE funding, IREC has submitted the program proposal into the current consolidated CARE docket, Application (A.) 14-11-007 et al. In that docket, IREC is requesting that the Commission at a minimum confirm that CleanCARE reflects a legally permissible use of CARE funds. Otherwise, IREC has suggested that the Commission resolve any outstanding policy or practical issues associated with CleanCARE in the instant docket. IREC believes these issues include:

- Confirmation that, beyond being legally permissible, CleanCARE should rely on CARE funds in the way described rather than a separate source of funding outside of the CARE program.
- Confirmation that CleanCARE should use full retail rate kWh credits to offset participants’ bills.
- Further development of the programmatic mechanism relied on to guarantee that participants’ bills do not increase beyond what they would have been under the standard CARE program.
- Confirmation that a pilot program is an appropriate mechanism to identify and explore further issues related to program implementation prior to full implementation of CleanCARE.

A. Methodology for Defining Disadvantaged Communities

IREC supports the use of the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify “disadvantaged communities.” We generally agree with Staff’s rationales for using CalEnviroScreen, which recognize the tool’s use of environmental, health, demographic and socioeconomic data, and its adoption by the Commission and other entities for similar purposes.¹ Staff also points out that the top 25 percent of impacted communities identified in CalEnviroScreen would cover approximately 9 million people statewide and that it is likely that the majority of the impacted communities would fall within the service territories of three investor-owned utilities (IOU). Although we have supported it in the past, IREC does not currently take a position on whether 25 percent is the appropriate cut-off point to use to identify the most “disadvantaged communities.” IREC also appreciates the Clean Coalition prior concern whether rural communities are accurately represented if the CalEnviroScreen ranking is done statewide,² and does not currently a position on whether the identification of communities should be conducted on a statewide or regional basis. We urge the Commission to define “disadvantaged communities” such that rural communities are fairly represented. It may make sense to consider additional criteria to ensure that rural communities are appropriately represented within the “disadvantaged communities” category for the purposes of this rulemaking, at least on a temporary basis until any such bias is corrected via updates to

¹ See ALJ Ruling, Att. 2: Energy Division Staff Paper Presenting Proposals for Alternatives to the NEM Successor Tariff or Contract for Residential Customers in Disadvantaged Communities in Compliance with AB 327, at 2-5 – 2-6 (June 4, 2015) [hereinafter Staff Disadvantaged Communities Paper]; see also Comments of the Interstate Renewable Energy Council, Inc. on the Administrative Law Judge's Ruling Seeking Comment on Policy Issues Associated with Development of Net Energy Metering Successor Standard Contract or Tariff, R.14-07-002, at 5-6 (March 16, 2015) (likewise supporting using the CalEnviroScreen tool).

² Clean Coalition Comments on Administrative Law Judge’s Ruling on Policy Issues Associated with Development of Net Energy Metering Successor Standard Contract or Tariff at 4-6 (March 16, 2015).

the CalEnviroScreen methodology.

IREC also supports Staff’s recommendation that, if the CalEnviroScreen methodology is updated in the future, that the IOUs should use the updated CalEnviroScreen for the purposes of implementing AB 327.³ IREC suggests, however, that the Commission should clarify that any changes to the definition of “disadvantaged communities” should be implemented on a going-forward basis to ensure market certainty for participants initially involved in “disadvantaged communities” alternative programs.

B. Addressing Barriers to Adoption of Renewable Distributed Generation Among Residential Customers in Disadvantaged Communities

Customers living in “disadvantaged communities,” like the low-income customer population more generally, often face unique barriers to adopting customer-sited distributed generation. IREC’s CleanCARE proposal addresses all of these barriers.

- **Low levels of homeownership:** Customers in “disadvantaged communities” are not as likely to own their roofs, either because they are renters and/or live in multi-tenant buildings.⁴ CleanCARE would rely on shared renewable energy generation, which would allow customers who do not own their own roofs or have suitable roof space to participate in and benefit from renewable energy projects. In addition, should participants relocate within the utility’s service territory, they would be able to continue their participation in CleanCARE just as they would be able to continue their participation in the traditional CARE program.
- **Lack of access to upfront capital or affordable credit:** These customers are also

³ See *id.* at 2-6.

⁴ Staff Disadvantaged Communities Paper at 2-10 (showing data from 2013 indicating that 66 percent of low-income California households rent and 54 percent of the total population in CalEnviroScreen-designated disadvantaged communities is low-income).

less likely to have access to upfront capital or affordable lines of credit. Because CleanCARE would require no independent contribution by participating customers, but instead would rely entirely on shifting the CARE subsidy, it overcomes these capital and credit barriers.

- **Small or nonexistent tax liability:** Similarly, customers in “disadvantaged communities” are likely to have a small or nonexistent tax liability, which would prevent full monetization of renewable energy tax credits. Again, because CleanCARE does not require an independent contribution by participating customers, their inability to monetize tax credits is irrelevant.
- **Reduced rates:** Since many customers in “disadvantaged communities” qualify for the CARE program, many of them have lower electric rates due to the CARE rate discount. As a result, under current NEM rules, they realize lower monthly bill savings as compared with a non-CARE customer with the same usage profile, and therefore adopting on-site generation is not as attractive to them. Moreover, reduced rates mask the true costs of energy for these customers and dampen conservation signals. CleanCARE would move customers onto standard retail rates, which would allow participants to have a clearer picture of their energy costs. However, customers would receive the same or lower bills as they would have under the CARE program due to the full retail rate kWh credits they would receive for their share of CleanCARE renewable energy generation.
- **Ineffective marketing, education and outreach:** Customers in “disadvantaged communities” may require specialized marketing, education, and outreach, both as far

as the method used (e.g., language, medium, etc.) as well as the substance.⁵

CleanCARE would rely on and leverage CARE program marketing, outreach, and education, and would also develop tailored materials and messages to effectively reach CARE customers who could benefit from CleanCARE.

C. Defining and Measuring “Growth Among Residential Customers”

As Staff indicates, approximately 9 million Californians live in the top 25 percent of communities identified by CalEnviroScreen, or approximately 24 percent of the State’s population, but only 6 percent of residential net-metered installations are located in these communities.⁶ Therefore, significant growth in renewable energy participation and installation in these communities is required to achieve a more equitable situation. IREC agrees with the Joint Solar Parties’ suggestion that “growth among residential customers in disadvantaged communities” should be defined as an increase of at least 30 percent annually over the next several years, measured on a megawatt (MW) basis.⁷ As Staff notes, in 2014, 40.374 MW of residential net-metered generation was installed in the top 25 percent of communities identified by CalEnviroScreen.⁸ Using 40.374 MW as a starting point, the goal for 2017 would be 52.486 MW (40.374 x 1.3), the goal for 2018 would be 68.231 MW (52.486 x 1.3), and so on.

Achieving this goal will likely require more than one alternative policy for growth in “disadvantaged communities.” IREC has proposed CleanCARE to begin as a 5-MW pilot

⁵ See Grid Alternatives’ Comments in Response to the Administrative Law Judge’s Ruling Seeking Comment on Policy Issues Associated with Development of Net Energy Metering Successor Standard Contract or Tariff Pursuant to Assembly Bill 327 at 6-7 (March 16, 2015).

⁶ Staff Disadvantaged Communities Paper at 2-6 - 2-7.

⁷ Comments of The Alliance for Solar Choice, the Solar Energy Industries Association, the California Solar Energy Industries Association, and Vote Solar on Policy Issues Associated with Development of Net Energy Metering Successor Standard Contract or Tariff at 11 (March 16, 2015).

⁸ Staff Disadvantaged Communities Paper at 2-8.

program in 2016, and to grow in size to 20 MW in 2017 and 25 MW in 2018, and potentially further in future years. Although these MW targets could be adjusted, it is still likely that the Commission would need to complement CleanCARE with other alternative programs targeting “disadvantaged communities” in order to reach the suggested growth targets. IREC looks forward to reviewing other parties’ proposals, and commenting on them and on Staff’s proposals in September.

