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Decision 16-12-036 December 15, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning and Evaluation of Integrated Distributed Energy Resources.

Rulemaking 14-10-003
(Filed October 2, 2014)

**DECISION ADDRESSING COMPETITIVE SOLICITATION
FRAMEWORK AND UTILITY REGULATORY INCENTIVE PILOT**

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DECISION ADDRESSING COMPETITIVE SOLICITATION FRAMEWORK AND UTILITY REGULATORY INCENTIVE PILOT

Summary

In this decision, we adopt the consensus recommendations from the Competitive Solicitation Framework Working Group (Working Group) August 1, 2016 Report (Report). We also approve a regulatory incentive mechanism pilot (Incentive Pilot), based upon a proposed pilot, the outcomes of the Working Group and party comments. Where consensus was not reached by the Working Group, we utilize the Incentive Pilot to test options suggested by individual members of the Working Group, but not agreed upon in the Report. To implement the Incentive Pilot, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities)¹ shall each identify one project where the deployment of distributed energy resources on the system would displace or defer the need for capital expenditures on traditional distribution infrastructure. To test the incentive mechanism, the Utilities are encouraged to select up to three additional projects. Lastly, we re-establish the Working Group to develop a technology-neutral pro forma contract for future use, based upon the Incentive Pilot experience.

This proceeding remains open to test and evaluate the Incentive Pilot.

1. Background

On October 2, 2014, the California Public Utilities Commission (Commission) established Rulemaking (R.) 14-10-003 to consider the

¹ Southern California Gas Company, although a respondent in this proceeding, is not required to implement the pilot approved in this decision, because the pilot only pertains to electric service.

development and adoption of a regulatory framework to provide policy consistency for the direction and review of demand-side resource programs. Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and Southern California Gas Company (SoCalGas) (jointly, the Utilities). Due to the complexity of issues in this proceeding, the assigned Commissioner has issued three scoping memos. The Joint Assigned Commissioner's and Administrative Law Judge's Ruling and Scoping Memo issued on January 5, 2015, recognized the complexity of the proceeding. This initial Scoping Memo provided an interim scope but noted that issues may be expanded and, thus, scheduled a series of workshops to consider the breadth of the proceeding. Following the workshops,² one round of comments,³ and an initial decision,⁴ an amended scoping memo was issued on February 26, 2016. That amended scoping memo authorized an expanded scope for the proceeding: 1) development of a competitive solicitation framework for distributed energy resources⁵ to target the reliability needs in the areas identified by R.14-08-013; 2) the continued development of technology-neutral cost-effectiveness methods and protocols; 3) leveraging the work performed in

² The following workshops were held: Learning Session I on 1/22/2015, Learning Session II on 2/20/2015, Interactive Workshops on 3/11-12/2015, and Cost-Effectiveness Workshop on 7/30/2015.

³ May 15, 2015 comments and May 29, 2015 reply comments to Joint Assigned Commissioner and Administrative Law Judge's April 15, 2015 Ruling Requesting Responses to Questions.

⁴ Decision Adopting an Expanded Scope, a Definition and a Goal for the Integration of Distributed Energy Resources, 9/17/2015.

⁵ Decision (D.) 15-09-022 stated that R.14-10-003 would use the same categories of distributed energy resources as those used in R.14-08-013. *See* R.14-08-013 Assigned Commissioner's Ruling, April 6, 2016, Attachment A at 14-15.

R.14-08-013⁶ (i.e., the Distribution Resource Plans proceeding demonstration projects); and 4) the role of the Utilities, business models, and financial interests with respect to distributed energy resources deployment. As part of the broadened scope, the February 26, 2016 Amended Scoping Memo indicated the future establishment of a working group to develop a competitive solicitation framework.

On March 24, 2016, the Administrative Law Judge issued a ruling establishing the Competitive Solicitation Framework (Framework) Working Group (Working Group) and tasked them with developing a Framework targeting the reliability needs within the areas identified by analysis performed in R.14-08-013 et al. In order to provide a solid springboard for the Working Group, the Commission held a workshop on March 28, 2016. The purpose of the workshop was to provide parties, especially members of the Working Group, with overviews of various prior solicitation experiences, discuss lessons learned from these experiences, and bring into focus some general requirements for the Framework. As required by the March 24, 2016 ruling, the Working Group filed a final report on August 1, 2016, making its recommendations for the framework (Report).⁷ The recommendations are identified and described below. On

⁶ R.14-08-013 was initiated to establish policies, procedures, and rules to guide regulated energy utilities in developing their distribution resources plans as required by Public Utilities Code Section 769. In R.14-08-013, we will develop methodologies to determine how distributed energy resources can meet system needs as an alternative to traditional investments, provide justification for meeting those needs with distributed energy resources instead of conventional alternatives, define the services that may be bought and sold to meet the needs, and produce maps that indicate where distributed energy resources should be sourced. See February 26, 2016, Amended Scoping Memo and Ruling at 5-6.

⁷ In compliance with the March 24, 2016 ruling, the Working Group also filed a status report on June 1, 2016.

August 22 and 31, 2016, the parties filed comments and reply comments, respectively, to the Report.

On April 4, 2016, a ruling was issued introducing the assigned Commissioner's regulatory incentive mechanism proposal (Incentive Proposal) addressing issues related to the "utility role, business models and financial interest with respect to distributed energy resources deployment," as reflected in the February 26, 2016 Amended Scoping Memo. Parties provided comments and reply comments to the Incentive Proposal on May 9 and 23, 2016, respectively. The Commission held a workshop on June 13, 2016, with the objectives of educating stakeholders on the value engine aspects of the regulatory incentive proposal, understanding the Utilities' perspective, and determining next steps. A June 23, 2016 ruling entered the workshop presentations into the administrative record of the proceeding and allowed comments addressing the merits of the financial theory discussed in the April 4, 2016 ruling. Parties filed comments on July 8, 2016.

On September 1, 2016, the assigned Commissioner and Administrative Law Judge jointly issued an amended scoping memo and ruling, which changed the categorization of this proceeding from quasi-legislative to ratesetting; combined the Phase Two issue of setting an incentive with the Phase One issues; and provided parties with an opportunity to comment on and respond to questions regarding a revised proposal for a regulatory incentive mechanism pilot, which includes a proposed incentive level (Revised Proposal). The Revised Proposal is described below. Parties filed comments to the ruling questions on September 15 and 22, 2016, respectively.

This proceeding remains open.

2. Framework Working Group Recommendations

A March 24, 2016 Administrative Law Judge ruling tasked the Working Group with the role of developing a Framework to include the following seven elements:

- a. Define the services to be bought and sold within the areas identified in the analysis performed in R.14-08-013 (the Distribution Resources Plans proceeding);
- b. Develop methodologies to count services provided and to ensure no duplication with procurement in other proceedings;
- c. Develop solicitation rules or principles;
- d. Develop solicitation oversight needs;
- e. Develop solicitation evaluation method;
- f. Develop solicitation pro forma contracts; and
- g. Develop outreach plans to ensure robust participation in the framework.

The membership of the Working Group includes customer advocacy groups,⁸ potential distributed energy resource providers,⁹ environmental advocacy groups,¹⁰ governmental agencies,¹¹ the Utilities, and other interested

⁸ Customer advocacy groups include the California Large Energy Consumers Association (CLECA) and the Office of Ratepayer Advocates (ORA).

⁹ Potential providers of distributed energy resources include Advanced Microgrid Solutions, Bloom Energy, California Energy Efficiency Industry Council (CEEIC), Comverge Inc., CPower, EnergyHub, EnerNOC, Enphase, Independent Energy Producers Association, Johnson Controls, Inc., Marin Clean Energy (MCE), Nexant, NRG, SolarCity, Solar Energy Industries Association, and Stem, Inc.

¹⁰ The environmental advocacy groups represented are Clean Coalition, Earthjustice, Natural Resources Defense Council (NRDC), and Sierra Club.

¹¹ The governmental agencies represented are California Energy Commission, California Independent System Operator (CAISO), the Commission, and Port of Long Beach

organizations and individuals.¹² The Working Group met multiple times between April 8, 2016, and July 14, 2016. For each of the elements listed above, a subgroup was formed to focus on that element. As required by the March 24, 2016 ruling, the Utilities – on behalf of the Working Group – filed a Status Report on June 1, 2016, and an August 1, 2016 final report with recommendations on the seven elements.¹³ As described in the brief below, the Working Group:

- Reached full consensus on defining the services to be procured;
- Reached some consensus on the elements of principles, valuation, the pro forma contract, and outreach;
- Reached no consensus but clear recommendations on oversight; and
- Reached neither consensus nor recommendations on methodologies for double counting or the development of actual rules.

2.1. Defining the Services to be Procured Using the Framework

As described in the Competitive Solicitation Framework (Framework) Working Group Final Report (Report), the Working Group agreed that the potential distribution services that distributed energy resources may be able to provide in order to address a distribution grid need are energy (up/down),

¹² The remaining members of the Working Group are Alcantar & Kahl, Barkovich & Yap, Global Energy Markets, Goodin, MacBride, Squieri & Day, LLP, ICF International, John Nimmons & Association, Karey Christ-Janer, Stanford University, Strategy Integration, The Energy Coalition, Vote Solar, and World Business Academy.

¹³ Competitive Solicitation Framework Working Group Final Report, August 1, 2016.

capacity (up/down), and Voltage/Volt-Ampere Reactive (VAR) services (up/down). The Working Group agreed on definitions for the following terms:

- Distribution Capacity services are load-modifying or supply services that distributed energy resources provide via the dispatch of power output for generators or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure;
- Voltage Support services are substation and/or feeder-level dynamic voltage management services provided by an individual resource and/or aggregated resources capable of dynamically correcting excursions outside voltage limits as well as supporting conservation voltage reduction strategies in coordination with utility voltage/reactive power control systems;
- Reliability (Back-Tie) services are load-modifying or supply services capable of improving local distribution reliability and/or resiliency. Specifically, this service provides a fast reconnection and availability of excess reserves to reduce demand when restoring customers during abnormal configurations; and
- Resiliency (microgrid) services are load-modifying or supply services capable of improving local distribution reliability and/or resiliency. This service provides a fast reconnection and availability of excess reserves to reduce demand when restoring customers during abnormal configurations.¹⁴

The Working Group also came to a consensus on three statements: i) the sourcing process may be procuring a solution that is a high-value application of these basic services; ii) detailed attributes for these services will depend on the specific needs of the system in a particular location, which will be identified in

¹⁴ See August 1, 2016 Report at 12-13.

R.14-08-013; and iii) incremental data being gathered from distributed energy resources devices has value and could be provided as a service.¹⁵

2.2. Methodologies to Ensure Incremental Services and No Double Counting

The Working Group did not reach any consensus on how to ensure that resources procured through the Framework are incremental and not counted more than once. However, the Working Group developed five different methods for the Commission to consider:

- The first method proposes that when a bidder provides offers, a pre-determined set of questions would guide the bidder's analysis of whether the offer is incremental or not. A set of questions would need to be developed based on the actual planning assumptions used to determine the need for a solicitation.
- The second method recommends four factors for determining whether a distributed energy resource is incremental: i) Whether it is in a targeted category and funded through existing programs; ii) whether it is an existing program and/or technology and not innately incremental; iii) whether it is a new technology and not innately incremental; and iv) whether it addresses overloaded circuits or high node prices and is not innately incremental.
- The third method takes a different approach noting that the types of questions suggested in the first method seem non-congruent with distributed energy resources that are not necessarily connected to a program, e.g., photovoltaics, electric vehicles and certain types of storage. The third method, instead, suggests assuming a pro rata baseline allocation of program effects across the grid and then assigning a distributed energy resource value only to an

¹⁵ The Working Group did not determine in what cases this would apply.

incremental magnitude of contractually-committed distributed energy resources.

- The fourth method recommends a tranche analysis combined with a well-specified distributed energy resources growth scenario. The analysis envisions three categories of distributed energy resources: 1) Those not already sourced through another channel; 2) Those partially sourced through another channel; and 3) Those wholly sourced through another channel.
- The fifth method, similar to the fourth, suggests that when *attributes* of a distributed energy resource have not been sourced through other mechanisms, they should be considered incremental, and if they have been sourced at least partially through another mechanism, at least a portion may be considered incremental if the bidder is able to demonstrate increased market participation due to the combined incentives.

2.3. Development of Rules and Oversight

Combining the topics of solicitation rules/principles and oversight, the Working Group was able to develop and agree upon 12 principles that should apply to the Framework. However, the sub-group assigned to these topics could not reach consensus on the details of the rules and oversight. The 12 recommended principles of the Framework are:

1. Framework meets the identified need on a least-cost, best-fit basis;
2. Framework utilizes a competitive process with broad markets;
3. Framework is technology-neutral;
4. Framework is as transparent as allowed within confidentiality boundaries;
5. Framework identifies a need without prejudging the technology;

6. Framework does not limit the amount of any one type of technology;
7. Framework is a streamlined process;
8. Framework is a fair and consistent process;
9. Framework focuses on the identified need;
10. Framework provides sufficient assurance of performance;
11. Framework allows for flexibility in the number and type of bids; and
12. Framework includes a lessons-learned feedback loop.

Additionally, the sub-group recommended the use of a Distribution Planning Advisory Group to provide advice to the utilities on the process for utility consideration of proposed distribution deferral projects and routine distribution activities that relate to the distributed energy resources. The use of the Distribution Planning Advisory Group was well-received by the Working Group, but did not obtain a consensus. Similarly, the sub-group recommended that bid review for compliance with technical specifications should be delegated to the existing Procurement Review Group which could employ an Independent Professional Engineer (Engineer). This recommendation was met with divided support by the Working Group. However, the sub-group also recommended the hiring of an Engineer to independently evaluate the distribution planning process, which the Working Group largely supported. Lastly, the sub-group recommended that the distribution deferral project require a Commission authorization and approval process. This issue elicited a robust discussion but, according to the Report, requires further development of informational material and time for party consideration.

2.4. Evaluation Method

The Working Group identified potential valuation components to be used in the Framework (*See Appendix A*). Consensus was reached on a viable starting point but not on the implementation of the valuation process. Agreeing on the use of the least-cost best-fit framework, the Working Group adopted three principles for valuation: 1) Consider the potential services, benefits and costs beyond what is asked for in the solicitation and other conceivable benefits/costs provided by distributed energy resources as qualitative factors; 2) Continue to refine the evaluation method and integrate lessons learned; and 3) Avoid double-counting of benefits and costs. The Working Group discussed the following evaluation steps: The initial screen, the quantitative valuation, and the qualitative evaluation, as well as the various components of each of these steps.

2.5. Pro Forma Contracts

The Working Group reached consensus on the types of changes necessary to modify existing contracts or term sheets for distribution deferral purposes. While the idea of a technology-neutral pro forma contract was addressed, the Working Group did not agree on either the need for such a contract or the process to develop it.

The areas in existing contracts that the Working Group agreed should be revised to accommodate distribution deferral projects include:

1) Performance-based payment structure during the distribution deferral period for solar resources; 2) An increase in the number of pre-operational milestones and consequences for not meeting the milestones; 3) Development security in the agreement; 4) Performance assurance in the agreement; and 5) Accommodations for voltage support product.