D. Applicability of Criteria Addressing Costs and Benefits

IREC continues to believe that any program that focuses on disadvantaged communities (CleanCARE or otherwise) should warrant separate treatment regarding the benefits and costs of the program with respect to other ratepayers.⁹ Given the particular challenges faced by disadvantaged communities, IREC suggests that the Commission should not restrict itself to benefit-cost neutrality and non-participant indifference when implementing alternatives to reach customers in disadvantaged communities, at least in the near term. Many of these communities have been disproportionately affected by much more polluting forms of energy generation, and the opportunity to transform their landscapes with clean, renewable assets brings considerable environmental and social benefits, including reduced pollution, job creation, and local economic development.

IREC notes that Staff also believes that the benefit-cost criteria should not apply to the alternative for “disadvantaged communities.”¹⁰ We agree with Staff that the statute’s emphasis on developing an “alternative” to the standard tariff designed for “growth” indicates a legislative

⁹ See Comments of the Interstate Renewable Energy Council, Inc. on the Administrative Law Judge's Ruling Seeking Comment on Policy Issues Associated with Development of Net Energy Metering Successor Standard Contract or Tariff at 8 (March 16, 2015).

¹⁰ Staff Disadvantaged Communities Paper at 2-9.

intent to separate the “disadvantaged communities” alternative policy from the requirements associated with standard tariff or contract.¹¹ IREC also agrees with Staff that, although CleanCARE and other alternative programs should not be held to the same benefit-cost standards as the standard tariff or contract, it could still be appropriate to evaluate these alternative policies for cost-effectiveness pursuant to the Standard Practice Manual. IREC has not provided such an analysis in this proposal, however we would be open to pursuing one, perhaps in collaboration with other parties, once we have received further input and Commission guidance on CleanCARE.

E. Funding

In its basic form, CleanCARE relies entirely on existing funds associated with the rate reduction provided to CARE-eligible customers. It would require no new funding. CleanCARE would simply reallocate existing CARE rate-discount funds toward investment in shared solar facilities, as demonstrated in **Attachment 2**. A portion of the funds would flow to solar project developers at a price ultimately dependent on the CleanCARE competitive solicitation. The balance would flow back to the utility and program administrator, as appropriate, to cover distribution and administrative costs. This process and IREC’s analytical assumptions are described in more detail in **Attachments 1 and 2**. Based on our analysis, IREC expects that CleanCARE reflects an effective policy mechanism and attractive value proposition for many CARE-eligible customers, relying only on existing CARE funds. As an example, IREC provides the analysis for an SCE customer consuming 660 kWh per month, using a solar cost based on SCE’s current ReMAT rate (\$0.069 per kWh), in both 2015 (under the current residential rate structure) and 2018 (under the revised residential rate structure set forth in the recently issued

¹¹ See *id.*

Order on docket R.12-06-013). The ReMAT rate in 2018 assumes a \$0.03 per kWh drop in solar costs. As the tables show, such an SCE CleanCARE customer would save \$20.68 more per month in 2015 as compared to the customer’s bill on discounted CARE rates. In 2018, the customer would save even more—an additional \$46.21 per month. These additional savings would be realized relying on existing CARE funds.

SCE Customer Bill Savings Under CleanCARE (2015)

	2015 CARE				2015 CleanCARE				Add'l Bill Savings
	Usage (kWh)	CARE Rate (\$/kWh)	Bill (\$)	CARE Subsidy (\$)	Ren. Energy (kWh)	Net Usage (kWh)	Res. Rate (\$/kWh)	Total Bill (\$)	
Tier 1	330	0.103	33.99	15.18		330	0.149	49.17	
Tier 2	99	0.145	14.36	6.24		83	0.208	17.30	
Tier 3	231	0.168	38.81	17.09		0	0.242	0	
TOTAL	660		87.15	38.51	247	413		66.47	20.68

SCE Customer Bill Savings Under CleanCARE (2018)

	2018 CARE				2018 CleanCARE				Add'l Bill Savings
	Usage (kWh)	CARE Rate (\$/kWh)	Bill (\$)	CARE Subsidy (\$)	Ren. Energy (kWh)	Net Usage (kWh)	Res. Rate (\$/kWh)	Total Bill (\$)	
Tier 1	330	0.112	36.96	18.15		275	0.167	45.86	
Tier 2	330	0.167	55.11	26.40		0	0.247	0	
TOTAL	660		92.07	44.55	385	275		45.86	46.21

*Calculations and figures in both tables are illustrative only, and dependent on rate and cost assumptions described in this section and in further detail in **Attachment 2**.*

That being said, CleanCARE could benefit from additional funding if it were made available. For example, additional funding could support additional marketing, education and outreach efforts to ensure the program is as successful as possible. In addition, further funding could support an economic development and job training component to help to promote in-community jobs. Although IREC proposes that all CleanCARE facilities be located within disadvantaged communities, we are aware that additional effort will be required to ensure that those communities receive the full potential economic and job-related benefits associated with those installations.

F. Legal Issues

1. Identification of Legal Issues

IREC believes that there are no legal issues associated with CleanCARE and that the Commission has full discretion to implement the program. Because CleanCARE relies on funding associated with the CARE program, however, IREC addresses CleanCARE's compliance with current laws related to the CARE program.

2. Compliance with Legal Obligations

CleanCARE is fully compliant with current laws related to the CARE program. CARE is primarily authorized by two statutory sections, both in the California Public Utilities Code: 739.1 and 382. In most respects, these statutory provisions allow the Commission and the IOUs substantial flexibility in how they provide a “level of discount for low-income electric and gas customers” on their electricity bills “that correctly reflects the level of need.”¹² Section 739.1 specifies that the “entire discount shall be provided in the form of a reduction in the overall bill for the eligible CARE customer.”¹³ It requires that the “average effective CARE discount not be less than 30 percent or more than 35 percent of the revenues that would have been produced for the same billed usage by non-CARE customers.”¹⁴ CleanCARE provides the required bill discount, but instead of doing it through lower rates, it accomplishes the discount via kWh bill credits generated as a result of CARE-funded investment in renewable energy. That CARE-funded investment, derived from the CARE subsidy, would very likely be within the 30- to 35-percent range, however this could be ensured by capping each participant's savings at 35 percent and reallocating excess within the program. Because the CleanCARE bill discount would be

¹² See § 739.1(a).

¹³ § 739.1(c)(3).

¹⁴ § 739.1(c)(1).

comparable or better than the discount under CARE rates, it should likewise ensure that “low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures.”¹⁵

Moreover, the Legislature makes it clear that the Commission may offer to low-income customers “any special rate or program” beyond what is explicitly required by legislation.¹⁶ In addition, the Commission can “allocate funds necessary” to meet the Legislature’s objectives with respect to low-income ratepayer assistance.¹⁷ Thus the Commission has ample discretion to authorize CleanCARE. Ultimately CleanCARE does not change the majority of the aspects of the CARE program specified in the statutory provisions, including the recovery of CARE administrative expenses, the participation and enrollment goals, the improvement of the application process, the coordination of the CARE program with the State’s other low-income programs, the refinement of the eligibility requirements for the CARE program, or the funding specifications for CARE.¹⁸ It simply seeks to make use of CARE funds more efficiently, expand access to renewable energy for some CARE-eligible customers, and generally support California’s renewable energy goals, while still providing the same or better bill discount to participating customers.

CleanCARE is also consistent with the Commission’s goals and priorities for the CARE program, most recently articulated in D.12-08-044 and D.14-08-030. The Commission has expressly identified the need to “make certain the CARE Program is efficiently and effectively administered and delivered in ways that ensure that the benefits (CARE discount rate) are

¹⁵ § 739.1(b)(1).

¹⁶ See § 382(c).

¹⁷ See § 382(f).