Lastly, the Working Group identified several challenges in past solicitations to which the group developed two solutions, neither of which received a consensus support. The first solution requires the use of a transparent, collaborative negotiation with buyers and sellers at the table. The second solution calls for the development of a standard contract, which is technology-agnostic.

2.6. Outreach

Two categories of outreach were discussed by the Working Group: Market and customer. The Working Group agreed that the existing market outreach practices meet the needs of the market. However, no consensus was reached on customer outreach.

The Working Group supports the utilities providing information within the solicitation package that describes a baseline level of customer engagement support, including an outline of current Commission rules and standard practices for pre-contracting and post-contracting acquisition of customer-specific data in the targeted location. Regarding pre-contracting practices, the Working Group agreed that the following information should be included in the solicitation package: i) The specific geographic area where resources must be deployed; ii) the customer composition in the geographic area; iii) instructions on how vendors can request customer-specific information under current privacy rules. Additionally, the Working Group agreed that the utilities should develop and maintain a customer-facing web presence during the solicitation period to increase customer awareness of the solicitation in the geographic area. For post-contracting outreach, the Working Group agreed that the level of enhanced post-contracting support that the utility will provide should be described in the solicitation documents.

3. Revised Regulatory Incentive Mechanism Pilot

The September 1, 2016 Amended Scoping Memo and Ruling presents a revised proposal for a regulatory incentive mechanism pilot (Revised Proposal). The Revised Proposal would award regulatory incentives to the Utilities for the cost-effective deployment of distributed energy resources that defer or displace more traditional distribution capital projects and expenditures. The dual purpose of the Revised Proposal is to test how an earnings opportunity affects the Utilities' distributed energy resources sourcing behavior as well as test elements of the Framework as proposed by the Working Group. The Revised Proposal contains six steps, covering a timeline of 17 months from the adoption of this decision. We briefly describe the proposed six steps and the accompanying schedule in Table 1 below.

If the solicitation is deemed successful, the utility would be authorized to record the value of the incentive in a balancing account for later recovery. There would be a review in the Energy Resource Recovery Account compliance application for each year in which an incentive was claimed. The incentive would be recovered as long as the distributed energy resources procured were successful in avoiding or deferring an otherwise planned utility expenditure. Once the deferral period ends and a traditional investment is made, no incentive would be recovered for that year and going forward.

The incentive is proposed to be set at a 4 percent pre-tax incentive when applied to the annual payment for the distributed energy resources alternative or, if applying the incentive to the avoided cost of the traditional alternative, a 3 percent pre-tax incentive would apply.

TABLE 1 Pilot Steps and Timeline (As proposed in September 1, 2016 Amended Scoping Memo)	
Timeline	Action
2 months	Utilities establish Distribution Planning Advisory Group, supported by Independent Professional Engineer, to review and provide feedback to Utilities on distribution projects to be deferred or displaced.
4 months	Utilities identify two projects where the deployment of distributed energy resources could displace or defer the need for capital expenditures; have a reasonable chance of being cost-effective; mirror Demonstration C ¹⁶ in R.14-08-013; and be incremental to current distributed energy resources deployment. Utilities consult with Distribution Planning Advisory Group.
6 months	Utilities each file Tier 3 Advice Letter proposing the procurement of the two (or more) projects.
10 months	Utilities hold a public workshop prior to end of protest period. Commission's Energy Division sets deadline to file comments or protests to Advice Letters. Proposed Resolution issued addressing Advice Letter.
14 months	If Advice Letter is approved, the Utilities, following the rules adopted pursuant to the Framework Working Group recommendations, undertake the solicitation process.
17 months	Following completion of the distributed energy resources procurement, the Utilities file a Pilot Evaluation Report including input from the Distribution Planning Advisory Group and the Procurement Review Group addressing specific questions.

¹⁶ Demonstration C is required to demonstrate distributed energy resources locational benefits. This project will validate the ability of distributed energy resources to achieve net benefits consistent with the Locational Net Benefits Analysis also developed in R.14-08-013.

4. Issues to be addressed

This decision addresses three concepts: 1) whether to adopt the recommendations of the Working Group; 2) whether to adopt a pilot to test the Revised Proposal for a regulatory incentive mechanism using the Framework recommended by the Working Group; and 3) at what level the incentive should be set.

5. Discussion and Analysis

We adopt the recommendations from the Framework Working Group Report where consensus has been reached. We discuss the aspects of the Framework where consensus was not reached and develop a plan to explore the options.

For purposes of testing the Framework, we require each of the Utilities to implement the Incentive Pilot by identifying one project where the deployment of distributed energy resources on the system would displace or defer the need for capital expenditures on traditional distribution infrastructure. In order to test the incentive mechanism, the Utilities are encouraged but not required to identify up to three additional projects for piloting, as described below. For purposes of the Incentive Pilot, we adopt a 4 percent pre-tax incentive, which will be applied to the annual payment for the distributed energy resources that are procured as an alternative to traditional distribution project investments.

5.1. Competitive Solicitation Framework

The Working Group was unable to reach consensus on many aspects of the seven elements with which the group was tasked to develop. However, the aspects where consensus has been reached, in addition to the options suggested for other aspects of the elements, provide the Commission with a good starting

point for the Framework. We address each of the seven elements individually below.

5.1.1. Defining the Services Bought and Sold

We adopt the Reports' consensus statements regarding potential distribution services, detailed attributes to these services, and data as a service.¹⁷ Furthermore, we adopt the definitions of the following terms, as agreed upon by the Working Group: distribution capacity, voltage support, reliability (back-tie) and resiliency.¹⁸ No party expressed opposition to these definitions or statements in comments to the Report. We, therefore, find it reasonable to adopt these definitions and terms.

The Working Group also discussed the issue of whether distributed energy resources could or should be part of a contingency plan. In this context, a contingency plan provides the utility procuring the distribution service an option if the distributed energy resource being procured proves unviable. On this issue, the Working Group did not reach consensus or provide recommendations. In comments to the Report, SDG&E and Vote Solar presented opposing views of contingency plans. Vote Solar, noting that the need for contingency planning is yet to be resolved, recommended a hierarchical contingency plan.¹⁹ SDG&E responded that it is premature to develop a contingency plan, suggesting that contingency plans should be discussed when discussing the ability of a distributed energy resource to defer a traditional distribution project.

¹⁷ *Id* at 9.

¹⁸ August 1, 2016 Report at 12-13.

¹⁹ Vote Solar August 22, 2016 Opening Comments at 3.

We find that a contingency plan should be part of the discussion in R.14-08-013 where, as we discuss below, the distribution planning process will be considered and may include a framework for deferral of distribution projects. However, given that the Incentive Pilot we authorize here may precede any determination made in R.14-08-013, we find that a contingency plan should be developed by the Utilities in consultation with the Distribution Planning Advisory Group for the purposes of the pilot approved in this decision.

5.1.2. Addressing Incrementality and Double-Counting of Services

Unable to come to a consensus on how to ensure resources are incremental to existing efforts and avoid the double-counting of services provided, the Working Group offered five recommendations in its Report. As we discuss further below, we find none of these proposals are complete and thus this element of the Framework requires further exploration. As suggested by NRDC, the pilot process is an appropriate time to explore experimentation. Hence, as described below, we take the opportunity to further explore the methods in the pilot we approve in this decision.

The March 24, 2016 ruling required the Working Group to develop methods to count services provided and ensure no duplication with procurement in other proceedings, i.e., ensure these services are incremental to existing efforts and avoid double-counting of services. In recognition of the principles adopted below, the counting method to be used in the pilot adopted in this decision shall:

- Ensure that ratepayers are not paying twice for the same service;
- Ensure the reliability of a service, i.e., ensure it is not counting on a service to be there when the service might be deployed at another time or place;
- Not be unduly burdensome to participants;

- Be technology-neutral;
- Be fair and consistent;
- Recognize that a distributed energy resource is eligible to provide multiple incremental services and be compensated for each service; and
- Be flexible and transparent to bidders.

The Report described five methods for ensuring that resources procured through this framework are incremental to existing efforts. Method 1 presents a series of questions used to determine whether a resource is incremental.²⁰ Similarly, Methods 2, 4 and 5 also ask a series of questions to ensure no double-counting.²¹ The author(s) of Method 3 argue that none of the other methodologies are able to address specific geographic areas, because distributed energy resources generally are distributed through area-wide programs or are deployed by multiple vendors without restriction or specification as to grid location. Hence, Method 3 proposes to assume a pro rata baseline allocation for all energy efficiency and demand response resources and assign value to only an incremental magnitude of contractually-committed resources. The description of this concept does not include the details on how or where to set this baseline. Accordingly, we do not find it reasonable to adopt the use of Method 3, as currently proposed.

The supporters of Method 3 contend that the screening questions in the other methods are not relevant to less-program-based distributed energy resources such as photovoltaics, electric vehicles or some storage. Looking at the

²⁰ August 1, 2016 Report at Table 5, at 20 through 24.

²¹ *Id* at 24 and 26 through 30.

questions asked in Method 1, 2, 4 and 5, we agree that the questions in Method 1 are technology-specific. However, we find the questions asked in Method 2, 4 and 5 to be technology-agnostic. Several parties express support for Methods 4 and 5, explaining that criteria should be practical,²² simple, actionable, and encouraging of business.²³ In addition to the bulleted items above, we find that the selected method should result in criteria with these attributes.

SCE takes a different approach and recommends focusing not on what distributed energy resources are incremental after receiving bids, but rather on clearly defining what distributed energy resources are incremental for each solicitation package. SCE explains that the planning assumptions for distributed energy resources, including forecasted distributed energy resources uptake in the relevant areas, distributed energy resources load shapes, market sectors, and measure types should be included in the solicitation package.²⁴ CEEIC agrees, stating that when the parameters of the bid for distributed energy resources are not clear in a solicitation package, arbitrary determinations of qualifying bids and stranded opportunities may occur. CEEIC contends that there should be clear parameters for determining what resources are incremental as part of the initial offering that do not change after the solicitation package has been issued.

While we agree with CEEIC, we cannot at this point determine which of the methods will provide the best assurance that resources are incremental while avoiding double-counting and meet all of the bulleted requirements above. However, we can help to ensure clear parameters of what is incremental by

²² NRDC Opening Comments, August 22, 2016 at 2.

²³ CEEIC Opening Comments, August 22, 2016 at 6.

²⁴ SCE Opening Comments, August 22, 2016 at 4.

requiring the Utilities to provide the planning assumptions for distributed energy resources in the solicitation package, including forecasted distributed energy resources' uptake in the relevant areas, distributed energy resources' load shapes, market sectors, and measure types.

In comments to the proposed decision, TURN maintains that none of the methods are transparent, fleshed out, or distinct enough to justify testing.²⁵ TURN recommends that each utility work with the Distribution Planning Advisory Group to finalize a Method. NRDC states that because no consensus was reached by the Working Group, there remains room for improvement for all the counting methods and suggests allowing the Utilities to choose from Method 4 or 5.²⁶ Furthermore, the Utilities contend that Method 2 is impractical to implement because neither the Utilities nor the distributed energy resources providers have access to reliable and verifiable technology metrics at the local level.²⁷

We find that additional work is needed before we can choose any one of the methods over the others. We adopt the following process for purposes of the pilot adopted in this proceeding. First, for purposes of the pilot adopted in this decision, each of the Utilities may propose a method and work with the Distribution Planning Advisory Group to finalize the method. Each utility may propose and utilize a different method for the adopted pilot. As we describe in more detail in our discussion of the Incentive Pilot, we find it reasonable to allow each of the Utilities to pursue a different method so that we can determine which

²⁵ TURN Opening Comments to Proposed Decision, November 30, 2016 at 3.

²⁶ NRDC Opening Comments to Proposed Decision, November 30, 2016 at 4.

²⁷ Utilities Opening Comments to Proposed Decision, November 30, 2016 at 6.

one method provides the best outcomes for ratepayers and customers. Because the Framework principles adopted below call for consistency, we find that adopting more than one method of counting in the Framework would not meet this principle. Hence, following the evaluation of the Incentive Pilot, the Commission will determine which one method to adopt.

In comments to the proposed decision, the Utilities contend that the Commission should permit each utility to use the method it determines most cost-effective and feasible at avoiding the double-counting rule. We underscore that for future Framework solicitations, the Commission will determine which method is most cost-effective and feasible at avoiding the double-counting rule.

5.1.3. Solicitation Principles

While unable to develop rules for the Framework, the Working Group identified 12 principles that should apply to the Framework. We find the 12 principles, as listed below, reasonable for the purposes of the Framework and adopt them:

1. Framework meets the identified need on a least-cost, best-fit basis;
2. Framework utilizes a competitive process with broad markets;
3. Framework is technology-neutral;
4. Framework is transparent as allowed within confidentiality boundaries;
5. Framework identifies a need without prejudging the technology;
6. Framework does not limit the amount of any one type of technology;
7. Framework is a streamlined process;
8. Framework is a fair and consistent process;
9. Framework focuses on the identified need;

10. Framework provides sufficient assurance of performance;
11. Framework allows for flexibility in the number and type of bids; and
12. Framework includes a lessons-learned feedback loop.

The 12 principles recommended by the Working Group are the same principles that are used in the existing procurement process.²⁸ We find the principles to be a solid foundation for the Framework. We find it reasonable to utilize them in the Framework.

In comments to the Report, feedback on the principles was limited. While the three utilities express support for the principles,²⁹ MCE contends further refinement to the principles is necessary.³⁰ MCE's concern is based on the issue of measuring whether a distributed energy resource is incremental. We find that defining the counting method for ensuring a resource is incremental is the more prudent approach to avoiding double-counting rather than further refining principles. We find no other concerns with the principles, and, thus, we adopt the principles as recommended by the Working Group.

5.1.4. Solicitation Oversight Needs

While the Working Group came to no consensus on appropriate oversight for the Framework, the sub-team recommended the establishment of a Distribution Planning Advisory Group, which we adopt on an interim basis for the purpose of the pilot approved in this decision. We clarify that final rules and oversight regarding distribution planning activities should be considered in

²⁸ August 1, 2016 Report at 33.

²⁹ PG&E Opening Comments, August 22, 2016 at 6-7; SDG&E Opening Comments, August 22, 2016 at 5; and SCE Opening Comments, August 22, 2016 at 6.

³⁰ MCE Opening Comments, August 22, 2016 at 5.

R.14-08-013 (Distribution Resources Plans proceeding), whereas rules and oversight regarding the solicitation of distributed energy resources to defer distribution infrastructure shall be considered in this proceeding. We anticipate that once the locational net benefits analysis is completed in R.14-08-013, the role of the Distribution Planning Advisory Group, adopted in this decision for the purposes of the pilot, may need to be amended, but any such amendments will be made in R.14-08-013. Until such determinations are made in R.14-08-013, we find it reasonable to allow market participants to interact in the Distribution Planning Advisory Group. Accordingly, we determine it is prudent to assign the review of the solicitations to the existing Procurement Review Group in order to avoid conflicts with market participants. Likewise, the acquisition of an Engineer, to evaluate the distribution planning processes, should be a valuable asset to the Commission for the purposes of the pilot approved in this decision. The permanency of such a role for distribution planning efforts shall be determined in R.14-08-013. However, as we discuss below, we approve the role of the Engineer as an advisor to and participant on both the Distribution Planning Advisory Group and the Procurement Review Group for the pilot solicitations.