¹⁸ See §§ 739.1(c)-(f), (h); 382(a), (f).

delivered to the maximum number of eligible households.”¹⁹ CleanCARE would use CARE funds more cost-effectively in line with the Commission’s goal by offering greater bill discounts to many participating customers than they would have otherwise received under CARE rates, while relying on the same level of ratepayer-funded subsidy. Moreover, CleanCARE offers additional benefits, including increased investments in local renewable energy sources, which provide long-term benefits to participants and all ratepayers, expansion of low-income customer access to renewable energy markets, and potential economic development, education, vocational training, and environmental benefits for communities in which CleanCARE generation facilities are sited. Thus CleanCARE further leverages CARE funding to produce additional benefits beyond customer bill reductions. With the tremendous growth in CARE expenditures over the past ten years or so, this cost-effectiveness seems especially critical.²⁰

In addition, participants in CleanCARE would still be considered part of the CARE program. They would simply opt to redirect their CARE subsidy toward investment in renewable energy on their behalf. Thus CleanCARE would support, rather than undermine, efforts to reach eligible CARE customers and achieve CARE penetration goals.²¹

3. Open Legal Issues

As discussed in the section above, IREC is confident that CleanCARE is legally

¹⁹ See D.12-08-044 at 3.

²⁰ At the beginning of 2001, CARE spending by the four IOUs totaled about \$126 million. LIHEAP Clearinghouse, California: State PBF/USF History, Legislation, Implementation, <http://liheap.ncat.org/dereg/states/california.htm>. The total budget for the 2009-2011 program cycle was \$2.65 billion across the four IOUs. D.08-011-031 at 3. The Commission approved an even larger budget for the 2012-2014 program cycle: nearly \$3.8 billion. D.12-08-044 at 6.

²¹ See D.12-08-044 at 23 (“For the 2012-2014 budget cycle, we will maintain the 90% CARE penetration goal. However, in this cycle and going forward, the Commission directs the IOUs to update their activities to focusing and improving their strategies to aggressively implement their outreach efforts to maintain and increase the current penetration rates, wherever feasible.”), 344 (¶ 17).

permissible. Nonetheless, we have requested that, in its decision in the A.14-11-007 et al., the Commission clarify at a minimum that CARE is compliant with the relevant CARE statutory provisions in order to facilitate the further development and approval of CleanCARE in the instant docket.

Otherwise, IREC is not aware of any open legal issues associated with CleanCARE.

III. Conclusion

IREC originally developed the CleanCARE idea as part of our exploration of ways to expand access to renewable energy for low- and moderate-income energy consumers, and generally as a means to achieve our core purpose of expanding renewable energy access to more consumers across the board. Since developing the CleanCARE concept, IREC has discussed it with a wide range of stakeholders including consumer advocates, environmental justice groups, the solar industry, utility representatives, and Commission Energy Division staff. Their feedback has been valuable and we have incorporated much of it into the updated CleanCARE proposal included here as **Attachment 1**. IREC continues to welcome suggestions related to our CleanCARE program proposal, especially from entities that have practical experience implementing and administering renewable energy and low-income programs. We look forward to reviewing other parties' September 1, 2015 comments on CleanCARE, as well as other parties' proposals submitted today.

Respectfully submitted at Oakland, California,

/s/ Erica Schroeder McConnell

Erica Schroeder McConnell
Jason B. Keyes
KEYES, FOX & WIEDMAN LLP
436 14th Street, Suite 1305
Oakland, CA 94612
Telephone: 510-314-8206
510-314-8203
Email: emcconnell@kfwlaw.com
jkeyes@kfwlaw.com

Attorneys for the INTERSTATE
RENEWABLE ENERGY COUNCIL, INC.

Dated: August 3, 2015

Attachment 1: CleanCARE Proposal

CleanCARE—Investing in Communities

Revised August 3, 2015

In developing the successor standard contract or tariff to the current net energy metering (NEM) tariff, Assembly Bill (AB) 327 requires the Commission to “[e]nsure that the standard contract or tariff made available to eligible customer-generators ensures that customer-sited renewable distributed generation continues to grow sustainable and include specific alternatives designed for growth among residential customers in disadvantaged communities.” Pub. Util. Code § 2827.1(b) (emphasis added). IREC proposes a new California Alternate Rates for Energy (CARE) rate option—CleanCARE—as one of those specific alternatives. Under CleanCARE, low-income and medical baseline customers would receive access to affordable renewable energy. The CleanCARE framework would also provide these customers with a clearer connection between cost-causation and energy usage. CleanCARE could complement other alternatives proposed by other parties.

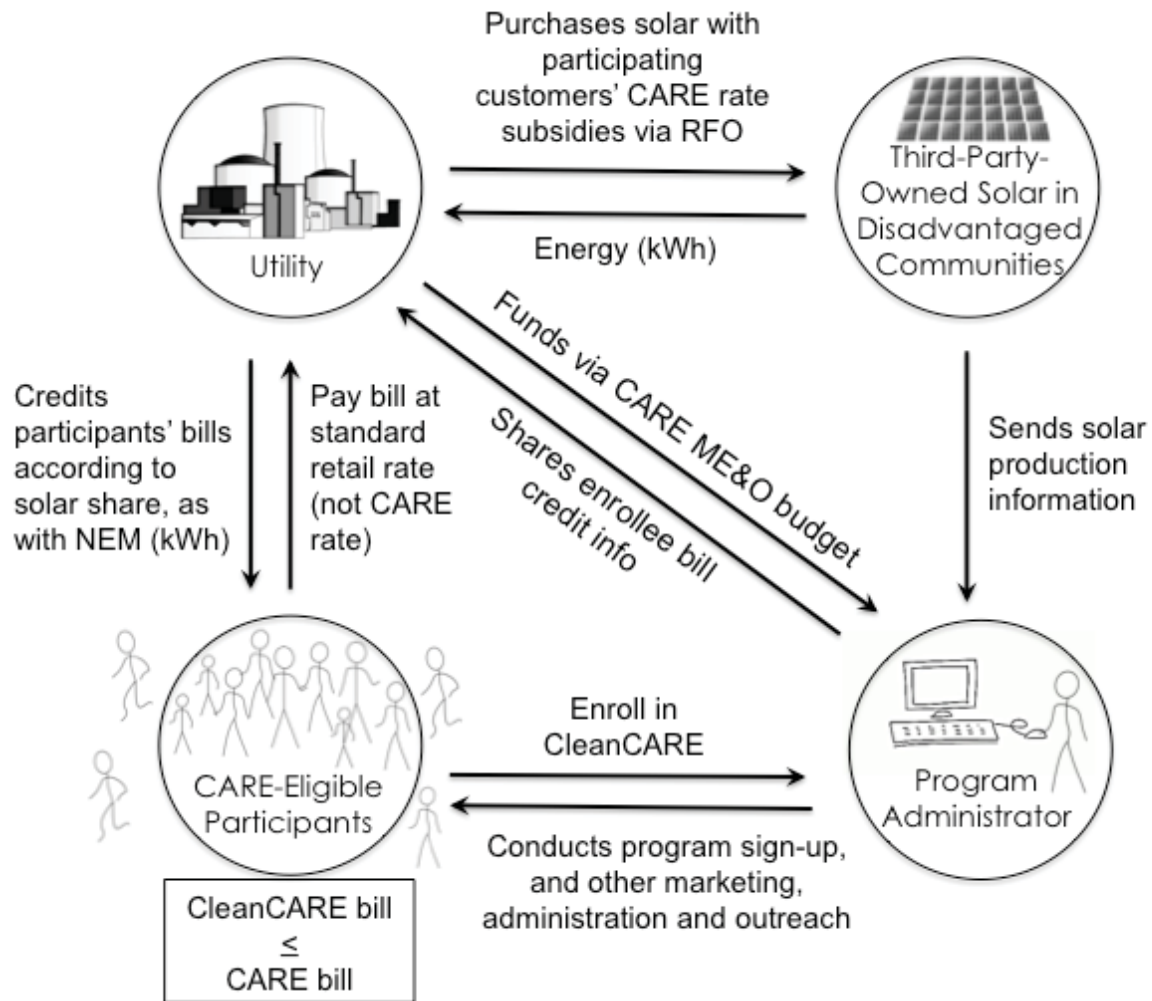
CleanCARE would allow a portion of the funds allocated toward CARE rate reductions to be invested in the development of shared distributed renewable generation by a third-party entity and procured by the utility via a competitive solicitation. CARE customers electing the CleanCARE option would move to the standard rate for the rate class and through participation in the CleanCARE program would offset a portion of their monthly bills through net energy metering (NEM) kilowatt-hour (kWh) bill credits. As a result, a CleanCARE customer would receive the equivalent or a lower bill than the customer would have seen under the traditional CARE program rates. In this way, the CleanCARE option would increase opportunities for low- and moderate-income households to participate in renewable energy programs while guaranteeing at least the average rate levels and benefits of the current CARE program and being revenue-neutral for ratepayers. IREC proposes a third-party-administered program, initially relying on five MW of pilot project capacity and, if successful, expanding to serve more customers with more renewable energy. CleanCARE could also eventually be expanded to incorporate energy efficiency, energy storage and demand response to decrease participants’ bills via usage reductions as well as NEM bill credits.