We begin by reiterating that the purpose of the Competitive Solicitation Framework is to determine how the distributed energy resources, needed to fill the required characteristics and values determined in R.14-08-013, will be procured. We underscore that the characteristics and values of distributed energy resources will be determined through the locational net benefits analysis and the integration capacity analysis performed in R.14-08-013. At this time, neither the locational net benefits analysis nor the integration capacity analysis is

complete. Once completed, these two analyses will provide the foundation for distribution planning activities.

SCE contends there should be a clear distinction between the distribution planning activities and the distributed energy resources sourcing activities, (i.e., the activities performed by the Framework). SCE argues that the distribution planning activities, including the establishment of a Distribution Planning Advisory Group, should be determined in R.14-08-013.³¹ PG&E also called for the continuation of the Working Group in R.14-08-013.

We agree that distribution planning activities should be determined in R.14-08-013. However, in order to i) test the elements of the Framework where consensus has been reached and ii) test multiple options of elements, where consensus has not been reached, we find it reasonable to adopt an interim set of distribution planning activities. Thus, for the purposes of the pilot approved in this proceeding, we adopt the oversight fundamentals discussed in the remainder of this section. The complete Framework steps to be utilized by the Utilities are detailed in our discussion regarding the Revised Proposal for the regulatory incentive mechanism pilot, in Section 5.2 below.

First, we require the Utilities to establish one Distribution Planning Advisory Group for all Utilities to consult with for the purposes of this pilot. In the future, such a mechanism may or may not be adopted in R.14-08-13, but until then, we will require the establishment of this group on an interim basis. As recommended by the sub-team, the Distribution Planning Advisory Group shall advise the Utilities on the process for consideration of proposed electric

³¹ SCE Opening Comments on Report, August 22, 2016 at 6.

distribution capacity deferral pilot projects. For purposes of the pilot, the Distribution Planning Advisory Group shall also advise the Utilities on proposed counting method and contingency plans.

In comments to the proposed decision, Independent Energy Producers Association (IEPA) calls for a separate Valuation Advisory Group. Contending that valuation and planning has been addressed separately throughout this proceeding, the IEPA maintains that allowing the Distribution Planning Advisory Group to address both subjects creates barriers to participate for those along interested in valuation. The issue of valuation has been addressed by the Working Group, of which IEPA was a member. Because we defer the final determination of distribution planning activities, including whether to establish a Distribution Planning Advisory Group, to R.14-08-013, we also find it reasonable to defer IEPA's issue.

Also in comments to the proposed decision, the Utilities maintain that the role of the Distribution Planning Advisory Group is advisory and that the Utilities are responsible for providing safe, reliable and affordable services and therefore must also remain responsible for conducting the solicitation process, selecting the distributed energy resources provider and developing all contingency plans.³² We confirm that the role of the Distribution Planning Advisory Group, for the purposes of this pilot, is to advise the Utilities on the pilot project planning process as well as the aspects of the Framework that remain unsettled, i.e., the counting method and the contingency plan. The Utilities shall work collaboratively with the Distribution Planning Advisory

³² Utilities Opening Comments on Proposed Decision, November 5, 2016 at 9.

Group to finalize the pilot counting method and contingency plan and to ensure that the distributed energy resources avoidance or deferral pilot projects are reasonable.

Furthermore, we allow market participants to participate in the Distribution Planning Advisory Group for the purposes of the pilot approved in this decision. Some parties contend that market participants should not participate in the group due to the foundational assumption that certain types of information, if shared with market participants, could harm the interests of customers or the competitive process.³³ SCE maintains that the benefits of market participants' input can be obtained via the competitive solicitation framework, such as bidder's conferences.³⁴

We agree with The Utility Reform Network (TURN) that these arguments are not convincing. TURN highlights that the Utilities do not account for the technical expertise and knowledge of distributed energy resources' capabilities that market participants would most likely bring to the group.³⁵ The Utilities contend that they have the expertise and an objective perspective to take all distributed energy resources into account simultaneously, whereas market participants may be inclined to champion special interests based on the technology the market participants want to sell.³⁶ SolarCity maintains that market participants bring an additional level of technical sophistication to the

³³ SCE Opening Comments on Report, August 22, 2016 at 8. *See also*, SDG&E Opening Comments on Report, August 22, 2016 at 5; and PG&E Opening Comments on Report, August 22, 2016 at 8.

³⁴ SCE Opening Comments to Report, August 22, 2016 at 9.

³⁵ TURN Reply Comments to Ruling, September 22, 2016 at 2.

³⁶ Utilities Opening Comments to Proposed Decision at 7.

discussions, including detailed understanding of the capabilities of distributed energy resources solutions.³⁷ SolarCity also recognizes that anything related to reviewing bids, shortlisting of projects, or anything which would be a direct conflict of interest should not involve market participants.³⁸

We agree that market participants can provide additional technical sophistication regarding distributed energy resources to the Distribution Planning Advisory Group beyond the expertise of the Utilities. We, thus, find it reasonable, for the purposes of the Incentive Pilot, to allow market participants to be included in the Distribution Planning Advisory Group. To ensure fair competition, market participants should be excluded from any Distribution Planning Advisory Group discussions regarding market sensitive information, as established in Decision (D.) 06-06-066, especially the potential distribution costs that may be avoided by distributed energy resources. Furthermore, market participants should not be permitted to participate in the Procurement Review Group, whose role is to review the solicitation bids. Future inclusion of market participants in distribution planning activities shall be determined in R.14-08-013. As we previously stated, the permanency of such a role for distribution planning efforts shall be determined in R.14-08-013 but we adopt a permanent role for the Engineer in the Procurement Review Group, as discussed below.

The sub-team recommended retaining an Engineer to evaluate distribution plans. The Engineer would be required to hold a degree in engineering with a specialization in power, licensed in California, and have familiarity with the

³⁷ SolarCity Reply Comments to Report, August 31, 2016.

³⁸ *Ibid.*

distribution grid and the technical specifications of various types of distributed energy resources. The sub-team also agreed that the Engineer must be free from conflicts, but could not determine how to prevent such conflicts. Lastly, the sub-team agreed that the Engineer should be responsible for providing a report on the distributed energy resources deferral process, a presentation to the Distribution Planning Advisory Group on the utility processes for distribution deferral need authorization, and a presentation to the Procurement Review Group on the process for utility evaluation of non-wires distributed energy resources deferral projects.

No party disagrees with the retention of an Engineer, as described above. However, as we concluded above, distribution planning activities – including whether an Engineer is consulted – should be determined in R.14-08-013. However, for the purposes of the pilot approved in this decision, we find it reasonable to retain an Engineer with the expertise recommended by the Working Group to advise the Distribution Planning Advisory Group. Accordingly, we direct the Utilities to enter into a contract with one Engineer for all three Utilities. We agree that the Engineer should remain free from conflicts and to ensure such independence, we task the Commission’s Energy Division to select the Engineer from a pool of candidates solicited by the Utilities in consultation with Energy Division. As noted by SCE, the Engineer will be expected to sign a non-disclosure agreement.³⁹ Contending that it may be difficult to find one individual with the requirements listed above, Vote Solar suggested instead that there be a pool of Engineers to advise the Utilities, the

³⁹ SCE Opening Comments on Report, August 22, 2016 at 8.

Distribution Planning Advisory Group, and the Procurement Review Group. We do not prejudge what is determined in R.14-08-013, but for purposes of the pilot approved in this decision, we find one Engineer to be sufficient. We also determine that the Engineer should be a permanent member of the Procurement Review Group to assist in the review of future Framework solicitation bids.

5.1.5. Solicitation Evaluation Method

We approve the Working Group's consensus set of potential valuation components as set forth in Appendix A.⁴⁰ The valuation components shall be used by the Utilities in the Incentive Pilot approved in this decision. Accordingly, we also encourage these components to be used in solicitations ordered by R.14-08-013. As recommended by the Working Group, we adopt the policy to use the least-cost, best-fit framework for the solicitation evaluation. Furthermore, we also adopt the Working Group's three principles for developing a solicitation evaluation method as follows: i) consider the potential services beyond what is asked in the solicitation and other conceivable benefits and costs provided by distributed energy resources as qualitative factors; ii) continue to refine the evaluation method and integrate lessons learned; and iii) avoid double-counting of benefits and costs.

The Utilities, Consumer Federation of California (CFC), and SolarCity provided the only feedback regarding solicitation evaluation. The Utilities reiterated that the list of valuation components is a good starting point.⁴¹

Encouraging the Commission to adopt this list of valuation components, PG&E

⁴⁰ August 1, 2016 Report at 39-45.

⁴¹ SCE Opening Comments on Report, August 22, 2016 at 11-12; SDG&E Opening Comments on Report, August 22, 2016 at 9; and PG&E Opening Comments on Report, August 22, 2016 at 9.

stated that the list substantially aligns with the competitive solicitation process PG&E has utilized to procure photovoltaics, storage, and other resources⁴² No party stated any opposition to the list of valuation components.

For the purpose of the pilot approved in this decision, we adopt the valuation components identified in the Report and attached as Appendix A. Because they are consistent with previously-approved valuation components, such as those used in the Renewable Portfolio Standard, we find it reasonable to use them here. The Report considered this list a viable starting point and suggested other valuation cost components.⁴³ SCE points out that some of the qualitative attributes listed in the Report only need defined quantification methods to be considered quantitative.⁴⁴ Hence, we see merit in continuing discussions to further develop the list and quantifying valuation components currently characterized as qualitative. Accordingly, for purposes of the pilot adopted in this decision, we direct the Utilities and Distribution Planning Advisory Group to work together consider additional valuations and methodologies for defining valuations. If consensus is reached, the additional valuations or quantification methodologies may be used in the Incentive Pilot.

In addition to the valuation components, the Report states that the Working Group agreed that a solicitation evaluation method should: i) consider the potential services beyond what is asked in the solicitation and other conceivable benefits and costs provided by distributed energy resources as qualitative factors; ii) continue to refine the evaluation method and integrate

⁴² PG&E Opening Comments on Report, August 22, 2016 at 9.

⁴³ Report at 39 and 45-46.

⁴⁴ SCE Opening Comments on Report, August 22, 2016 at 12.

lessons learned; and iii) avoid double-counting of benefits and costs. The Working Group also agreed that the least-cost, best-fit framework should be adopted as part of the evaluation method.⁴⁵ According to the Report, the electric utilities employ least-cost, best-fit principles in the evaluation process of several existing solicitations, such as the Renewable Portfolio Standard.^{46 47} SCE argues that the least-cost, best-fit methodologies take into account the quantitative and qualitative factors associated with bids to obtain the best value and most effective solution for customers.⁴⁸ CFC agrees that the use of the least-cost, best-fit method is eminently logical for obtaining the best value by taking into account the quantitative and qualitative factors.⁴⁹ We find it consistent to require the use of the least-cost, best-fit framework in the Incentive Pilot given that the Commission has required its use in the Renewable Portfolio Standard as well as other solicitations. Furthermore, we also find the three principles recommended by the Working Group to be consistent with Commission policies. Accordingly, we adopt these principles as part of the Framework.

There were several issues within the element of valuation where the Working Group did not reach consensus. Recognizing that the process of creating the Framework is an evolutionary one, we find it necessary to address only one of those issues in this decision: The transparency of the evaluation process.

⁴⁵ Report at 40-41.

⁴⁶ Report at Appendix 4, at 82.

⁴⁷ D.03-06-07 adopted the initial least-cost, best-fit framework for the Renewable Portfolio Standard, which was subsequently refined in D.12-11-016.

⁴⁸ SCE Opening Comments to Report at 12.

⁴⁹ CFC Opening Comments to Report at 8.

We begin by providing clarity regarding the role of R.14-08-013 and this proceeding. Questioning whether the issue of transparency should be resolved in R.14-08-013 or R.14-10-003, SolarCity contends that a recent Assigned Commissioner's Ruling in R.14-08-013 stated that sub-track 3 will consider the processes for integrating distribution resource plans into utility distribution planning and investment, including how the identification of deferral opportunities or other high-value locations for distributed energy resources deployment will lead to solicitations for distributed energy resources services. We reiterate our previous conclusion that distribution planning activities will be determined in R.14-08-013 and the purpose of the Framework is to determine how the distributed energy resources, needed to fill the required characteristics and values determined in R.14-08-013, will be procured. Hence, while R.14-08-013 should determine the issue of transparency for determining distribution planning activities, this proceeding must address the issue of transparency as it relates to the distributed energy resources solicitation documents and how the bids for those resources will be evaluated.

The Report comments that there was not consensus on the transparency of the solicitation evaluation process and notes that market participants want to understand the details of the evaluation criteria, including the value of the deferred investment. The Report states that the Utilities strongly support confidentiality of this information. As such, PG&E argues in its comments to the Report that providing commercially-sensitive information – such as evaluation rules and the costs to defer a distribution investment – to market participants negatively affects the competitiveness of the solicitation and harms ratepayers. PG&E contends that this commercially-sensitive information should be kept confidential under the same protections of market-sensitive information

approved in D.06-06-066 and D.13-10-040.⁵⁰ SDG&E agrees with PG&E, pointing out that information provided to participants in competitive solicitations during the pre-bid conferences and within the publicly-posted materials provide sufficient transparency for participants to structure their bids appropriately.⁵¹ However, SolarCity argues that providing this data to market participants ensures that providers are developing and tailoring bids that maximize the level of benefits to the Utilities and ratepayers and helps to evaluate and assess the technical underpinnings of the utilities' investment needs.⁵²

We note again that the process of creating the Framework is an evolving process, and so, for the purposes of testing the approved pilot and to further the principle of transparency, we find it reasonable to require the Utilities to be more transparent in both the solicitation documents and for how the bids for those resources are evaluated. As such, we have approved a bid evaluation method requiring transparency for purposes of the approved pilot. In the section below, we approve solicitation pro forma contracts to be utilized in this approved pilot, which will also provide transparency. However, established policy in D.06-06-066 protects the confidentiality of market sensitive materials. Thus, any such materials, including the avoided cost of the deferred traditional investment, will not be disclosed in the solicitation package.

5.1.6. Solicitation Pro Forma Contracts

We find that a technology-neutral pro forma contract, while challenging to create, is the proper approach for this groundbreaking Framework. The major

⁵⁰ PG&E Opening Comments to Report, August 22, 2016 at 10.

⁵¹ SDG&E Opening Comments to Report, August 22, 2016 at 9.

⁵² SolarCity Reply Comments to Report, August 31, 2016 at 10.

challenge is that no such contract exists and will take additional time to create. It is conceivable that additional experience in this realm should provide opportunity to address the creation challenge. For the purposes of the approved pilot, we direct the Utilities to utilize the currently-used pro forma contracts, modified in the areas of changes as agreed to by the Working Group.⁵³ Following the evaluation of the approved pilot, the Working Group shall reconvene to develop a technology-neutral pro forma. As further discussed below, the Working Group shall be supported by a Commission-obtained independent consultant with expertise in distributed energy resources contracts.

As stated in the August 1, 2016 Report, the sub-team developed two approaches for addressing the subject of contracts: 1) create contracts to reflect solicitations aimed at distribution deferral projects or 2) make improvements to existing contracts. For the latter approach, the sub-team offered the solution of adopting the use of a transparent, collaborative negotiation for new product pro forma contracts. For the former approach, the sub-team recommended developing a technology-agnostic pro forma through a working group process, similar to that used for the Demand Response Auction Mechanism contract in Application 14-06-001 et al. While the Working Group did not reach consensus on either one of these two approaches, it was able to agree on the types of changes required to modify existing contracts for distribution deferral purposes, if the latter approach is adopted.

While supporting the idea of modifying current contracts, the Joint Demand Response Parties argue that a pro forma contract for the Framework

⁵³ Framework Report at Table 8.

needs to allow for transparent, collaborative negotiation with buyers and sellers at the table, rather than a take it or leave it contract.⁵⁴ The Joint Demand Response Parties also developed a redlined pro forma to address remaining concerns that the existing pro forma discussed in the Report does not include a product definition or performance obligation that would be relevant as a distributed energy resource.⁵⁵ CEEIC expresses similar concern about modifying existing pro forma contracts, noting that an energy efficiency model contract does not exist.⁵⁶

In support of the approach for creating new contracts, PG&E and SCE agree that the Commission should have a goal of developing a technology-neutral pro forma contract for the solicitation of distributed energy resources.⁵⁷ In its comments on the Report, PG&E offers to create its own technology-neutral pro forma contract-building on its existing contracts and modifying them to incorporate the high-level conceptual changes identified in the Report.⁵⁸ PG&E suggests that this would be the starting point for bidders to assess the potential risks and benefits of providing distributed energy resources and then prepare and submit a bid in response to a solicitation. PG&E underscores that the final contract may vary in order to allocate risks,

⁵⁴ Joint Demand Response Parties Opening Comments to Report, August 22, 2016 at 3 and SCE Opening Comments to Report, August 22, 2016 at 14.

⁵⁵ Joint Demand Response Parties Opening Comments to Report, August 22, 2016 at 3.

⁵⁶ CEEIC Reply Comments to Report, August 31, 2016 at 5.

⁵⁷ PG&E Opening Comments on Report, August 22, 2016 at 11 and SCE Opening Comments on Report, August 22, 2016 at 15.

⁵⁸ PG&E Opening Comments on Report, August 22, 2016 at 11.

responsibilities, and benefits.⁵⁹ SolarCity responded that technology neutrality is critical given the myriad resources that can be deployed and aggregated to address a given need.⁶⁰

Modifying currently-used pro forma contracts is not a perfect solution, as is seen by the challenges indicated by the Joint Demand Response Parties. A newly-created technology-neutral pro forma contract should reinforce the adopted principle of technological neutrality. However, creating such a contract will take time and effort. While not a perfect solution, we agree with SDG&E that the degree of consensus reached on the contract areas where changes are needed is robust enough for a pilot to move forward until the Working Group can develop a technology-neutral contract. For purposes of the pilot approved in this decision, the Utilities shall utilize the agreed-upon list of changes to modify existing contracts.

In comments to the proposed decision, the Utilities expressed concern regarding the redlined changes to the pro forma contracts proposed by the Joint Demand Response Parties. The Utilities assert that the redlines are inconsistent with the recommendations of the Working Group, and are only applicable to demand response services. Furthermore, the Utilities caution that the redlines eliminate consequences to a distributed energy resources provider. The Utilities suggest that the redlines be a point of discussion in the Working Group.⁶¹ The Joint Demand Response Parties argue that the redlines are based on extensive experience reviewing and negotiating contracts in the California market and

⁵⁹ *Id* at 12.

⁶⁰ SolarCity Reply Comments on Report, August 31, 2016 at 6.

⁶¹ Utilities Opening Comments to Proposed Decision, November 30, 2016 at 10-11.

address recurrent issues that make it difficult for providers to do business for the services requested.⁶²

We find the list of contract areas requiring changes reasonable given the consensus in the Working Group, and we adopt them. We agree with the Joint Demand Response Parties that contract negotiations should be a collaborative process between a utility and a distributed energy resource provider. Hence, while we do not adopt the redlines recommended by the Joint Demand Response Parties, we require that the Utilities utilize collaborative negotiations for this pilot and use the redlines as a beginning point of discussion in those negotiations.

Additionally, we consider PG&E's recommendation to create a technology-neutral pro forma to be beneficial to initiating the learning process. We authorize PG&E, in collaboration with stakeholders, to create its own technology-neutral pro forma contract, as proposed in the comments, for use in the approved Incentive Pilot. Furthermore, we establish a process for the Utilities to collaboratively produce a standardized technology-neutral pro forma contract after the pilot solicitation concludes. As described below, we direct the Utilities to hire a consultant to observe the pilot and assist in the development of the technology neutral pro forma contract. We also re-establish the Working Group to develop the technology neutral pro forma contract.

Within 30 days of the issuance of this decision, and in consultation with SDG&E, SCE, and the Energy Division, PG&E shall hire an industry consultant, with expertise in distributed energy resources and contracting. The consultant

⁶² Joint Demand Response Parties Reply Comments to the Proposed Decision, December 5, 2016 at 1-2.

shall observe all steps of the Incentive Pilot process and then assist in developing the technology-neutral pro forma. No later than 30 days after the pilot solicitations have taken place, the Utilities, in consultation with the Commission's Energy Division, will reconvene the Working Group to begin discussions on the development of a technology-neutral pro forma contract. The consultant shall participate in the working group and provide a status report to the service list no later than 90 days following the recommencement of the Working Group. No more than 180 days following the recommencement of the Working Group, the Utilities shall file an Advice Letter requesting Commission approval of a technology-neutral pro forma contract for soliciting distributed energy resources. The Utilities shall work toward consensus of a final contract, putting forth a contract with consensus elements in the Advice Letter. Where consensus of any element is not reached, the Utilities shall provide detailed discussions of alternative elements.

At this time, there is an insufficient record to determine whether to require the Utilities to use the technology neutral pro forma contract as the sole contract for future solicitations using the Framework. Such a determination will be made following the submission of the pilot evaluation.

5.1.7. Solicitation Outreach

We adopt the recommendation to continue existing market outreach practices, including the practice of performing outreach during the design phase of the solicitation, because current practices are meeting the needs of the market. Furthermore, in order to ensure an appropriate level of customer outreach, we adopt the recommendation that solicitation packages include a description of the baseline level of customer engagement support. The Working Group discussed both pre- and post-contracting customer outreach engagement, agreeing that a

contracted vendor would likely benefit from utility-provided post-contract signing customer outreach. We discuss these specific recommendations in more detail below.

Parties provided limited feedback in comments regarding solicitation outreach policies. PG&E and SCE both expressed support for pre- and post-contracting customer outreach engagement. In this context, pre- and post-contracting are defined as before and after the signing of the contract.⁶³ SCE contends there may be benefits and cost-saving opportunities from an enhanced level of customer acquisition support for winning bidders.⁶⁴ PG&E maintains that it is committed to providing a level of vendor support that will provide the best opportunity for bidders to be successful, including holding several bidder conferences to ascertain the appropriate level of post-contracting customer acquisition support.⁶⁵ However, CFC cautions the Commission that any costs associated with this support should not be incremental to ratepayers and should be recovered from the distributed energy resources providers as a cost of doing business.⁶⁶

The Commission should ensure that bidders are given the opportunity to be successful in acquiring customers; otherwise, the Framework will not be successful. Simultaneously, there is also a need to ensure that the costs of acquiring distributed energy resources are lower than the costs of deploying a traditional solution. We agree with CFC that the costs associated with the

⁶³ Report at 52-53.

⁶⁴ SCE Opening Comments, August 22, 2016 at 16.

⁶⁵ PG&E Opening Comments, August 22, 2016 at 13.

⁶⁶ CFC Opening Comments, August 22, 2016 at 11.

pre- and post-contracting customer acquisition support should not be ignored. Hence, we find this type of support to be part of the costs and benefits of the solicitation of distributed energy resources. Furthermore, we confirm that these costs shall be included in the contracts resulting from the solicitations. Accordingly, the Utilities should take these costs into account when designing the solicitation package, and bidders should take these benefits into account when developing their bids.

We adopt the following solicitation requirements:

- The solicitation package shall include information regarding the specific geographic area where resources must be deployed, the customer composition in that area (to the extent that the information does not violate customer privacy rules), and information on how to request specific customer information under current Commission rules.
- The solicitation package shall also include information regarding the level of post-contracting customer acquisition support by the utility.
- A customer facing web presentation shall be deployed by the utility during each solicitation period in order to increase customer awareness and inform customers of possible contact by bidders.

5.2. Adoption of a Regulatory Incentive Mechanism Pilot

This decision requires the Utilities to implement the Incentive Pilot utilizing the Framework and its principles as adopted above. In this respect, the Incentive Pilot will be testing the Framework as well as the effectiveness of the proposed incentive in motivating a utility to procure distributed energy resources. Specifically, each Utility shall identify one project where the deployment of distributed energy resources on the system would displace or

defer the need for capital expenditures on traditional distribution infrastructure. The Utilities also have the option to identify up to three additional projects, as described below. In order to test options from the Framework where consensus has not been reached on certain elements, we require the Utilities to perform the pilot(s) using the approaches detailed below. Lastly, for purposes of the regulatory incentive mechanism, we adopt a 4 percent pre-tax incentive applied to annual payment for the distributed energy resource.

There is general support for an incentive mechanism pilot because it represents an initial step to examine alternative payment structures for utilities and strikes a reasonable balance.⁶⁷ However, parties point out challenges and omissions with regard to the Revised Proposal and request modifications. In addition to our discussion regarding the specifics of each step of the adopted Incentive Pilot, we address these challenges and omissions.

5.2.1. Approval of an Incentive Pilot

We begin with a discussion of whether the Revised Proposal meets its goal of motivating the Utilities to procure distributed energy resources. Clean Coalition suggests that a pilot might be more useful if the Commission did not set either a minimum or maximum required number of projects to be pursued.⁶⁸ ORA explains that because the Revised Proposal requires the pursuit of two projects, it may be impossible to separate the effect of the financial incentive from the effect of a Commission requirement. However, ORA as well as TURN

⁶⁷ See the following comments on Revised Proposal filed on September 15, 2016: Clean Coalition at 1, CFC at 3, Interstate Renewable Energy Council at 2, Joint Utilities at 2, Christ-Janer at 2, NRDC at 2, ORA at 2, Sierra Club at 1, SolarCity at 1, Solar Energy Industry Association and Vote Solar at 1, and TURN at 1.

⁶⁸ Clean Coalition Opening Comments to Revised Proposal, September 15, 2016 at 3. See also TURN Opening Comments to Revised Proposal, September 15, 2016 at 2.

sees the value in pursuing a pilot for the purpose of evaluating the Framework and how effectively the Utilities incorporate distributed energy resources into the day-to-day electric distribution planning and operational activities. The most important test for the Revised Proposal, according to ORA, is to determine whether the utility will seek distributed energy resources solutions in lieu of traditional distribution upgrades with an incentive and without a requirement.⁶⁹

The September 1, 2016 ruling described the purpose of the regulatory incentive mechanism as testing how an incentive affects the Utilities' distributed energy resources sourcing behavior. We recognize that requiring the selection of a project is at odds with this purpose. However, we find it prudent to utilize the contents of the Revised Proposal to perform a test of the adopted Framework. Accordingly, we require the Utilities to identify only one project to pilot, and we simultaneously provide an opportunity for each utility to identify up to three additional projects to pilot. Allowing for a required project and optional projects should enable us to test both the Framework and the incentive mechanism. We encourage the Utilities to identify a variety of diverse potential projects for deferral or displacement.

In comments to the proposed decision, Clean Coalition suggested removing the cap on the number of pilot projects in order to better test the incentive mechanism. Clean Coalition contends that more pilot projects could lead to greater ratepayer benefits and likewise, instituting the cap limits potential ratepayer savings. Clean Coalition asserts that the proposed decision fails to justify the need for a cap or its size.⁷⁰ Because this is a pilot and the purpose of

⁶⁹ ORA Opening Comments to Revised Proposal, September 15, 2016 at 2.

⁷⁰ Clean Coalition Opening Comments on Proposed Decision, November 30, 2016 at 2-3.

a pilot is to determine success, the Commission must be prudent with ratepayer funds. At this time, we consider the cap of four total projects to be a good balance between meeting the purpose of the pilot and protecting ratepayers. Hence, we decline to remove the limitation on pilot projects.

5.2.2. Step One – Formation of the Advisory Group

Within two months from the issuance of this decision, the Utilities shall establish, for the purposes of the Incentive Pilot, a single Distribution Planning Advisory Group, including an Independent Professional Engineer (Engineer), to advise the Utilities on distribution planning activities as described herein.

In comments to the September 1, 2016 ruling, Clean Coalition recommended creating a working group to focus on the initial identification of target areas for distribution planning activities. As we previously discussed, the specifics of future distribution planning activities should be determined in R.14-08-013. Additionally, R.14-08-013 has ordered the development of a locational net benefits analysis and an integration capacity analysis. Combined, these actions eliminate the need for the Clean Coalition-proposed working group. Hence, it is reasonable to deny the request of Clean Coalition to establish a working group to identify target areas for distribution planning activities.

While we await the results of R.14-08-013, we find it reasonable to test the Framework with an interim approach, in which the Utilities establish a single Distribution Planning Advisory Group, as previously described, to advise the Utilities on the process for consideration of proposed electric distribution capacity deferral projects for the pilot. Because establishment of the advisory group is an interim approach for purposes of the pilot, we direct the Utilities to build upon the participants of the Procurement Review Group adding participants to address distribution planning, including market participants. The

Utilities shall also work with the Commission to retain an Engineer to evaluate distribution plans, as previously described. The Engineer will be a member of the Distribution Planning Advisory Group, as well as a permanent member of the Procurement Review Group. The experience of the Distribution Planning Advisory Group should assist the Commission in determining its framework for distribution planning activities through R.14-08-013.

As recommended in the Revised Proposal, the Utilities should have two months from the issuance of this decision to establish the Distribution Planning Advisory Group and work with the Commission to hire the Engineer. No party opposed this timeline. We find two months to be a reasonable amount of time to establish the advisory group and hire the Engineer.

5.2.3. Step Two – Identification of Projects

The Utilities shall have four months following the issuance of this decision to identify at least one but up to four projects for the Incentive Pilot. As described below, during this time, each utility shall work with the Distribution Planning Advisory Group and the Engineer to determine how many and which projects shall be pursued. Again, we encourage the identification of a diverse set of projects to test the use of distributed energy resources in a variety of different situations.