The CleanCARE program can effectively serve to increase access to renewable energy for customers in “disadvantaged communities” and result in new renewable energy facilities sited in those communities. IREC intends this proposal to be a starting point for discussion on the manner in which a CleanCARE program option could meet these goals. IREC has already solicited and incorporated feedback from a variety of stakeholders and organizations, and looks forward to continuing to discuss this program concept.

How would CleanCARE work?

Currently, the CARE program provides discounted electricity and gas rates for nearly 5 million low-income enrollees. Because the CARE program is structured as a direct rate discount, however, it provides very limited opportunities for enrollees to participate in California’s renewable energy programs. CleanCARE would provide an option to redirect a portion of the current CARE program funds associated with this rate discount toward purchasing renewable generation from a third-party developer for the benefit of CARE-eligible customers.

Overview of CleanCARE Concept



Relationship to existing CARE program: Fundamentally, CleanCARE relies on the funding associated with the CARE rate discount to support investment in renewable energy generation for the benefit of participants via NEM bill credits. Participants in CleanCARE would have to meet the eligibility requirements for CARE but would choose CleanCARE's alternative bill reduction option instead of receiving the CARE rate discount, which would guarantee them the same or better bill reductions as they would receive under CARE rates. Thus participants in CleanCARE could still be considered part of the CARE program, and CleanCARE would support rather than undermine efforts to reach eligible CARE customers and achieve CARE penetration goals. In addition, CleanCARE would rely on the CARE administrative budget, in particular with respect to marketing, education and outreach, and leverage existing efforts to minimize costs.

Disadvantaged communities: AB 327 does not define the term "disadvantaged communities." In this instance, IREC believes that it would be appropriate to use the most recent version of the California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify the census tracts that represent the most disadvantaged communities. No matter the percentage cut-

off and methodology used (e.g., statewide versus regional analysis), the census tracts identified by CalEnviroScreen should represent a significant percentage of the State geographically, including a fair representation of rural communities. Therefore, there should be many potential sites for solar development within disadvantaged communities. Based on an initial exploration of census data and the top 25 percent of communities identified by CalEnviroScreen, IREC expects that there is significant overlap between CARE enrollment and customers living in “disadvantaged communities,” but recognizes that (1) some CARE customers do not live in these communities and (2) some customers in these communities are not eligible for the CARE program. Nonetheless, IREC believes that CleanCARE would reach a significant customer segment in “disadvantaged communities.” In addition, CleanCARE would incorporate a requirement that all of the renewable energy facilities associated with the program be located within “disadvantaged communities,” as discussed below.

IREC further notes that, based on the data we have gathered to date, many CARE-eligible customers are renters who cannot install on-site renewable generation. CleanCARE would provide an option for these customers to participate in renewable energy. CleanCARE would be offered to both CARE-eligible renters and homeowners, and some homeowners may find it to be a more attractive option. CleanCARE would complement California’s successful Single-family Affordable Solar Housing (SASH) and Multi-family Affordable Solar Housing (MASH) programs by increasing program options for low-income customers. CARE-eligible customers living in single-family homes may be able to choose between the SASH program and CleanCARE, for example. In some regions, up to 40 percent of eligible SASH clients have properties that are not suitable for solar, for example due to shading issues or roofs in need of replacement. Likewise, CARE enrollees in multifamily housing may be able to choose between MASH and CleanCARE. Together with SASH and MASH, CleanCARE would expand the options for low-income customers to benefit from renewable energy generation. A customer’s choice would depend on program eligibility requirements, and the customer’s particular situation, needs and preferences, including whether the customer is more interested in on-site or shared renewable generation.

Optional program, starting on a pilot basis: IREC proposes that CleanCARE be introduced on a pilot basis, with voluntary, limited enrollment in particular regions of the state, for example those with high levels of participation in the current CARE program or large numbers of enrollees who have higher energy usage. As discussed below, CleanCARE is likely to be most attractive to Tier 3 CARE customers and potentially Tier 2 CARE customers, as well, especially in future years. Specifically, CleanCARE could be piloted for high-usage CARE customers, with a focus on customers that have already implemented energy-efficiency improvements through the Energy Savings Assistance Program (ESAP) and are still high energy users; these customers would likely stand to benefit the most from CleanCARE. Alternatively, CleanCARE could begin with enrollment in a region with the highest proportion of CARE customers in “disadvantaged communities,” as the Commission defines them under AB 327. This framework would allow for identification of sites for the “in-community” renewables and focus outreach efforts on a particular region. Other means of creating a sample customer base for a pilot program could also be developed with input from interested parties. Marketing and outreach for the program would be closely coordinated with entities with experience in this area, including existing low-income

program administrators, state weatherization program experts, and other community-based organizations to identify the most effective strategies and ensure positive uptake.

IREC proposes that the pilot program capacity be limited to 5 MW total—with approximately 2 MW of smaller-sized projects (20 or more projects, sized smaller than 100 kW) and approximately 3 MW of larger projects (sized from 101 kW to 1 MW). If the first year pilot (e.g., 2016) is successful, then the program would be expanded to incorporate more renewable energy to serve more customers, for example an additional 20 MW in 2017 and 25 MW in 2018. In addition, energy efficiency, energy storage and demand response could also be incorporated, as discussed below.

Program administration: IREC suggests that a third party administer the CleanCARE program to help to ensure that the program is as nimble and cost-effective as possible. A third party with direct experience working with “disadvantaged communities” would be especially appropriate in this case. The utilities would necessarily play an important role in CleanCARE implementation and administration, as well. A framework for appropriate information-sharing between the third party and the utility would need to be put in place since the utilities have information on CARE enrollees’ locations and energy usage, and so that the utilities could apply appropriate bill credits to enrollees’ bills. In addition, IREC expects that CleanCARE marketing, outreach and education would be coordinated with current outreach efforts around CARE and ESAP, as well as the SASH and MASH programs, and that these existing efforts would be leveraged to keep costs low. Marketing, outreach and education efforts should also be coordinated with community-based organizations. Such marketing, education and outreach efforts should include education for participants in reading and understanding their electricity bills. In addition, a workforce development component could be incorporated into the program to maximize the benefit to disadvantaged communities.

Participation: The program administrator would sign up interested customers only after evaluating whether, by participating in CleanCARE, customers would save the same or more money as they would have under the traditional CARE program, based on their past 12 months of energy consumption. To do this, the program administrator would conduct an analysis similar to that described below regarding the program’s bill impact and in more detail in **Attachment 2**. If the program administrator were to determine that the customer would not benefit from CleanCARE (i.e., not achieve the same or better bill discount as under standard CARE), then the customer could be placed on a wait list and could have their eligibility re-evaluated the following year. Guaranteeing the participant’s bill savings going forward is discussed further below. In addition, as under the traditional CARE program, if a customer were to re-locate within a utility’s service territory, she would be able to continue her participation in CleanCARE.