ORA maintains that the Revised Proposal does not include a process for ensuring that distributed energy resources procured are incremental to those forecasted.⁷¹ We have already determined that we should further explore the proposed counting methods to ascertain which method or a combination of methods should be adopted for use in the Framework. Hence, as part of the

⁷¹ ORA Opening Comments to Revised Proposal, September 15, 2016 at 3.

project identification process for Step Two, the Utilities shall each propose a method to utilize for ensuring that the distributed energy resources procured are incremental to those forecasted. For the purposes of this pilot, each of the Utilities shall work with the Distribution Planning Advisory Group to finalize the proposed methodology.

As proposed in the Revised Proposal and adopted here for the Incentive Pilot, projects should be selected where the solicited distributed energy resources have a reasonable chance of being cost-effective consistent with the list of valuation components approved above.⁷² The Utilities shall work with the Distribution Planning Advisory Group to select which valuation components shall apply. Because a societal test is still being addressed in this proceeding, the societal test shall not apply to the pilot approved in this decision.

Finally, this decision directs that if the Utilities chose to identify additional projects beyond the first required project, one of the optional projects is required to mirror the projects approved for Demonstration “C” in R.14-08-013, our control group. The Environmental Defense Fund (EDF) expressed a need for clarity on this requirement, contending that if the intention is to provide a reciprocal image, the pilot would not be useful.⁷³ EDF recommends that the Incentive Pilot and Demonstration “C” “should be complementary, learning and mutually reinforcing each other to make something more whole.”⁷⁴ In comments to the proposed decision, NRDC cautions that the Utilities may not be able to

⁷² In this context, “cost-effective” means that the cost of the distributed energy resource alternative, plus the incentive and the utility’s costs of administering the process, is less than the avoided cost (or value of deferring) the traditional distribution upgrade.

⁷³ EDF Opening Comments to Ruling, September 15, 2016 at 7-8.

⁷⁴ *Ibid.*

identify an additional project that closely mirrors Demonstration “C” within the relatively short timeframe of this pilot and may limit their participation to the one required project. In trying to balance the uncertain benefits of this approach with the costs of losing the opportunity to implement distributed energy resources projects that address a wider variety of grid needs, NRDC contends that limiting the Utilities to a project that complements Demonstration “C” will make the project less informative than it otherwise should be.⁷⁵

As discussed in the September 1, 2016 ruling, the purpose of mirroring Demonstration “C” is to provide a control group to determine the impact of the incentive in the Incentive Pilot. As we determined above, each of the Utilities is required to identify one project, which will test the Framework recommendations and options. EDF’s recommendation for the Pilot and Demonstration “C” to be complementary is reasonable and we adopt this recommendation for the required project. Because we are not measuring the effectiveness of the incentive in the required project, the required project is not obligated to mirror Demonstration “C”. However, it is prudent to take advantage of the control group opportunity we have before us and require a comparison of the optional Incentive Pilot and Demonstration “C”. Hence, if a utility chooses to implement additional projects, one of the projects must mirror Demonstration “C”. NRDC’s concern about weighing the uncertain benefits of this approach with the costs of losing the opportunity to implement distributed energy resources projects that address a wider variety of grid needs has some

⁷⁵ NRDC Opening Comments to the Proposed Decision, November 30, 2016 at 5-6.

validity. Thus, if the Utilities choose to implement two or three optional projects, these projects are not required to mirror nor complement Demonstration “C”.

5.2.4. Step Three – Advice Letter Process

Each of the Utilities shall file a Tier Three Advice Letter requesting approval to procure a distributed energy resources solution as described in this decision and including a forecast of expected incremental administrative costs for the solicitation process. Each utility shall have six months following the issuance of this decision to file its Advice Letter.

In comments, TURN suggested that the Utilities be given a total of nine months to submit an advice letter, stating that six months is insufficient.⁷⁶ Suggesting that drafting an advice letter is not a complicated process and should only take one month, Sierra Club proposes designating one month for the drafting of the advice letter.⁷⁷ We maintain the six-month timeline for filing the advice letter for purposes of the pilot. We are concerned about the length of time the entire process takes and continue to look at ways to save time without harming the process. Given that this is a pilot, we will learn whether additional time is necessary for this step or other steps.

5.2.5. Step Four – Solicitation Approval Process

We adopt a three-part process for granting Utilities’ request to procure a distributed energy resource solution for distribution purposes. Following the filing of the advice letter in the previous step, the Commission’s Energy Division will i) host a workshop to discuss the contents of the advice letter, ii) establish a

⁷⁶ TURN Opening Comments on Ruling, September 15, 2016 at 6-7.

⁷⁷ Sierra Club Opening Comments on Ruling, September 15, 2016 at 5.

schedule to allow for protests or responses to the advice letter and, iii) issue a proposed resolution for Commission consideration. As described below, these three steps, including Commission determination, will be concluded within 10 months following the issuance of this decision.

No party opposed the contents of or timeline for this step of the Incentive Pilot. The three-part process allows for informal and formal stakeholder input. Discussion in a workshop setting should lead to a better understanding of the contents of the Advice Letter. As noted in the September 1, 2016 ruling, the purpose of the workshop is to allow the Utilities to explain the solicitation in detail so that stakeholders can understand the products and/or services the utility is soliciting. The Utilities should be prepared to discuss proposed attributes and performance requirements during the workshops. Stakeholders will be afforded the opportunity to suggest alternatives at that time. Following the workshop, the formal advice letter process shall be conducted with protests and responses filed and a proposed resolution issued. In addition to addressing the distributed energy resources solicitation, the proposed resolution shall also approve a forecast of the incremental expenses incurred by the utility in conducting the distributed energy resources solicitation process. The Utilities may record those administrative costs in a memorandum account for later recovery. The Energy Division will determine the exact timing of these processes but should ensure that all steps, including Commission consideration of the Resolution, are completed by no later than 10 months following the issuance of this decision.

5.2.6. Step Five – Solicitation Process

We approve a solicitation process to be complete no later than 14 months from the issuance of this decision.

The Utilities contend that a four-month timeline to implement the distribution deferral request for offers is a challenging timeline and request an additional two months. The Utilities argue that the bidders need at least 30 days to respond to the request for offers and longer contract negotiations are expected for these new products. To be most successful in a request for offers for a new product, the Utilities recommend a three-part process with initial bids, contract negotiations, then final bids. Noting that this process takes longer, the Utilities underscore that it allows for collaborative work between market participants and the utilities.

We reiterate that through this pilot, the Commission is attempting to streamline the solicitation process. Hence, requests for longer timelines are frowned upon. Furthermore, as we have already determined, market participants are permitted to participate on the Distribution Planning Advisory Group, and the solicitation packages are now required to be more transparent regarding the products sought. Both of these should lend themselves to shorter negotiation periods.

We, therefore, deny the request by the Utilities for a six-month solicitation timeline and maintain the four-month schedule as set forth in the Revised Proposal.

5.2.7. Step Six – Contract Approval Process

We add a new step to the Incentive Pilot where the Utilities shall review the contracts with the Procurement Review Group and then the Utilities shall file a Tier Two Advice Letter requesting approval of the contracts. As we describe below, if the Utilities properly follow the steps as set forth above, the advice letter requesting approval of the contract should be routine. If the steps and rules of the Framework are not properly followed by the Utilities, Commission

Energy Division Staff shall reject the Advice Letter. The Utilities will have 360 days following the Solicitation to review the contracts with the Procurement Review Group and file the Tier Two Advice Letter. The advice letter should include a detailed description of the solicitation process indicating that all steps have been taken and the associated rules and principles have been followed. As discussed below, we adopt additional information for the Utilities to include in the Tier Two Advice Letter.

ORA recommends that the Commission adopt a stakeholder review of the solicitation process results and contract approval. ORA states that standard practice for utility energy procurement includes the use of a Procurement Review Group assisted by an Independent Evaluator and a regulatory mechanism for contract approval following the conclusion of a solicitation.⁷⁸ ORA argues that the use of the Procurement Review Group and an Independent Evaluator ensure the Utilities comply with the rules governing a given solicitation. ORA further argues that stakeholders do not have recourse if a utility deviates substantially from its approved solicitation process.

We agree that the resulting contracts should be approved by the Commission, but ideally on a routine basis. The Framework steps completed prior to the contract approval step, along with the associated principles and rules, are intended to provide the appropriate level of stakeholder review. While we agree that standard practice includes review and Commission approval, current practice does not include the upfront preparation we anticipate in the

⁷⁸ ORA Comments to Ruling, September 15, 2016 at 4-5.

Framework, including the eventual creation of a technology-neutral pro forma contract.

In comments to the proposed decision, ORA reiterated its concern that a Tier Three Advice Letter is the proper procedural path for distributed energy resources contract approval. ORA states that the least-cost best-fit methodology is an exercise of utility discretion and a Tier Three Advice Letter allows for sufficient review of the results of the distributed energy resources deferral solicitation and the content of the contracts.⁷⁹ Clean Coalition, supporting a Tier One Advice Letter, contends that the Tier Three Advice Letter will introduce significant delay and increased uncertainty into the procurement process.⁸⁰ ORA further argues that approval on a routine basis, i.e. less than a Tier Three Advice Letter, is incongruent with the pilot nature of this solicitation.⁸¹

We first note that part of the purpose of the pilot is test streamlining of the solicitation process. Given that this pilot lays the foundation for future distributed energy resources policy, we find it reasonable to provide review time with the Procurement Review Group but balance it with a Tier Two Advice Letter. The Procurement Review Group, whose membership includes Energy Division staff, will have an opportunity to ensure that the Utilities followed the adopted elements of the framework and the steps of the pilot. For the purposes of the pilot, we will institute a review of the contracts by the Procurement Review Group and require the Utilities to file a Tier Two Advice Letter. These steps should be completed in 60 days. However, we will reconsider the use of a

⁷⁹ ORA Opening Comments to Proposed Decision, November 30, 2016 at 2-3.

⁸⁰ Clean Coalition Reply Comments to the Proposed Decision, December 5, 2016 at 2.

⁸¹ *Id* at 4.

Tier One Advice Letter following evaluation of this process. We find that this timeline strikes a balance of proper oversight and process streamlining. If the advice letter is approved, the utility would be authorized to record the costs of the contracted resources in a balancing account for subsequent recovery.

We are encouraged by the solicitation experience in other well developed solicitation processes (i.e., the demand response auction mechanism adopted in R.13-09-011) where input by parties and other stakeholders prior to the actual solicitation has decreased the amount of time needed for the solicitation process. We are also encouraged by the extent of participation in the Working Group and anticipate that the shared knowledge by the participants will lead to success in decreasing what have been lengthy solicitation efforts.

5.2.8. Step Seven – Pilot Reporting Process

We approve a two-part Pilot Report to be written by the Utilities, with the first part completed no later than 90 days after the approval of the Tier 2 Advice Letter addressing the procurement contracts. We clarify that the Utilities report shall then be analyzed by the Commission with a final evaluation of the pilot projects and the pilot process conducted by the Commission through the use of workshop(s) and party comment.

As further described below, the first part of the Utilities' report shall focus on the performance of the solicitation process, which should provide the Commission with additional information to perform its own analysis and determine whether improvements to the Framework and/or the Incentive Pilot are necessary. The second part of the report shall focus on the performance of the distributed energy resources and shall be filed 15 months after the approved projects are implemented. Prior to filing the pilot report, the Utilities shall host a workshop to discuss its findings; stakeholder comments shall be incorporated

into the final report. As discussed in a subsequent section, the Utilities' pilot report will be further analyzed by Energy Division and the Commission in this proceeding.

The Revised Proposal recommended a solicitation evaluation performed by the Utilities three months following the Incentive Pilot contract execution. Stakeholders had alternate opinions. SolarCity suggests that there would be benefit in bringing in a third-party to perform the evaluation.⁸² ORA agrees that a third-party should perform the evaluation with the Energy Division providing direction and oversight.⁸³ ORA adds that the Utilities would be included in the planning and execution of the study to ensure their perspective factors into the conclusions and recommendations of the final evaluation. The Utilities argued that they are best suited to conduct a post-pilot evaluation and question whether outsourcing the analysis would be constructive.⁸⁴ The Utilities contend that there are a plethora of examples where the Commission has required the Utilities to pursue pilots and submit evaluation reports.⁸⁵ In comments to the proposed decision, similar arguments were presented.

We clarify that the Utilities are providing the Commission with data on the pilot. Indeed, the Commission has directed the Utilities to submit pilot reports in the past. However, we explain that the Commission's Energy Division will analyze the information provided by the Utilities and determine the success of the pilot. Hence, we find it reasonable to allow the Utilities to provide the

⁸² SolarCity Opening Comments to the Ruling, September 15, 2016 at 5-6.

⁸³ ORA Opening Comments to the Ruling, September 15, 2016 at 5-6.

⁸⁴ Joint Utilities Reply Comments to the Ruling, September 22, 2016 at 12.

⁸⁵ *Ibid.*

Commission with data on the results of the pilot, with the input of the Distribution Planning Advisory Group. Furthermore, as suggested by MCE, a post-pilot workshop shall be held prior to the issuance of the report to allow parties to examine and comment on the results of the report with comments incorporated into the Utilities' report.⁸⁶

Parties also provided comment on the contents of the report. In addition to the questions in the Revised Proposal to be addressed in the pilot report,⁸⁷ the Utilities and Sierra Club recommended including questions regarding the performance of the distributed energy resources.⁸⁸ While performance of the distributed energy resources does not help to determine success of the Framework or the Incentive Pilot itself, it will be relevant to the overall goal of improved distributed energy resource use. Hence, we find it reasonable to include distributed energy resource performance data, appropriately aggregated and/or anonymized, as the second part of the Utilities' pilot report to be filed 15 months following the implementation of the distributed energy resources procured.

Lastly, NRDC recommended that additional incentive variations could be assessed in the pilot report and suggested presenting calculations on the percent of investment incentive as proposed, the percent of investment incentive applied to the counterfactual conventional investment, and shared savings.⁸⁹ In reply

⁸⁶ Marin Clean Energy Opening Comments to the Ruling, September 15, 2016 at 3.

⁸⁷ September 1, 2016 Amended Scoping Memo and Ruling, Attachment at 12.

⁸⁸ Utilities Opening Comments to the Ruling, September 15, 2016 at 4-5 and Sierra Club Opening Comments to the Ruling, September 15, 2016 at 5.

⁸⁹ NRDC Opening Comments to the Ruling, September 15, 2016 at 4-5.

comments, TURN called NRDC's proposal a practical way to compare various alternatives without imposing costs or undue risk on ratepayers.⁹⁰ We agree and find it reasonable to determine and compare these incentive variations on paper. Hence, we add the following question to those listed in the Revised Proposal and direct the Utilities to include this in the first part of the report:

How would different incentive structures allocate the costs and benefits of the projects differently than the incentive employed in the pilot? The report shall include a financial analysis of the impacts on the utilities, customers, and vendors from the three incentive mechanisms using data from the projects completed: i) the percent of investment incentive as proposed, ii) the percent of investment incentive applied to the counterfactual conventional investment, and iii) shared savings.