Standard retail rates: In contrast to CARE participants, CleanCARE enrollees would remain on or be transferred to their utility’s standard residential rate structure instead of receiving discounted rates. The requisite CARE “bill reduction” would be achieved by reduced overall energy *bills* through kWh bill credits, rather than reduction in energy *rates*. This shift would be an important improvement over the current CARE program because it would provide CleanCARE participants with greater information concerning the cost of their energy consumption, thereby increasing their ability to manage their energy costs directly based on

consistent pricing signals over the longer term—both during enrollment in the CleanCARE program and after they have exited the program. In particular, the CleanCARE program would encourage participating customers to conserve energy, for example through energy efficiency implementation, since their remaining consumption not offset by bill credits would be at the higher standard rate than the reduced CARE rate. This is particularly important because many current CARE enrollees are only temporarily within the program but energy cost management decisions can continue to provide benefits after departing the program.

Shared distributed generation: The renewable distributed generation provided under CleanCARE would be from eligible renewable energy resources procured by the utilities through a competitive bid process and take the form of shared renewable generation of at least two types:

- Some percentage of facilities (e.g., 30 percent) would be smaller-scale generation (e.g., 1 – 100 kW) located within “disadvantaged communities,” and would include rooftop or small ground-mounted solar and potentially small-scale wind.
- The remaining capacity would be larger-scale renewable distributed generation (e.g., 101 kW – 5 MW) located in optimal locations on the electricity grid, as determined by the local distribution utility. These larger facilities, like the smaller facilities, would be located within “disadvantaged communities.”

Residents and other stakeholders from within the “disadvantaged communities” should be able to provide input regarding any facilities located in those communities. This would involve outreach to citizens, community groups, and/or local governments, and would occur through various forums, including local meetings, Commission-sponsored forums, and/or through utility or developer-led outreach, potentially in response to particular requirements in the procurement process as discussed below.

Utilizing shared renewable generation would allow for economies of scale on a programmatic basis by facilitating the installation of systems larger than those seen in on-site programs. At the same time, the “shared” aspect of these facilities can accommodate the participation of customers in the CARE program for a relatively short period of time, very likely shorter than a typical 20- or 25-year renewable energy contract. When a customer is no longer CARE-eligible and leaves the program, a new customer could participate drawn from a wait list maintained by the program administrator. Beginning with a small program and phasing in capacity would limit any negative effects on ratepayers of unexpectedly low enrollment or project failure. If a project were to fail for any reason, and therefore not generate energy and associated kWh bill credits, CleanCARE participants could be immediately transferred back to traditional CARE rates such that they would not experience any adverse bill impacts.

Moreover, to further address cost concerns, CleanCARE could be designed to unlock broader grid benefits by targeting areas of the grid identified by the local distribution utility as benefiting from renewable distributed generation and possibly energy storage. These benefits would flow to the local utilities’ ratepayers as a whole. In addition, relying on a fleet of CleanCARE facilities to serve all CleanCARE enrollees should help minimize risk as compared to a customer or group of customers relying on a single facility.

Bill credit mechanism: To realize the necessary bill reductions, CleanCARE enrollees would receive NEM kWh bill credits associated with the shared renewable generation developed under the program. The program would ensure that their electricity bills would be offset via these NEM credits at the same level or more than they currently experience under the broader CARE program. Participating customers' CARE subsidies would be used to procure renewable energy, as discussed below; the CleanCARE customer would receive a set quantity of energy from the CleanCARE renewable energy facility, via NEM bill credits, based on how much the CARE subsidy associated with customer's full bill will purchase.

CleanCARE presumes that customers would receive a full retail rate bill credit (i.e., one-to-one kWh offset), as under the current NEM program. IREC believes that full retail rate NEM should continue for all customers, however even if the Commission implements a different paradigm in place of NEM going forward, IREC suggests that full retail rate bill credits are appropriate for customers participating in CleanCARE. These customers face numerous, unique barriers to access in renewable energy, and therefore, even if the Commission determines that the costs outweigh the benefits of relying on full retail rate bill credits for general market NEM, this determination should not affect the Commission's decision with respect to CleanCARE. The Commission has the discretion to permit full retail rate NEM credits to be used within the "alternative" program for disadvantaged communities permitted by AB 327 and permitting full retail rate credits within CleanCARE helps to ensure that more customers could benefit from participation in the program. Nonetheless, in order to address concerns raised in the past by utilities and other parties about the costs of "wheeling" power to off-site customers, IREC suggests a cost adder to the all-in cost of CleanCARE solar generation to reflect distribution costs. This value stream would flow to utilities, as discussed below.

Although the Commission has approved a separate bill credit paradigm for the Green Tariff Shared Renewables (GTSR) program for off-site shared generation, it results in participants paying a premium above their normal rates to participate and therefore is not appropriate in for CleanCARE, where participants must save as much as, if not more than, they would have under the CARE rate discount. IREC notes that stakeholders will be exploring ways to enable participation by customers in disadvantaged communities in the GTSR program, as well. It is uncertain at this time what that will look like and/or when that will be made available for disadvantaged communities, however, as no proposals have been put forward or discussed to date.

Improved bill reduction: As shown in **Attachment 2**, IREC has calculated the bill impacts of CleanCARE under certain illustrative assumptions for customers consuming 400 kWh per month and 660 kWh per month in both 2015 and 2018 in each of the three utilities' service territories. We relied on the residential and CARE rates for 2015 and 2018 provided by utilities in the residential rates Rulemaking (R.) 12-06-013, which incorporate the Commission's final decision in that docket. As for the cost of solar, IREC evaluated two scenarios, both of which assumed a \$0.03 per kWh drop in solar prices between 2015 and 2018. (1) The first scenario assumes solar costs based on the utilities' Renewable Market Adjusting Tariff (ReMAT) prices for as-available peaking resources, which currently range from \$0.065 to \$0.089 per kWh. (2) The second scenario assumes somewhat higher solar costs--\$0.15 in 2015 and \$0.12 in 2018—intended to

account for potential additional costs associated with the CleanCARE program, including the requirement to locate facilities in disadvantaged communities. Ultimately, the cost of solar in the CleanCARE program would be the most competitive price received in the competitive solicitation discussed below.

For the all-in cost of CleanCARE solar generation, IREC also incorporated per-kWh adders associated with administrative costs and distribution costs, whose total value would flow to the utilities and program administrator as appropriate. IREC relied on each utility’s current distribution rate component for the distribution cost for 2015, which ranged from \$0.057 to 0.09 per kWh, and assumed an adder equivalent to the same percentage of the total retail rate in 2018 (\$0.047 to \$0.073 per kWh). In all cases, we assumed a \$0.03 per kWh adder for administrative costs.

IREC emphasizes that we evaluated all of these scenarios for illustrative purposes.

The outcomes varied across utilities and scenarios. As an example, IREC provides the analysis for an SCE customer consuming 660 kWh per month, using a solar cost based on SCE’s ReMAT rate, in both 2015 and 2018, as identified in the final order on residential rates R.12-06-013. As the tables show, such an SCE CleanCARE customer would save \$20.68 more per month in 2015 as compared to the customer’s bill on discounted CARE rates. In 2018, the customer would save even more—an additional \$46.21 per month. This customer would also be able to participate directly in renewable energy a way previously not available to them.