5.3. Establishing the Level of Incentive

As further described below, for purposes of the Incentive Pilot approved in this decision, we establish an incentive of 4 percent pre-tax applied to the annual payment for the distributed energy resource alternative to the traditional distribution investment.

Parties generally supported the proposed incentive of 4 percent pre-tax applied to the annual payment for the distributed energy resource. Hence, we find it reasonable to adopt it for purposes of this pilot. Furthermore, while no party directly opposed the proposed incentive, several parties offered alternatives. Accordingly, we address these recommendations.

First, the Solar Parties recommend that the Utilities be allowed to earn a return based on the amount of the traditional wires solution, rather than the

⁹⁰ TURN Reply Comments to the Ruling, September 22, 2016 at 1-2.

distributed energy resources annual payment.⁹¹ The Solar Parties suggest that this resolves the investment-scale challenge critical to the success of the pilot. The Utilities point out that the Solar Parties base their recommendation on an incorrect assumption that the Utilities earn 14 percent on distributed energy resources contract payments.⁹² The Utilities correctly acknowledge that earnings will be only 4 percent of the annual payments, on a pre-tax basis. However, in comments to the proposed decision, Vote Solar and Solar Energy Industries Association clarify that their underlying argument is that the four percent pre-tax incentive does not address the issue of investment scale. Both Solar parties contend that an incentive based on the value of the distributed energy resources contract will be less financially attractive to the utilities than the return they are able to make on a traditional grid investment and therefore should be based on the value of the traditional investment.⁹³ ORA responded that connecting the incentive to the distributed energy resources contract price provides greater cost recovery, cost certainty, and procedural transparency. We agree with ORA and decline to adopt the Solar Parties recommendation.

In addition to the 4 percent incentive in the Revised Proposal, SCE has put forth two alternative earnings mechanisms to pilot: 1) an upfront payment and 2) contract for distribution services. SCE recommends that the Utilities be allowed to choose from the three approaches. SCE explains that the upfront payment would provide a rate-based lump sum to the distributed energy

⁹¹ Solar Parties Opening Comments to Ruling, September 15, 2016 at 3-6.

⁹² Joint Utilities Reply Comments to Ruling, September 22, 2016 at 4-5.

⁹³ See Vote Solar Opening Comments to the Proposed Decision, November 30, 2016 at 3-5 and SEIA's Opening Comments to the Proposed Decision, November 30, 2016 at 4-5.

resources provider after the distributed energy resources is built out with the incentive based on this lump sum. The contract for distribution service would entail non-rate-based payments to be made over the term of the contract, and the incentive would be based on the contract payment but be two or three times the magnitude proposed in the Revised Proposal.

In comments, several parties suggest that the SCE alternatives may have merit, but, as pointed out by CFC, there is already a level of complexity in the Revised Proposal that will pose an analytical challenge for sorting out incentive impacts.⁹⁴ Sierra Club contends that the SCE alternatives require further comment as additional details are needed.⁹⁵

We agree that SCE's alternative incentive mechanisms would require further clarification. Furthermore, we find that too many variables may challenge the ability of the Commission to properly evaluate the outcomes of the Incentive Pilot. Hence, we decline to pursue a pilot using SCE's alternative. However, to the extent feasible, we add these alternatives to the list of incentives to be evaluated on a "paper" basis as part of the Incentive Pilot evaluation.

5.4. Recovery of Incentive and Procurement Cost

In the case of successful solicitations in the Incentive Pilot, we authorize the utility to record the value of the incentive in a balancing account for recovery in its next Energy Resource Recovery Account compliance application if deferral of the traditional distribution expenditure was achieved. Pre-approval of the distributed energy resource contract costs and the solicitation administrative

⁹⁴ CFC Reply Comments to Ruling, September 22, 2016 at 4.

⁹⁵ Sierra Club Reply Comments to Ruling, September 22, 2016 at 5-6. *See also* TURN Reply Comments to Ruling, September 22, 2016 at 1-2 and SolarCity Reply Comments to Ruling, September 22, 2016 at 4-5.

costs shall be conducted through the Tier Three and Tier Two Advice Letter Incentive Pilot processes, shall follow existing Commission cost-allocation principles, but shall be recovered in the next general rate case. We explain both of these in more detail below.

The Revised Proposal provides recommendations on the process for recovery of the incentive and recovery of the costs of the distributed energy resources contract payments and administrative costs for the solicitation, which we adopt here with one modification. We first address recovery of the incentive.

The Revised Proposal recommended that for each year in which an incentive is claimed, the Commission shall review the Energy Resource Recovery Account compliance application to ensure the distributed energy resources procured either avoided or deferred an otherwise planned distribution project(s). If the Commission determines the procurement is successful, the incentive will be deemed recoverable. MCE argues that the deployed distributed energy resources should be reviewed and required to meet performance metrics prior to recovery of the shareholder incentive.⁹⁶ The Joint Utilities argue that the uncertainty regarding cost recovery and incentives based on actual performance will make the “utility decision-making to pursue distributed energy resources much more difficult because the utility will need to factor such risks into its decision-making process.”⁹⁷ We reiterate that the purpose of the Framework is to defer or avoid a previously planned and previously authorized distribution project through the procurement of distributed energy resources. We confirm that the requirement to achieve the proposed incentive is that the contracted

⁹⁶ Marin Clean Energy Comments on Ruling, September 15, 2016 at 3.

⁹⁷ Joint Utilities Reply Comments to Ruling, September 22, 2016 at 7.

distributed energy resources must avoid or defer a previously-identified distribution project. Hence, we deny the request of MCE to require performance metrics. No other party opposed the process for recovery of the incentive. We find it reasonable to adopt this process on a pilot basis.

Authorized spending, including the distributed energy resources contract payments and solicitation administrative costs, will be recovered in the subsequent general rate case. Any administrative costs recorded in the memorandum account that exceed the approved forecast will be subject to a reasonableness review. Annual distributed energy resources contract costs, having been pre-approved, will be recovered over the lifespan of the contract. Through the general rate case application process, a utility's past distribution capital spending will be reviewed to ensure that no duplication of recovery of the deferred traditional distribution investment is authorized for inclusion in recorded rate base.

As recommended in the Revised Proposal, and adopted here, the Commission "will not extract the cost of any displaced distribution investment from a utility's authorized revenue requirement prior to the utility's next general rate case."⁹⁸ The Revised Proposal indicated that in most cases, the timeline for project identification and distributed energy resource solicitation and deployment is likely to be lengthy enough that the traditional investment alternative would not have been reflected in a prior general rate case's revenue requirement. Furthermore, the Revised Proposal explained that even if the traditional investment had already been reflected in rates, it would be nearly

⁹⁸ September 1, 2016 Amended Scoping Memo, Attachment at 13.

impossible to determine, given the aggregate nature of distribution capital forecasts in general rate cases, particularly for attrition years. Hence, we adopt the Revised Proposal's recommendation that any previously-authorized distribution capital spending will not be reviewed until the next general rate case, when the recorded rate base is trued up. With this approach, a utility will be able to retain any savings from deploying less costly distributed energy resources in lieu of the previously-authorized distribution project(s); a utility may receive an additional incentive for cost reduction during the current cycle. The Revised Proposal noted this approach is similar to that adopted by the New York Commission.⁹⁹ ORA maintains that this approach is against the principles of cost of service ratemaking and violates one of the principle objectives of Assembly Bill 327 to minimize overall system costs and maximize ratepayer benefits from investments in distributed resources. The purpose of the pilot is to determine whether this additional incentive will, in fact, create additional savings to the ratepayers. Hence, we find it reasonable to test this as part of the pilot. If we determine that the savings to ratepayers is not greater than the savings to the Utilities, we will revise this portion of the incentive mechanism.

In comments to the ruling, the Joint Utilities express concern the distributed energy resources costs would not be recovered currently, but rather pre-approved for recovery in the utility's next general rate case. The Joint Utilities contend that the pilot program should provide up-front approval for the Utilities to recover the administrative costs of conducting the pilot and the costs

⁹⁹ September 1, 2016 Ruling, Attachment at 14.

of the contracted distributed energy resources in the pilot. We agree, but only to the extent that we will allow simultaneous recording of contract costs in a balancing account and administrative costs in a memorandum account. Actual rate recovery will occur in the next general rate case, but the Utilities will receive full recovery of the costs of the procured distributed energy resources and the administrative costs of the solicitation, as estimated in the Tier Three Advice letter, including interest accrued during the period prior to inclusion in rates. In comments to the proposed decision, the Utilities reiterate their argument stating that delayed recovery is inconsistent with current ratemaking for pilots.¹⁰⁰ No other party opposed this approach. We find this approach reasonable for the purposes of the Incentive Pilot.

The Utilities shall present an estimation of the administrative costs in the Tier Three Advice Letter required in Step Three of the Incentive Pilot. This estimate and a cost-effectiveness cap for the solicited distributed energy resources projects should also be presented in a confidential attachment to the advice letter. The Tier Two Advice Letter, requesting approval of the actual contracts, shall include the final costs not to exceed the cost-effectiveness cap.

The Utilities point out in their comments that it may be necessary to perform an allocation of the distributed energy resource contract costs if the utility will be receiving the energy, capacity and any ancillary services provided by the distributed energy resource.¹⁰¹ We find this reasonable and direct the Utilities to propose such an allocation in their next general rate case application that includes the distributed energy resources contract costs. The value of any

¹⁰⁰ Utilities Opening Comments to Proposed Decision, November 30, 2016 at 3-5.

¹⁰¹ Utilities Opening Comments to Ruling, September 15, 2016 at 7-8.

energy, generation capacity and ancillary services provided by the distributed energy resources should be recovered from bundled customers through the Energy Resource Recovery Account, while the balance of contract costs would be allocated to distribution and recovered from all customers through that rate component.

6. Action Following the Pilot Evaluation Report

Following the submission of the first part of the evaluation report from the Utilities, the Commission will begin to analyze the Utilities' report. The analysis will entail input from parties through at least one workshop and through party comments. The purpose of the analysis will be to determine whether the Incentive Pilot met its purpose, whether changes are required, and whether to adopt the Framework and the incentive as final.

7. Comments on Proposed Decision

The proposed decision of Administrative Law Judge Kelly A. Hymes 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 filed on November 30, 2016 by California Energy Storage Alliance, Clean Coalition, Coalition of California Utility Employees (CUE), Consumer Federation of California, Independent Energy Producers, Interstate Renewable Energy Council, Inc., Joint Demand Response Parties, Marin Clean Energy, NRDC, NRG Energy, ORA, SolarCity, Sierra Club, Solar Energy Industries, TURN, the Utilities, and Vote Solar. Reply comments were filed on December 5, 2016 by Clean Coalition, Interstate Renewable Energy Council, Joint Demand Response Parties, Marin Clean Energy, ORA, and the Utilities. Clarifications and corrections were made throughout this decision in response to the comments.

We address the concern of CUE that putting distribution reliability in the hands of unregulated third party providers is misguided and threatens electric reliability and safety. Referencing the 1998-2000 California energy crisis, CUE contends that actions pursued by this pilot will result in blackouts and price spikes.¹⁰² SolarCity retorts that a distributed energy resources service provider cannot have a sustainable business if it does not provide reliable grid services to a utility and a quality experience to the end customer. Furthermore, SolarCity highlights that the parallels to the California energy crisis are inappropriate in that both the circumstances and the industry type are not similar.¹⁰³ We agree that the circumstances are different, in that we are dealing with pilot programs in one sector of the market. Furthermore, the Commission has set forth a policy whereby we are committed to the use of third party providers with the goal of expanding competition in California, leading to lower costs for ratepayers. However, this by no means dilutes the requirement of the Utilities to ensure that services provided by those contracts are safe and reliable.

8. Assignment of Proceeding

Michel Peter Florio is the assigned Commissioner and Kelly A. Hymes is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The Working Group agreed on definitions for the terms distribution capacity, voltage support, reliability (back-tie), and resiliency.
2. The Working Group agreed on a series of statements regarding potential distribution services, detailed attributes to these services, and data as a service.

¹⁰² CUE Opening Comments to Proposed Decision, November 30, 2016 at 4.

¹⁰³ SolarCity Reply Comments to the Proposed Decision, December 5, 2016 at 4-5.

3. No party expressed opposition to the consensus term definitions or statements.
4. A contingency plan should be contemplated when considering the distribution planning process.
5. A contingency plan should be developed by the Utilities in consultation with the Distribution Planning Advisory Group for the purposes of the pilot.
6. The method to count services and ensure no procurement duplication should comply with the principles recommended by the Working Group and adopted in this decision.
7. The description of counting Method Number 3 in the Report does not include the detail on how or where to set its proposed baseline.
8. It is not reasonable to adopt counting Method Number 3, as currently proposed.
9. The questions posed in counting Method Number 1 in the Report are technology-specific.
10. The questions posed in counting Methods 2, 4 and 5 are technology agnostic.
11. There should be clear and constant parameters for determining what distributed energy resources are incremental as part of the initial solicitation package.
12. The method selected should result in practical, simple, actionable, flexible and transparent criteria.
13. There is no determination, at this point, on which of the methods provide the best assurance of being incremental and avoiding double counting.
14. Each of the proposed methods requires additional work.
15. The Framework principles adopted in this decision call for consistency.

16. Adopting more than one method of counting in the final Framework does not meet the principle of consistency.

17. It is reasonable to continue exploring the recommended counting methods to determine which one can provide the best assurance of avoiding double-counting.

18. Requiring the Utilities to provide the planning assumptions for distributed energy resources in the solicitation packages should ensure clear parameters of what distributed energy resources are incremental.

19. The Working Group identified 12 principles that should apply to the Framework.

20. The 12 principles identified by the Working Group are the same principles used in the existing procurement process.

21. The 12 principles provide a solid foundation for the Framework.

22. Defining the counting method for ensuring a resource is incremental is the more prudent approach to avoiding double-counting rather than further refining principles.

23. Characteristics and values of distributed energy resources will be determined through the locational net benefits analysis and the integration capacity analysis performed in R.14-08-013.

24. Distribution planning activities should be determined in R.14-08-013.

25. To test the consensus elements of the Framework and other options suggested in the Report, we should adopt an interim set of distribution planning activities.

26. The Utilities are responsible for providing safe, reliable and affordable services and should be responsible for conducting the solicitation process,

selecting the distributed energy resources provider and developing contingency plans.

27. The role of the Distribution Planning Advisory Group, in the Incentive Pilot, is to advise the Utilities on the pilot project planning process and the aspects of the Framework that remain unsettled, i.e., the counting method and the contingency plan.

28. Market participants should be excluded from the portions of the Distribution Planning Advisory Group discussions regarding any market-sensitive information, as established in D.06-06-066, especially the potential distribution costs that may be avoided by distributed energy resources.

29. Market participants can provide technical sophistication to the Distribution Planning Advisory Group regarding distributed energy resources.

30. No party opposes the retention of an Engineer.

31. The Commission should ensure that the Engineer has no conflicts of interest and remains truly independent.

32. No party stated any opposition to the list of valuation components agreed upon by the Working Group.

33. The valuation components identified in the report are consistent with previously-approved valuation components.

34. There is merit in continuing discussions to further develop the list of valuation components and quantifying those components characterized as qualitative.