SCE Customer Bill Savings Under CleanCARE (2015)

	2015 CARE				2015 CleanCARE				Add'l Bill Savings
	Usage (kWh)	CARE Rate (\$/kWh)	Bill (\$)	CARE Subsidy (\$)	Ren. Energy (kWh)	Net Usage (kWh)	Res. Rate (\$/kWh)	Total Bill (\$)	
Tier 1	330	0.103	33.99	15.18		330	0.149	49.17	
Tier 2	99	0.145	14.36	6.24		83	0.208	17.30	
Tier 3	231	0.168	38.81	17.09		0	0.242	0	
TOTAL	660		87.15	38.51	247	413		66.47	20.68

SCE Customer Bill Savings Under CleanCARE (2018)

	2015 CARE				2015 CleanCARE				Add'l Bill Savings
	Usage (kWh)	CARE Rate (\$/kWh)	Bill (\$)	CARE Subsidy (\$)	Ren. Energy (kWh)	Net Usage (kWh)	Res. Rate (\$/kWh)	Total Bill (\$)	
Tier 1	330	0.112	36.96	18.15		275	0.167	45.86	
Tier 2	330	0.167	55.11	26.40		0	0.247	0	
TOTAL	660		92.07	44.55	385	275		45.86	46.21

IREC emphasizes that the bill savings associated with CleanCARE are just a piece of the benefits associated with the proposed program, which also include the benefits associated with increased renewable energy generation generally and benefits of siting those facilities in

“disadvantaged communities.” In addition, the bill savings could be improved by incorporating energy efficiency improvements into the program to further lower a customer’s bill. As discussed below, this may be more feasible as solar costs drop and a portion of the CARE funding could be transferred to energy efficiency and other demand-side management. Finally, a workforce development component to the CleanCARE program could further enhance job-related and other economic benefits to disadvantaged communities.

Guaranteed bill reduction: Guaranteeing that participants receive the same or better bill discount as under the standard CARE program is fundamental to CleanCARE. Once a customer is enrolled, IREC expects that the program administrator, in consultation with the Commission, utilities and other stakeholders, would determine the best way to guarantee the requisite bill discount on a month-to-month basis for the customer. In addition, the pilot phase could help inform the refinement of this mechanism going forward, once it is deployed in practice. In the meantime, IREC continues to solicit feedback from program administrators and utilities, both of whom have practical experience running programs, as well as other entities regarding the appropriate mechanism. In this proposal we offer, two possible mechanisms for consideration.

Option 1: Once a customer is enrolled, she would be placed in the CleanCARE queue, with her position determined by the date of her enrollment. Each month, the program administrator would evaluate the CleanCARE participant queue customer by customer. If the program administrator determines that Customer 1 would save money on CleanCARE that month based on how much energy that customer actually used in that month, then Customer 1 would participate in CleanCARE, i.e., pay for service at standard residential rates and receive the appropriate number of kWh bill credits. If not, that customer would receive service at CARE rates. The program administrator would then conduct the same evaluation for Customer 2 and so on, until all of the kWh produced by the CleanCARE project(s) that month had been allocated.

Option 2: Once a customer is enrolled, she would participate in CleanCARE for that program year unless she leaves her utility’s service territory, in which case, her share would be transferred to other customers on the wait list. There would be no penalty for leaving the program. On a monthly basis, the program administrator would evaluate the CleanCARE customer’s bill impacts under traditional CARE rates and the CleanCARE paradigm. If necessary to meet the requisite CARE bill reduction in a given month, and to account for seasonal variations of solar output over the course of the year, the program administrator would apply additional kWh bill credits to that customer’s bill for the month in order to bring her bill down to the level it would have been under the CARE program. The program administrator would set-aside a modest “bank” of kWh bill credits (e.g., five percent of the total CleanCARE generation) for this purpose, to be included as an administrative expense of the program (i.e., covered by the \$0.03 per kWh assumed administrative cost). At the end of the program year, the CleanCARE program administrator would re-evaluate each customer’s eligibility for CleanCARE. If the administrator determines that a customer did not achieve the CleanCARE bill savings on average across the year, she will be returned to CARE rates and notified accordingly. In addition, at the end of the year, any excess credits in the kWh credit “bank” would be credited to all the utilities’ ratepayers.

Regardless of the mechanism used, guaranteeing the bill discount should be a program priority and the process should also be as easy to understand as possible for participating customers.

Procurement: The utilities would use a request for offer (RFO) process to procure renewable generation facilities for the CleanCARE program, beginning with the initial pilot phase of 5 MW. The RFO would require that facilities be located within “disadvantaged communities.” Similarly bidders could be required to conduct some form of outreach with those disadvantaged communities prior to submitting a bid. The Renewable Energy Credits (RECs) associated with these facilities would be retired on behalf of participating customers.

It will be critical to ensure long-term funding for the CleanCARE renewable energy facilities such that the income stream derived from shifting the CARE rate subsidy would be locked in for a significant number of years (e.g., 10-20 years). Long-term funding of the CleanCARE program is essential because CleanCARE enrollees would not be “buying down” the upfront cost of their participation, as participants might in other renewable energy programs. Financiers will need to have the assurance of a long-term income stream.

Future “clean energy package”—energy storage, energy efficiency, demand-side management: After the initial pilot phase of the program, IREC proposes that CleanCARE would incorporate investment in a broader “clean energy package,” which would likewise be designed to achieve an equivalent or better monthly bill for CleanCARE enrollees as compared to bills they would have received under the current CARE program. In order to achieve such bill savings for CleanCARE enrollees, the “clean energy package” would incorporate energy efficiency upgrades to lower the enrollee’s overall energy consumption, in addition to the bill credits associated with participation in shared renewable energy generation.

The concept of the “clean energy package” is intentionally left flexible enough to allow for development and offering of diverse packages of targeted measures that meet the needs of CleanCARE enrollees. This flexibility should allow for packages to include an appropriate mix of energy efficiency and renewable distributed generation to achieve cost-effective bill savings for enrollees while also using energy storage and demand response to drive grid benefits. The program administrator and/or “clean energy package” offerors would be required to identify target communities, assess their energy needs, and develop a plan to meet those needs within the program parameters. Our discussions with organizations working in low-income communities on energy issues show broad support for this idea of a stable, long-term funding mechanism designed to support investment in a holistic package of services for enrollees to meet their energy needs.

The ESAP could fund energy efficiency offerings and participation in ESAP could be coordinated with the CleanCARE program enrollment process to ensure CleanCARE enrollees receive energy efficiency upgrades to reduce their consumption prior to enrollment in CleanCARE. Similarly, coordination between CleanCARE and demand response programs targeted at residential customers, such as San Diego Gas & Electric Company’s Summer Saver program, could be increased to drive overall program savings and grid benefits.

Because a “clean energy package” would introduce additional complexity into the program, IREC proposes introducing it in a later phase of the program.

Benefits of CleanCARE

The cornerstone of the CleanCARE program is that it would achieve at least the same beneficial bill impacts for enrollees as the current CARE program, and could empower program participants to achieve even better results. In addition, low-income customers enrolled in CleanCARE would be able to enjoy the benefits of renewable energy generation. On-site renewable generation programs to date have typically had high cost barriers to participation and have been largely unavailable to renters. Because enrollees would be served under their utility’s standard retail rates, CleanCARE would also more directly and continuously provide the same price signals as other customers, instead of masking those signals with below-cost rates. In the longer term, this should provide these customers the information about rates that they need to continue to make long-term decisions about energy conservation and efficiency.

In addition, CleanCARE would benefit “disadvantaged communities” in at least two ways. First, it would provide for direct participation by CARE-eligible customers in “disadvantaged communities. These customers, as well as other participating CARE-eligible customers located in other communities, would see the bill savings from participation in the CleanCARE program on their electricity bills. Second, CleanCARE would result in renewable energy development within “disadvantaged communities,” which could include both urban and rural locations. Thus although there is not complete overlap between CARE-eligible customers and customers within “disadvantaged communities,” all customers within disadvantaged communities can benefit from increased renewable generation in their communities. These include the environmental benefits of these facilities, as well as job creation and other workforce-related benefits, in particular if a job training component is incorporated into the program.

CleanCARE should also drive down rates for all California energy consumers as it represents a more efficient use of ratepayer funds for low-income assistance. Importantly, if implemented quickly, development of CleanCARE resources would allow California to leverage the full 30% federal Investment Tax Credit, set to decrease to 10% on Jan 1, 2017. This would result in a 30% reduction in the price of the renewable distributed generation used to serve the program along with an additional 20% reduction in cost via accelerated depreciation. Additionally, by installing renewable distributed generation at locations on the grid identified by utilities as benefiting from DG, CleanCARE would maximize grid benefits from the program, which in turn should help to drive down all energy customers’ rates over time.

Beyond these benefits, the modifications to the CARE program embodied in CleanCARE are aligned with California’s overall renewable energy goals. These include the Commission’s loading order, the 33% Renewable Portfolio Standard and the Governor’s 50% renewable energy and 12,000-MW distributed generation goals.

Attachment 2: CleanCARE Analysis

PG&E CleanCARE Analysis

Scenario 1 -- higher solar cost

Scenario 1a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.109	35.97	19.56		305	0.168	51.39	0.259	
Tier 2	70	0.130	9.09	4.97		-	0.201	-		
Tier 3	0	0.165	-	-		-	0.255	-		
Total	400		45.06	24.53	95	305		51.39	(6.33)	

Scenario 1b -- 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.109	35.97	19.56		330	0.168	55.53	0.259	
Tier 2	99	0.130	12.86	7.03		99	0.201	19.90		
Tier 3	231	0.165	38.15	20.86		48	0.255	12.27		
Total	660		86.98	47.45	183	477		87.69	(0.71)	

Scenario 1c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.118	38.81	21.14		270	0.182	49.08	0.209	
Tier 2	70	0.156	10.89	5.96		-	0.241	-		
Total	400		49.70	27.10	130	270		49.08	0.62	

Scenario 1d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.118	38.81	21.14		330	0.182	59.95	0.209	
Tier 2	330	0.156	51.34	28.08		94	0.241	22.66		
Total	660		90.15	49.23	236	424		82.61	7.54	

ALL RATES FROM IOUs' RROIR TABLES

Current PG&E CARE Tier 1 Rate	0.109
Current PG&E CARE Tier 2 Rate	0.130
Current PG&E CARE Tier 3 Rate	0.165
Current PG&E CARE Tier 4 Rate	0.165
Current PG&E Non-CARE Tier 1 Rate	0.168
Current PG&E Non-CARE Tier 2 Rate	0.201
Current PG&E Non-CARE Tier 3 Rate	0.255
Current PG&E Non-CARE Tier 4 Rate	0.325
Current PG&E Tier 1 Subsidy	0.059
Current PG&E Tier 2 Subsidy	0.071
Current PG&E Tier 3 Subsidy	0.090
Current PG&E Tier 4 Subsidy	0.160
2018 PG&E Proposed CARE Tier 1 Rate	0.118
2018 PG&E Proposed CARE Tier 2 Rate	0.156
2018 PG&E Proposed Non-CARE Tier 1 Rate	0.182
2018 PG&E Proposed Non-CARE Tier 2 Rate	0.241
2018 PG&E Tier 1 Subsidy	0.06
2018 PG&E Tier 2 Subsidy	0.09

Assumes average baseline of 330 kWh per month. Actual baseline varies by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 100% of baseline. Assumes full retail rate NEM credit.

Scenario 2 -- Re-MAT based solar cost

Scenario 2a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.109	35.97	19.56		259	0.168	43.66	0.175	
Tier 2	70	0.130	9.09	4.97		-	0.201	-		
Tier 3	0	0.165	-	-		-	0.255	-		
Total	400		45.06	24.53	141	259		43.66	1.40	

Scenario 2b -- 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.109	35.97	19.56		330	0.168	55.53	0.175	
Tier 2	99	0.130	12.86	7.03		58	0.201	11.69		
Tier 3	231	0.165	38.15	20.86		-	0.255	-		
Total	660		86.98	47.45	272	388		67.22	19.76	

Scenario 2c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.118	38.81	21.14		181	0.182	32.87	0.124	
Tier 2	70	0.156	10.89	5.96		-	0.241	-		
Total	400		49.70	27.10	219	181		32.87		16.83

Scenario 2d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.118	38.81	21.14		262	0.182	47.61	0.124	
Tier 2	330	0.156	51.34	28.08		-	0.241	-		
Total	660		90.15	49.23	398	262		47.61		42.54

ALL RATES FROM IOUs' RROIR TABLES

Current PG&E CARE Tier 1 Rate	0.109
Current PG&E CARE Tier 2 Rate	0.130
Current PG&E CARE Tier 3 Rate	0.165
Current PG&E CARE Tier 4 Rate	0.165
Current PG&E Non-CARE Tier 1 Rate	0.168
Current PG&E Non-CARE Tier 2 Rate	0.201
Current PG&E Non-CARE Tier 3 Rate	0.255
Current PG&E Non-CARE Tier 4 Rate	0.325
Current PG&E Tier 1 Subsidy	0.059
Current PG&E Tier 2 Subsidy	0.071
Current PG&E Tier 3 Subsidy	0.090
Current PG&E Tier 4 Subsidy	0.160
2018 PG&E Proposed CARE Tier 1 Rate	0.118
2018 PG&E Proposed CARE Tier 2 Rate	0.156
2018 PG&E Proposed Non-CARE Tier 1 Rate	0.182
2018 PG&E Proposed Non-CARE Tier 2 Rate	0.241
2018 PG&E Tier 1 Subsidy	0.06
2018 PG&E Tier 2 Subsidy	0.09

Assumes average baseline of 330 kWh per month. Actual baseline varies by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 100% of baseline. Assumes full retail rate NEM credit.

SCE CleanCARE Analysis

Scenario 1 -- higher solar cost

Scenario 1a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.103	33.99	15.18		317	0.149	47.27	0.237	
Tier 2	70	0.145	10.15	4.41		-	0.208	-		
Tier 3	0	0.168	-	-		-	0.242	-		
Total	400		44.14	19.59	83	317		47.27		(3.13)

Scenario 1b -- 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.103	33.99	15.18		330	0.149	49.17	0.237	
Tier 2	99	0.145	14.36	6.24		99	0.208	20.59		
Tier 3	231	0.168	38.81	17.09		68	0.242	16.54		
Total	660		87.15	38.51	163	497		86.31		0.85

Scenario 1c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.112	36.96	18.15		279	0.167	46.63	0.197	
Tier 2	70	0.167	11.69	5.60		-	0.247	-		
Total	400		48.65	23.75	121	279		46.63		

Scenario 1d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.112	36.96	18.15		330	0.167	55.11	0.197	
Tier 2	330	0.167	55.11	26.40		103	0.247	25.54		
Total	660		92.07	44.55	227	433		80.65		

ALL RATES FROM IOUs' RROIR TABLES

Current Average CARE Tier 1 Rate	0.103
Current Average CARE Tier 2 Rate	0.145
Current Average CARE Tier 3 Rate	0.168
Current Average CARE Tier 4 Rate	0.168
Current Average Non-CARE Tier 1 Rate	0.149
Current Average Non-CARE Tier 2 Rate	0.208
Current Average Non-CARE Tier 3 Rate	0.242
Current Average Non-CARE Tier 4 Rate	0.301
Current Average Tier 1 Subsidy	0.046
Current Average Tier 2 Subsidy	0.063
Current Average Tier 3 Subsidy	0.074
Current Average Tier 4 Subsidy	0.133
2018 Average Proposed CARE Tier 1 Rate	0.112
2018 Average Proposed CARE Tier 2 Rate	0.167
2018 Average Proposed Non-CARE Tier 1 Rate	0.167
2018 Average Proposed Non-CARE Tier 2 Rate	0.247
2018 Average Tier 1 Subsidy	0.06
2018 Average Tier 2 Subsidy	0.08

Assumes average baseline of 330 kWh per month. Actual baseline varies by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 100% of baseline. Assumes full retail rate NEM credit.