35. It is consistent to require the use of the least-cost, best-fit framework given that it is used in other procurement solicitations.

36. The three recommended principles for developing a solicitation evaluation method are consistent with Commission policies.

37. R.14-08-013 should resolve the issues regarding transparency for determining distribution planning activities.

38. This proceeding should determine the issue of transparency as it relates to the distributed energy resource solicitation documents and how the bids for those resources will be evaluated.

39. The process of creating the Framework is an evolving process.

40. Transparency in the solicitation documents and for how the bids for distributed energy resources are evaluated is consistent with the adopted principle of transparency.

41. It is reasonable to test a higher level of transparency in bid evaluation through this pilot.

42. Modifying currently-used pro forma contracts is not a perfect solution.

43. A newly-created technology-neutral pro forma contract should reinforce the adopted principle of technological-neutrality.

44. Creating a technology neutral pro forma contract will take time and effort.

45. The degree of consensus reached regarding the modified pro forma contracts is robust enough to move forward with a pilot.

46. The list of changes to modify existing contracts is reasonable and should be adopted.

47. Contract negotiations should be a collaborative process between the utility and the distributed energy resources provider.

48. PG&E's recommendation to create a technology-neutral pro forma contract is beneficial to initiating the learning process for pro-forma contracts.

49. Pre- and post-contracting are defined as before and after the signing of the contract.

50. The Commission should ensure that bidders are given the opportunity to be successful in acquiring customers.

51. We should ensure that the costs of acquiring distributed energy resources in the Incentive Pilot are lower than the costs of deploying a traditional solution.

52. Costs associated with the pre- and post-contracting customer acquisition support should not be ignored, but should be part of the costs and benefits of the solicitation of distributed energy resources.

53. Utilities should take pre- and post-contracting customer acquisition support costs into consideration when designing the solicitation package.

54. Bidders should take pre- and post-contracting customer acquisition support costs into consideration when developing their bids.

55. There is general support for an incentive mechanism pilot.

56. The incentive mechanism pilot represents an initial step to examine alternative payment structures for utilities.

57. The purpose of the regulatory incentive mechanism is to test how an incentive affects the Utilities' distributed energy resources sourcing behavior.

58. Requiring the selection of a project for the Incentive Pilot is at odds with its purpose.

59. It is prudent to utilize the Incentive Pilot to test the adopted portions of the Framework.

60. Allowing for a required project and optional projects should enable the Commission to test both the Framework and the incentive mechanism.

61. A cap of four pilot projects provides a good balance between meeting the purpose of the pilot and protecting ratepayers.

62. The locational net benefits analysis, the integration capacity analysis, and the future distribution planning activities together eliminate the need for another working group to identify target areas for distributed energy resources.

63. It is reasonable to deny the request of Clean Coalition to establish a working group to identify distributed energy resources target areas.

64. The Distribution Planning Advisory Group is an interim approach for the purposes of the pilot adopted in this decision.

65. The Utilities should build upon the participants of the Procurement Review Group to form the Distribution Planning Advisory Group.

66. The experience of the adopted pilot by the Distribution Planning Advisory Group should assist the Commission in determining its framework for distribution planning activities in R.14-08-013.

67. No party opposed the timeline recommended for the formation of an advisory group.

68. It is reasonable to explore the counting methodologies proposed by the Working Group in the Incentive Pilot.

69. Projects for the pilot should be selected where the solicited distributed energy resources have a reasonable chance of being cost-effective consistent with the list of valuation components adopted in this decision.

70. A societal cost test is still being explored on a separate track in this proceeding.

71. The purpose of mirroring Demonstration "C" is to provide a control group to determine the impact of the incentive in the Incentive Pilot.

72. We are not measuring the effectiveness of the incentive in the required project for the Incentive Pilot.

73. It is reasonable that the required project in the Incentive Pilot not mirror but rather be complementary to Demonstration “C”.

74. It is prudent to take advantage of the control group opportunity.

75. It is reasonable to require that one of the optional projects mirror Demonstration “C”.

76. This project should weigh the uncertain benefits of the adopted approach with the costs of losing the opportunity to implement distributed energy resources projects that address a wider variety of grid needs.

77. It is reasonable to not require the second or third optional projects to mirror or complement Demonstration “C”.

78. The Commission is concerned about the length of time the Framework process takes.

79. The Commission wants to reduce the Framework process time without harming the process.

80. A pilot will provide the opportunity to determine the length of time needed for the Framework process.

81. No party opposed the contents of or timeline for the Solicitation Approval step of the Revised Proposal.

82. The three-part process for the Solicitation Approval step allows for informal and formal stakeholder input.

83. Discussion in a workshop setting should lead to a better understanding of the contents of the Utilities’ advice letter requesting approval of a distributed energy resources solicitation.

84. The purpose of the Step Four workshop is to allow the Utilities to explain the solicitation in detail so that stakeholders can understand the products and/or services the utility is soliciting.

85. The Commission is attempting to streamline the solicitation process in the Framework.

86. The participation of market participants in the Distribution Planning Advisory Group and the requirement for transparency in the solicitation packages should result in shorter negotiation periods.

87. Contracts resulting from the solicitation ideally should be approved by the Commission on a routine basis.

88. The Framework steps completed prior to the contract approval, along with the adopted principles and rules, should provide appropriate stakeholder review.

89. Standard Commission practice includes Commission review and approval of contracts.

90. Current practice does not include the upfront preparation we build into the Framework.

91. This pilot lays the foundation for future distributed energy resources policy.

92. It reasonable to provide review time with the Procurement Review Group but balance it with a Tier Two Advice Letter process, for purposes of the adopted pilot.

93. A review of the Tier Two Advice Letter by Procurement Review Group, whose membership includes Energy Division staff, should ensure that the Utilities followed the adopted elements of the framework and the steps of the pilot.

94. The timeline strikes a balance of proper oversight and process streamlining.

95. There are many examples where the Commission has required the Utilities to pursue pilots and submit reports.

96. A post pilot workshop will allow parties to examine and comment on the pilot report.

97. Performance of the distributed energy resource does not help to evaluate the Framework of the Incentive Pilot.

98. Performance of the distributed energy resources is relevant to the overall goal of improved distributed energy resource use.

99. A paper pilot of additional incentive variations is a practical way to assess various alternatives without imposing costs or undue risk on ratepayers.

100. Parties generally support the proposed incentive of 4 percent pre-tax applied to the annual payment for the distributed energy resource.

101. The Solar Parties base their recommended alternative incentive on an incorrect assumption that the Utilities earn 14 percent on distributed energy resources contract payments.

102. Proposed earnings will be 4 percent of the annual payments on a pre-tax basis.

103. SCE's alternative incentive mechanisms require further clarifications.

104. Too many variables may challenge the ability of the Commission to properly evaluate the outcomes of the Incentive Pilot.

105. The purpose of the Framework is to defer or avoid a previously planned distribution project through the procurement of distributed energy resources.

106. The requirement to achieve the proposed incentive is that the distributed energy resources must avoid or defer a previously-identified distribution project.

107. The timeline for project identification and distributed energy resource solicitation and deployment may be lengthy enough that the traditional

investment alternative would not be reflected in a prior general rate case's revenue requirement.

108. If the traditional investment had been reflected in rates, it would be difficult to determine given the aggregate nature of distribution capital forecasts in general rate cases.

109. The proposed approach will enable a utility to retain savings from deploying less costly distributed energy resources in lieu of the previously authorized distribution project.

110. The proposed approach is similar to the approach adopted by the New York Commission.

111. The purpose of the pilot is to determine whether the additional incentive will create additional savings to the ratepayers.

112. It is reasonable to test the New York approach as part of the pilot.

Conclusions of Law

1. The Commission should adopt the policy statements regarding distribution services agreed to by the Competitive Solicitation Framework Working Group in its August 1, 2016 Report.

2. The Commission should adopt the definitions for the key distribution services that distributed energy resources can provide, which were agreed to by the Competitive Solicitation Framework Working Group in its August 1, 2016 Report.

3. The Commission should adopt the 12 principles for the Competitive Solicitation Framework as agreed to by the Working Group in its August 1, 2016 Report.

4. The Commission should adopt the valuation components recommended by the Working Group, as set forth in Appendix A of this decision, as a starting

point for the adopted pilot for Competitive Solicitation Framework's solicitation evaluation method.

5. The Commission should require the use of existing market outreach practices, including the practice of performing outreach during the design phase of the solicitation in the Competitive Solicitation Framework.

6. The Commission should adopt the solicitation requirements for the Competitive Solicitation Framework as recommended by the Working Group.

7. The Commission should require the Utilities to identify at least one project to implement and test the consensus elements of the Framework.

8. The Commission should allow the Utilities the option to identify up to three additional projects to implement and test both the consensus elements of the Framework as well as the incentive mechanism.

9. The Commission should address distribution planning activities in R.14-08-013.

10. The Commission should implement an interim set of distribution planning activities in order to test the consensus items of the Framework and the incentive mechanism.

11. For the purposes of the Incentive Pilot, the Commission should require that the Distribution Planning Advisory Group be open to market participants, except when market sensitive materials as defined in D.06-06-066, e.g., the costs of the alternative traditional solution, are being discussed.

12. The Commission should not permit market participants to participate in the Procurement Review Group, whose role is to review the solicitation bids.

13. The Commission should take advantage of the opportunity to test options for counting methodologies.

14. The Commission should establish a process to collaboratively develop a standardized technology neutral pro forma contract for future consideration by the Commission.

15. The Commission should require the Utilities to hire an industry consultant with expertise in distributed energy resources and contracting to advise and assist in the development of a technology neutral pro forma contract.

16. The Commission should approve the contracts for the Incentive Mechanism pilot(s) through the Tier Two Advice Letter process, after a review by the Procurement Review Group.

17. The Commission should adopt a 4 percent pre-tax incentive applied to the annual payment for the distributed energy resource alternative but require the utilities to perform a paper analysis of the other incentive options.

18. The Commission should require a report on the solicitation portion of the pilot as well as a report on the performance of the distributed energy resources.

19. The Commission should adopt the proposed incentive and procurement cost recovery approaches.

20. The Commission should make this decision effective immediately.

ORDER

IT IS ORDERED that:

1. The following three policy statements regarding distribution services are adopted for the Competitive Solicitation Framework:

- The distribution services that distributed energy resources may be able to provide to address a distribution grid need are Energy (up/down); Capacity (up/down); and Voltage/Volt Ampere Reactive (VAR) services (up/down). The sourcing process may be procuring a solution that is a high-value application of these services.

- Detailed attributes to these distribution services will depend on the specific needs of the system in a particular location, which will be identified and developed in Rulemaking 14-08-013.
- Data being gathered from distributed energy sources that is incremental to data required for safe and reliable operation of the distribution grid has value and in some yet to be determined cases could be provided as a service.

2. The following definitions for the key distribution services that distributed energy resources can provide are adopted for the Competitive Solicitation Framework:

- Distribution Capacity services are load-modifying or supply services that distributed energy resources provide via the dispatch of power output for generators or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure;
- Voltage Support services are substation and/or feeder level dynamic voltage management services provided by an individual resource and/or aggregated resources capable of dynamically correcting excursions outside voltage limits as well as supporting conservation voltage reduction strategies in coordination with utility voltage/reactive power control systems;
- Reliability (Back-Tie) services are load-modifying or supply service capable of improving local distribution reliability and/or resiliency. Specifically, this service provides a fast reconnection and availability of excess reserves to reduce demand when restoring customers during abnormal configurations; and

- Resiliency (microgrid) services are load-modifying or supply services capable of improving local distribution reliability and/or resiliency. This service provides a fast reconnection and availability of excess reserves to reduce demand when restoring customers during abnormal configurations.

3. In recognition of the principles adopted below, the counting method used in the pilot adopted below in Ordering Paragraph 10:

- a. Ensure that ratepayers are not paying twice for the same service;
- b. Ensure the reliability of a service, i.e., ensure it is not counting on a service to be there when the service might be deployed at another time or place;
- c. Not be unduly burdensome to participants;
- d. Be technology-neutral;
- e. Be fair and consistent;
- f. Recognize that a distributed energy resource is eligible to provide multiple incremental services and be compensated for each service; and
- g. Be flexible and transparent to bidders.

4. The following 12 principles are adopted for the Competitive Solicitation Framework:

- Framework meets the identified need on a least-cost, best-fit basis;
- Framework utilizes a competitive process with broad markets;
- Framework is technology-neutral;
- Framework is transparent as allowed within confidentiality boundaries;
- Framework identifies a need without prejudging the technology;

- Framework does not limit the amount of any one type of technology;
- Framework is a streamlined process;
- Framework is a fair and consistent process;
- Framework focuses on the identified need;
- Framework provides sufficient assurance of performance;
- Framework allows for flexibility in the number and type of bids; and
- Framework includes a lessons-learned feedback loop.

5. The valuation components summarized below and further defined in Appendix A are adopted as a starting point for the Competitive Solicitation Framework's solicitation evaluation method. If Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company, in consultation with the Distribution Planning Advisory Group achieve further consensus on valuation components, the list of valuation components may be modified:

- Quantitative Factors including net market value, resource adequacy value, energy value benefit, ancillary services value benefit, renewables portfolio standard benefit, reduced greenhouse gas emissions benefit, renewable integration cost/reduced cost benefit, distribution deferral value, transmission deferral value, and contract payments cost; and
- Qualitative Factors including project viability, voltage and other power quality services, equipment life extensions, societal net benefits, and other factors such as supplier diversity, counterparty concentration, site diversity, and technology/end-use directory to help market transformation.

6. No later than 30 days after the issuance of this decision, Pacific Gas and Electric Company, in consultation with San Diego Gas & Electric Company, and

Southern California Edison Company, and the Commission's Energy Division shall hire an industry consultant with expertise in distributed energy resources and contracting. The Industry Consultant shall observe the entire Incentive Pilot process and then assist in developing a technology-neutral pro forma contract for future use in the Competitive Solicitation Framework.

7. No later than 30 days after the pilot solicitations have taken place, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) in consultation with the Commission's Energy Division, will reconvene the Competitive Solicitation Framework Working Group (Working Group) to begin discussions on the development of a technology-neutral pro forma contract. The Industry Consultant in Ordering Paragraph 5 shall participate in the Working Group and provide a status report to the service list in this proceeding no later than 90 days following the recommencement of the Working Group. No more than 180 days following the recommencement of the Working Group, the Utilities shall file a Tier Three Advice Letter requesting Commission approval of a technology-neutral pro forma contract for soliciting distributed energy resources in the future Competitive Solicitation Framework. The Utilities shall work toward consensus of a final contract, putting forth a contract with consensus elements in the Advice Letter. Where consensus of any element is not reached, the Utilities shall provide detailed discussions of alternative elements.

8. The Competitive Solicitation Framework shall use existing market outreach practices, including the practice of performing outreach during the design phase of the solicitation.