Scenario 2 -- Re-MAT based solar cost

Scenario 2a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.103	33.99	15.18		274	0.149	40.89	0.156	
Tier 2	70	0.145	10.15	4.41		-	0.208	-		
Tier 3	0	0.168	-	-		-	0.242	-		
Total	400		44.14	19.59	126	274		40.89	3.25	

Scenario 2b - 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.103	33.99	15.18		330	0.149	49.17	0.156	
Tier 2	99	0.145	14.36	6.24		83	0.208	17.30		
Tier 3	231	0.168	38.81	17.09		-	0.242	-		
Total	660		87.15	38.51	247	413		66.47	20.68	

Scenario 2c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.112	36.96	18.15		195	0.167	32.49	0.116	
Tier 2	70	0.167	11.69	5.60		-	0.247	-		
Total	400		48.65	23.75	205	195		32.49		16.16

Scenario 2d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.112	36.96	18.15		275	0.167	45.86	0.116	
Tier 2	330	0.167	55.11	26.40		-	0.247	-		
Total	660		92.07	44.55	385	275		45.86		46.21

ALL RATES FROM IOUs' RROI TABLES

Current Average CARE Tier 1 Rate	0.103
Current Average CARE Tier 2 Rate	0.145
Current Average CARE Tier 3 Rate	0.168
Current Average CARE Tier 4 Rate	0.168
Current Average Non-CARE Tier 1 Rate	0.149
Current Average Non-CARE Tier 2 Rate	0.208
Current Average Non-CARE Tier 3 Rate	0.242
Current Average Non-CARE Tier 4 Rate	0.301
Current Average Tier 1 Subsidy	0.046
Current Average Tier 2 Subsidy	0.063
Current Average Tier 3 Subsidy	0.074
Current Average Tier 4 Subsidy	0.133
2018 Average Proposed CARE Tier 1 Rate	0.112
2018 Average Proposed CARE Tier 2 Rate	0.167
2018 Average Proposed Non-CARE Tier 1 Rate	0.167
2018 Average Proposed Non-CARE Tier 2 Rate	0.247
2018 Average Tier 1 Subsidy	0.06
2018 Average Tier 2 Subsidy	0.08

Assumes average baseline of 330 kWh per month. Actual baseline varies by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 100% of baseline. Assumes full retail rate NEM credit.

SDG&E CleanCARE Analysis

Scenario 1 -- higher solar cost

Scenario 1a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.107	35.31	24.42		288	0.181	52.13	0.269	
Tier 2	70	0.123	8.61	5.74		-	0.205	-		
Tier 3	0	0.245	-	-		-	0.396	-		
Total	400		43.92	30.16	112	288		52.13		(8.21)

Scenario 1b -- 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.107	35.31	24.42		330	0.181	59.73	0.269	
Tier 2	99	0.123	12.18	8.12		80	0.205	16.32		
Tier 3	231	0.245	56.60	34.88		-	0.396	-		
Total	660		104.08	67.42	250	410		76.05		28.03

Scenario 1c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	400	0.149	59.60	35.20		242	0.237	57.32	0.223	
Tier 2	0	0.205	-	-		-	0.322	-		
Total	400		59.60	35.20	158	242		57.32		2.28

Scenario 1d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	429	0.149	63.92	37.75		369	0.237	87.45	0.223	
Tier 2	231	0.205	47.36	27.03		-	0.322	-		
Total	660		111.28	64.78	291	369		87.45		23.83

ALL RATES FROM IOUs' RROIR TABLES

Current SDG&E CARE Tier 1 Rate	0.107
Current SDG&E CARE Tier 2 Rate	0.123
Current SDG&E CARE Tier 3 Rate	0.245
Current SDG&E CARE Tier 4 Rate	0.245
Current SDG&E Non-CARE Tier 1 Rate	0.181
Current SDG&E Non-CARE Tier 2 Rate	0.205
Current SDG&E Non-CARE Tier 3 Rate	0.396
Current SDG&E Non-CARE Tier 4 Rate	0.396
Current SDG&E Tier 1 Subsidy	0.074
Current SDG&E Tier 2 Subsidy	0.082
Current SDG&E Tier 3 Subsidy	0.151
Current SDG&E Tier 4 Subsidy	0.151
2018 SDG&E Proposed CARE Tier 1 Rate	0.149
2018 SDG&E Proposed CARE Tier 2 Rate	0.205
2018 SDG&E Proposed Non-CARE Tier 1 Rate	0.237
2018 SDG&E Proposed Non-CARE Tier 2 Rate	0.322
2018 SDG&E Tier 1 Subsidy	0.09
2018 SDG&E Tier 2 Subsidy	0.12

Assumes average baseline usage of 330 kWh per month. Actual baseline will vary by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 130% of baseline. Assumes full retail rate NEM credit.

Scenario 2 -- Re-MAT based solar cost

Scenario 2a -- 2015 -- Tier 2 Customer (400 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.107	35.31	24.42		255	0.181	46.22	0.208	
Tier 2	70	0.123	8.61	5.74		-	0.205	-		
Tier 3	0	0.245	-	-		-	0.396	-		
Total	400		43.92	30.16	145	255		46.22		(2.30)

Scenario 2b -- 2015 -- Tier 3 Customer (660 kWh per month)

	2015 CARE				2015 CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	330	0.107	35.31	24.42		330	0.181	59.73	0.208	
Tier 2	100	0.123	12.30	8.20		7	0.205	1.42		
Tier 3	230	0.245	56.35	34.73		-	0.396	-		
Total	660		103.96	67.35	323	337		61.15		42.81

Scenario 2c -- 2018 -- 400 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	400	0.149	59.60	35.20		182	0.237	43.18	0.162	
Tier 2	0	0.205	-	-		-	0.322	-		
Total	400		59.60	35.20	218	182		43.18		16.42

Scenario 2d -- 2018 -- 660 kWh per month

	2018 CARE				2018 Clean CARE				Solar Cost	Bill Savings
	Usage	Rate (CARE)	Bill	Subsidy	kWh Subsidy	Net Usage	Rate (Non-CARE)	Total Bill		
Tier 1	429	0.149	63.92	37.75		259	0.237	61.41	0.162	
Tier 2	231	0.205	47.36	27.03		-	0.322	-		
Total	660		111.28	64.78	401	259		61.41		49.86

ALL RATES FROM IOUs' RROIR TABLES

Current SDG&E CARE Tier 1 Rate	0.107
Current SDG&E CARE Tier 2 Rate	0.123
Current SDG&E CARE Tier 3 Rate	0.245
Current SDG&E CARE Tier 4 Rate	0.245
Current SDG&E Non-CARE Tier 1 Rate	0.181
Current SDG&E Non-CARE Tier 2 Rate	0.205
Current SDG&E Non-CARE Tier 3 Rate	0.396
Current SDG&E Non-CARE Tier 4 Rate	0.396
Current SDG&E Tier 1 Subsidy	0.074
Current SDG&E Tier 2 Subsidy	0.082
Current SDG&E Tier 3 Subsidy	0.151
Current SDG&E Tier 4 Subsidy	0.151
2018 SDG&E Proposed CARE Tier 1 Rate	0.149
2018 SDG&E Proposed CARE Tier 2 Rate	0.205
2018 SDG&E Proposed Non-CARE Tier 1 Rate	0.237
2018 SDG&E Proposed Non-CARE Tier 2 Rate	0.322
2018 SDG&E Tier 1 Subsidy	0.09
2018 SDG&E Tier 2 Subsidy	0.12

Assumes average baseline usage of 330 kWh per month. Actual baseline will vary by IOU and climate region. In 2015, Tier 1 is baseline, Tier 2 is 100-130% of baseline, Tier 3 is 130-200% of baseline. In 2018, Tier 1 is baseline and Tier 2 is > 130% of baseline. Assumes full retail rate NEM credit.

COST ASSUMPTIONS				
COST OF SOLAR	2015	2018		
Higher cost	0.150	0.120		
PG&E ReMAT	0.065	0.035		
SCE ReMAT	0.069	0.039		
SDG&E ReMAT	0.089	0.059		
(ReMAT July 2015)		(assumes .03 reduction in cost 2015-2018)		
DISTRIBUTION	2015	2018		% 2015 T4 rate
PG&E Rate - D component	0.079	0.059		24.39%
SCE Rate - D component	0.057	0.047		18.87%
SDG&E Rate - D component	0.089	0.073		22.55%
		(assumes same % of rate in 2018 as in 2015)		
ADMIN	2015	2018		
Admin. assumption	0.030	0.030		