9. The following solicitation requirements for the Competitive Solicitation Framework are adopted:

- The solicitation package shall include information regarding the specific geographic area where resources must be deployed, the customer composition in that area (to the extent that the information does not violate customer privacy rules), and information on how to request specific customer information under current Commission rules;
- The solicitation package shall also include information regarding the level of post-contracting customer acquisition support to be provided by the utility; and
- A customer-facing web presentation shall be deployed by the utility during each solicitation period in order to increase customer awareness and inform customers of possible contact by bidders.

10. Upon issuance of this decision, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall begin to implement the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot) following the adopted aspects of the Competitive Solicitation Framework. The Utilities shall each select one project to test the Framework. Furthermore, the Utilities have the option to select up to an additional three projects to implement the Incentive Pilot. The Utilities shall follow the processes and procedures described in Ordering Paragraph 10 (OP) through OP 18 for each project selected.

11. Within 60 days following the issuance of this decision, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall implement Step One of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot), by jointly forming a single Distribution Planning Advisory Group (Distribution Planning Advisory Group) to advise them on distribution planning activities. The Distribution Planning Advisory Group shall be open to market participants, except during

discussions of market sensitive information as established in Decision 06-06-066. One member of the distribution planning group shall be an Independent Professional Engineer (Engineer) tasked with evaluating distribution plans for the Incentive Pilot.

12. Within 60 days of the issuance of this decision, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall enter into a contract with an Independent Professional Engineer (Engineer). The Utilities shall work with Commission staff to select the Engineer. The Engineer shall have the followed credentials:

a) a degree in engineering, specializing in power; b) California Licensed Professional Engineer; c) familiarity with the distribution grid; and d) familiarity with technical specifications of various types of distributed energy resources.

The Role of the Engineer, as a member of the interim Distribution Planning Advisory Group, shall be to advise the Utilities in developing bid evaluation methods, prepare reports on the distribution planning process proposals and the distributed energy resources deferral process, provide a presentation to the Distribution Planning Advisory Group on the Utilities' processes for distribution deferral need, and provide a presentation to the Procurement Review Group on the Utilities' processes for evaluation of non-wires distributed energy resources deferral projects. The Engineer also shall be a member of the Procurement Review Group.

13. Within 120 days following the issuance of this decision, Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE) (jointly, the Utilities) shall implement Step Two of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot) by working with the Distribution Planning Advisory Group

(Distribution Planning Advisory Group) to identify at least one project (required project) with the option to pursue up to four projects. The required project shall complement the project used in Demonstration “C” of Rulemaking 14-08-013. As part of the identification process, PG&E, SDG&E, and SCE shall each propose a counting method either as described in or as an alternative to the methods in the August 1, 2016 Competitive Solicitation Framework Working Group Report (Report) to ensure distributed energy resources procured are incremental to those forecasted. The final counting method used shall have the attributes listed in Ordering Paragraph 3 above. The Utilities shall work collaboratively with the Distribution Planning Advisory Group to finalize the counting method as well as a contingency plan. Projects shall be selected where the solicited distributed energy resource has a reasonable chance of being cost-effective consistent with the list of valuation components approved in Ordering Paragraph 5. The Utilities shall work with the Distribution Planning Advisory Group to select which valuation components are applicable. The Societal Test valuation component shall not be used for the purposes of the Incentive Pilot. If more than one project is selected by the Utilities, one of the additional projects must mirror the project used in Demonstration “C” of Rulemaking 14-08-013.

14. No later than six months following the issuance of this decision, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall implement Step Three of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot), by filing a Tier Three Advice Letter requesting Commission approval to procure a distributed energy resource solution for the project or projects selected in Ordering Paragraph 13.

15. The Commission's Energy Division will implement Step Four of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot) by hosting a workshop to discuss the contents of the advice letters filed pursuant to Ordering Paragraph 14. The Energy Division will also establish a schedule to allow for protests or response to the advice letters following the workshop and, subsequently, issue a proposed resolution addressing the advice letters. These tasks should be concluded within ten months following the issuance of this decision.

16. Within four months following the determination of the proposed resolution in Ordering Paragraph 15, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall complete Step Five of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot), the solicitation process. The Utilities shall follow the Competitive Solicitation Framework principles adopted in Ordering Paragraph 4 and the solicitation requirements adopted in Ordering Paragraph 9.

17. Within six months following the determination of the proposed resolution in Ordering Paragraph 14, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company shall complete Step Six of the Utility Regulatory Incentive Mechanism Pilot, by a) meeting with the Procurement Review Group to allow a review of the proposed contracts and b) each filing a Tier Two Advice Letter requesting Commission approval of the contract(s) to procure for projects identified in Ordering Paragraph 13 above.

18. No later than 90 days following the execution of the procurement contracts approved in Ordering Paragraph 17, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall complete the first part of Step Seven of the Utility

Regulatory Incentive Mechanism Pilot (Incentive Pilot), by filing the first of the two-part Incentive Pilot Report. With input from the Distribution Planning Advisory Group (Distribution Planning Advisory Group), the first part of the Incentive Pilot Report shall thoroughly respond to the following questions and provide associated data:

- Was the solicitation successful in procuring distributed energy resources (distributed energy resources) to meet the identified need?
- How did the earnings opportunity provided in this pilot affect utility sourcing of distributed energy resources to defer or displace distribution infrastructure? Explain the screening process used for determining whether to perform zero, one, or two projects for the optional projects. For the project required to mirror Demonstration “C” in Rulemaking 14-08-013 (if applicable), was there any measurable difference relative to utility sourcing for Demonstration “C”?
- Describe the impact on the Incentive Pilot of the Distribution Planning Advisory Group review of utility project identification?
- Did the competitive solicitation framework process perform effectively?
- What changes to the Incentive Pilot would have made it more effective?
- How would different incentive structures allocate the costs and benefits of the projects differently than the incentive employed in the Incentive Pilot? Include a financial analysis of the impacts on the utilities, customers, and vendors from the three incentive mechanisms using data from the projects completed: i) the percent of investment incentive as proposed, ii) the percent of investment incentive applied to the counterfactual conventional investment, and iii) shared savings.

19. No later than 15 months following the implementation of the projects pursuant to Ordering Paragraph 16, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (jointly, the Utilities) shall complete part two of Step Seven of the Utility Regulatory Incentive Mechanism Pilot (Incentive Pilot), by filing the second of the two-part Incentive Pilot Report. The second part of the Incentive Pilot Report shall provide associated data, appropriately aggregated and anonymized regarding the performance of the distributed energy resources procured pursuant to the Incentive Pilot approved in this decision.

20. For the purposes of the Utility Regulatory Incentive Mechanism Pilot, we adopt a 4 percent pre-tax incentive applied to the annual payment for the distributed energy resource. The incentive would be recoverable if the distributed energy resources procured were successful in avoiding or deferring an otherwise planned utility expenditure. Once the deferral period ends and a traditional investment is made, no incentive shall be recovered for that year and going forward.

21. Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company are authorized to create memorandum accounts to track the incremental administrative costs of the Incentive Pilot.

22. For successful solicitations pursuant to Ordering Paragraph 10 through Ordering Paragraph 19, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company are authorized to record the value of the incentive in a balancing account for later recovery. The Commission will review each utility's Energy Resource Recovery Account compliance application for each year in which an incentive pursuant to this decision is claimed.

23. The cost of the annual payments to the distributed energy resource provider shall be considered pre-approved for recording in a balancing account and recovery in the next general rate case for that utility. Pacific Gas and Electric Company's, San Diego Gas & Electric Company's, and Southern California Edison Company's distribution spending request in their general rate cases shall be reviewed to ensure that no double recovery of traditional distribution spending occurs.

24. Rulemaking 14-10-003 remains open.

This order is effective today.

Dated December 15, 2016, at San Francisco, California.

MICHAEL PICKER
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
CARLA J. PETERMAN
LIANE M. RANDOLPH
Commissioners

APPENDIX A

Approved Valuation Components for Distribution Grid Services Competitive Solicitations

Evaluation Methodology

The CSFWG discussed the below set of quantitative and qualitative factors.

1. Quantitative Factors

Quantitative factors include Net Market Value (NMV). NMV intends to represent the value of an Offer from the market perspective. The NMV captures the market value provided by an Offer of Energy, A/S, and Capacity and compares it to the Offer's cost. NMV is calculated for each Offer as follows:

$$\text{NMV (levelized \$/kW-year)} = \text{Benefits} - \text{Costs}$$

Where Benefits =

RA (Capacity) Value

Energy Value

Ancillary Services Value

RPS Benefit

Reduced GHG Emissions Benefit

Renewable Integration Cost/Reduced Cost Benefit

Distribution Deferral Value

Transmission Deferral Value

And Costs = Contract Payments Costs (including Fixed and Variable Costs)

RA Value Benefit

The RA (including system, local and flexible) amount attributed to each resource is established under the guidance of the current net qualifying capacity counting rules of the CPUC. As new rules are implemented, the methodologies to determine RA capacity for the associated resources are replaced to reflect new guidance. If a resource's operational capabilities generally fall under a category described by the CPUC for RA counting rules, the rules are applied directly. When no such category is identified, electric utilities may use program/technology specific studies/proceedings to estimate the impact of resource on peak load or assess the contribution to peak load through their own analysis.

The resources that act as load reducers may receive adjustments to their RA quantity benefits to reflect avoided T&D losses and RA reserve margin requirements.

The RA price forecast is developed from multiple sources and assumptions such as market transacted data from utilities' own previous solicitations, local requirements, long-term capacity value, cost of generation studies, and planning reserve margin assessment. There is inherent uncertainty in the RA price forecasts, therefore there is no guarantee that the ascribed RA value to a resource during the time of solicitation will be realized in the future.

Energy Value Benefit

The energy amount attributed to must-take and baseload resources is based on the bid's expected generation delivery profile. For dispatchable resources, operations of the resource are projected using the economic dispatch principle

based on bid's operating characteristics, operating costs and market services offered. The resources that act as load reducers may receive adjustments to their energy quantity benefits to reflect avoided losses.

The energy price forecast is generally established using forward market data and fundamental model prices. The location-specific adjustment are done to reflect associated congestion value forecasts. As discussed for RA price forecast, there is inherent uncertainty in the energy price forecasts, therefore there is no guarantee that the ascribed energy value to a resource during the time of solicitation will be realized in the future.

Ancillary Services (A/S) Value Benefit

The A/S amount is projected based on first determining if a resource is capable of providing A/S. If the resource can provide A/S, then similar methodologies as energy amount forecast are used to determine A/S amount to be attributed to the resource.

The A/S price forecast could be based on historical market data, statistical model or fundamental model. As discussed above for RA and energy price forecast, there is inherent uncertainty in the A/S price forecasts, therefore there is no guarantee that the ascribed A/S value to a resource during the time of solicitation will be realized in the future.

RPS Benefit

The eligible renewable DERs that count towards utilities' RPS compliance requirement get RPS benefit. Their RPS benefit quantity is calculated from their generation delivery profile. The load reducing DERs also get RPS benefit as they

result in reduction in utility's RPS compliance requirement. The reduced RPS compliance requirement is calculated based on total reduced bundled load projection from the resource and RPS standard targets.

The electric utilities forecast Renewable Energy Credit (REC) value from their own RPS solicitations data, third party vendors' subscribed data and public market reports.

Reduced GHG Emissions Benefit

The load reducing DERs or renewable DGs get the benefit of not have any combustionrelated GHG compliance obligation and corresponding costs. There is not separate quantification of this benefit as DERs receive the value of avoiding GHG emissions via the value of reduced generation need energy costs. The emission costs are embedded into LMP prices.

Renewable Integration Cost/Reduced Cost Benefit

The renewable resources integration requires flexible resources that the utility and/or the CAISO can control to manage and firm-up intermittent output. For the DG resources where renewable integration cost is applicable, Renewable Integration Cost Adder (RICA) methodology from RPS proceeding is generally employed.

Certain DERs can reduce the cost of integrating intermittent renewable generation by providing the operational flexibility that the system needs. By providing such flexibility, the system operation costs are reduced which otherwise have been incurred in acquiring flexible resources. However, to the

extent this benefit is captured in flexible RA or ancillary services value, it is appropriate to not double-count this benefit.

Distribution Deferral Value

As identified in DRP's LNBA methodology, deferred distribution components would

Include:

- a. Sub-transmission, Substation and Feeder Capital and Operating Expenditures
- b. Distribution Voltage and Power Quality Capital and Operating Expenditures
- c. Distribution Reliability and Resiliency Capital and Operating Expenditures

The CSFWG has proposed to develop deferral values using Real Economic Carrying Charge (RECC) method based on the approach being developed in the DRP.

The benefit of distribution deferral will be evaluated for DERs that are located on identified substations and/or feeders. Such benefit will be assessed based on the deferred cost of the least expensive traditional solution meeting the identified operational need on that distribution location, *i.e.*, the project that would most likely be built in the DERs' absence. The main factors in the analysis for each alternative include the installed cost, the operating and maintenance cost, project life, return on investment, and discount rate.

Transmission Deferral Value

There are various public processes that determine the required transmission projects in the CAISO controlled grid, and the utilities also conduct their own transmission reliability assessment in parallel to CAISO's Transmission Planning Process. Using the cost of traditional grid investment and by identifying specific system characteristics (or needs) driving the need for the transmission projects, a deferral value or avoided cost may be calculated. The factors like interrelationship between transmission system planning and distribution system planning, coincident peak between DER and transmission need will be taken into account to determine any potential contribution of DERs in deferring transmission capital and operating expenditure.

Contract Payments Costs

The contract costs could be composed of capacity payments and/or energy payments, *i.e.*, fixed costs and variable costs. The energy payments could be associated with generation as all-in cost for DG type of resources, or variable costs for DR/ES type of resources.

2. Qualitative Factors

Qualitative factors include: "Project Viability," "Voltage and Other Power Quality Services," "Equipment Life Extension," "Societal Net Benefits" and "Other Factors."

Project Viability

The project viability assessment includes factors such as developer experience, O&M experience (proven track record), commercial technology, reasonableness of delivery date, and interconnection progress.

Voltage and Other Power Quality Services

The voltage and other power quality services stream that are not identified as DER portfolio need during solicitation, but deemed to be providing value to the system are also considered while selecting bids.

Equipment Life Extension

If certain DER bids are deemed to have impact on extending/reducing the distribution equipment life, the attribute would be considered as part of qualitative consideration while selection, as secondary benefit or cost.

Societal Net Benefits

Where identified, societal benefits and/or costs include public benefits and/or costs that do not have any nexus to utility rates. The societal net benefits attribute is planned to be leveraged from various other proceedings such as the DRP's LNBA methodology, and the IDER's demand side cost effectiveness. Rather than perform duplicative efforts within this Working Group, it is best for discussions regarding societal net benefits to take place as part of the IDER proceeding's efforts to address the Energy Division Staff's identified Phase 3 efforts to remedy the shortcomings in the current cost-effectiveness framework,

as was proposed in the Cost Effectiveness Working Group's Final Report. It is appropriate to include any societal net benefit that can clearly be linked to the deployment of the proposed product.

Other Factors

Other factors include considerations like supplier diversity, counterparty concentration, site diversity, technology/end-use diversity to help market transformation.

(END OF APPENDIX A)