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 Demand-Side Resource Programs.	Rulemaking 14-10-003 (Filed October 10, 2014)

REPLY COMMENTS OF CLEAN COALITION ON AMENDED SCOPING MEMO OF ASSIGNED COMMISSIONER AND JOINT RULING WITH ADMINISTRATIVE LAW JUDGE

Kenneth Sahm White
Director, Economic & Policy Analysis
(831) 295-3734
sahm@clean-coalition.org

Doug Karpa, J.D., Ph.D.
Policy Director
State Bar Number 266365
(415) 860-6681
doug@clean-coalition.org

Clean Coalition
16 Palm Ct
Menlo Park, CA 94025

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I. INTRODUCTION

The Clean Coalition respectfully submits these replies to party's comments and responses to Attachment A of the Amended Scoping Memo of Assigned Commissioner and Joint Ruling with Administrative Law Judge ("Amended Scoping Memo") issued February 12, 2018 under Rules 6.2, 1.9, and 1.10 of the CPUC Rules of Practice and Procedure.

In reply Clean Coalition disputes the characterization of the limits and applicability of tariffs put forward by the Joint Utilities and the Office of Ratepayer Advocates but note broad agreement on the importance of coordination between programs and proceedings, both within and between agencies, including DER contribution to transmission planning and credit for avoided transmission costs. Additionally, we support consideration recommended by parties with regard to Disadvantaged Communities.

II. DESCRIPTION OF THE PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of DER—such as local renewables, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full

potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER. The Clean Coalition is a project of Natural Capitalism Solutions, a 501(c)(3) non-profit.

III. DISCUSSION

A. Applicability of Tariffs

- The characterization of the limits and applicability of tariffs put forward by the Joint Utilities, and to a lesser degree by the Office of Ratepayer Advocates, is overly narrow and restrictive, critically missing the opportunities for the Commission to fulfill the goals of this proceeding.
- Utilities should pursue whichever combination tariffs, solicitations, and grid investment is most cost effective for ratepayers based on the estimated incremental costs and capabilities each provide; however, a tariff or other price incentive approach should be considered as the first mitigation due to its very rapid implementation and evaluation potential.
- All Load Serving Entities (LSEs) can and should coordinate in tariff offerings.

The Joint Utilities state that "In contrast [to competitive solicitations], tariffs typically rely on voluntary participation by customers, vendors, or other participants. Thus, there is no assurance that the DERs needed to meet the distribution need will materialize."[1]

While it is important to understand the differences between solicitations and tariffs, the two should be seen as complimentary rather that alternative. Grid needs arise out of customer behavior, and tariffs directly influence that behavior, including the use of energy and responsiveness to utility signals. Tariff rates and structure incent load, load modifying, and other distributed energy resources, to operate differently than they would absent the tariff. This has been clearly demonstrated in critical peak pricing, time of use, and demand charge features in retail tariffs. The operational characteristics of both load and generation resources define grid

[1] *Joint Comments of Pacific Gas and Electric Company (U 39-E), San Diego Gas & Electric Company (U 902-M), and Southern California Edison Company (U 338-E) on Amended Scoping Memo of Assigned Commissioner and Joint Ruling with Administrative Law Judge,* Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Distributed Energy Resources, R. 14-10-003 at 5 (Mar. 29, 2018).

needs, and changes in operation in response to tariffs or other incentive or compensation mechanisms can mitigate those needs. The question for this proceeding is not whether only one approach or the other should be utilized, but which combination is most efficient and cost effective.

The effect of tariffs and other incentive mechanisms is reasonably predictable with any required degree of probability as a price curve. For each increment of tariff pricing differential, the existing load and DER resources will have an estimated 99% likelihood of providing "x" response, a 90% likelihood of providing two or three times that response, et c. As experience is gained with this market, the accuracy and certainty of these estimates will be increasingly reliable.

In addition, in an environment in which variable and real time pricing tariffs are available, customer equipment will be increasingly designed to respond to such signals; this is especially true where the utility, load serving entity, or third-party aggregator institutes programs to supply or install this capability, either as add-on retrofit devices at the plug, or integrated into replacement equipment. Programmed or signal responsive control of HV/AC, hot water heating, EV charging, and residential or commercial pumps, have all been well established as effective resources across numerous utilities, and the Commission has appropriately developed and implemented standards for smart inverter capabilities that can respond to signals or settings to provide grid services. As these become increasingly widespread, grid operators will have access to a large installed base of resources that can be leveraged to meet changing operational needs.

Likewise, the incremental cost of grid upgrades can be determined, and the cost of comparable solicitation contracts for DER can be estimated. Utilities should pursue which ever combination is most cost effective for ratepayers based on the estimated incremental costs and capabilities each provide, but this cannot be accomplished if tariff options are not considered.

The Utilities further state that "A utility could offer a tariff to incent DERs, incurring significant costs to customers, but not have enough response to defer the distribution project, thus requiring customers to also pay the costs of the traditional wires solution."[2] However it is not clear why there would be significant cost to ratepayers. In contrast to a permanent grid investment or long-term contract, tariffs and similar compensation mechanisms do not necessarily require any long-term cost commitment for ratepayers. Optional tariff offerings to

[2] *Id.*

customers or aggregators are wonderfully flexible instruments even to the point of real time pricing. A utility or LSE can test the response to a change in tariff price signals and adjust or discontinue the offering based on that response. While predictable long-term pricing and policy is a very important factor in relation to new investment in DER, we must also recognize the opportunity to utilize the existing load and DER resource base. A short-term tariff offer can both test the waters to determine whether a long-term tariff offer is warranted and can then be applied on top of a long term offer to provide flexibility and refinement beyond the base resource established by any long-term offer.

As we see increasing ability of customer and third-party equipment to respond to tariffs, this will offer by far the quickest mitigation to implement, with some measured results being immediate, and additional results occurring in line with outreach and enrollment schedules where a new tariff is required rather than simply an adjustment to pricing signals associated with any existing tariff or compensation incentive mechanism. Because of this, a tariff or other price incentive approach may be seen as the first response, either fully meeting the need, or deferring the need so as to allow more time for competitive solicitation processes and contracted deployment to occur if this is expected to be more cost effective than continuing the tariff pricing inducements.

Utilities further state that "Tariffs also are typically not capped or location-based. This makes them ineffective in satisfying distribution deferral needs that require DERs in specific locations."[3]

It is true that tariffs have not been historically been capped or location-based, but that is precisely the opportunity now before this proceeding, particularly with the development of improved locational valuation. With regard to location, the utilities are correct to note that extreme locational specificity may not be practical at this time; however, we note that value occurs at all levels of granularity, and a need may most cost effectively be addressed by stacking the contribution of tariffs + solicitations + grid investments. A tariff across one CAISO defined transmission level Local Resource Area will also contribute to substation and distribution grid needs in all associated Distribution Planning Areas. In fact, the Locational Net Benefits Assessment (LNBA) tool is designed to reflect the value at any specified level of granularity, including the contribution to multiple distribution needs across separate locations within one

[3] *Id.*

substation or planning area. We also take this opportunity to remind the Commission that LNBA is in no way intended to establish the price offered for services, only the value of those services; a tariff should seek to obtain services at the lowest price available from all sources, with the LNBA value informing DER pricing by defining the upper limit of cost effectiveness for DER services procured either through tariffs or a competitive solicitation.

Further, as has been demonstrated by the tools employed by the utilities through Integral Analytics and other vendors, it is already possible to identify differential value in extreme granularity and entirely possible to target individual customers where the impacts will have far greater value for ratepayers in reducing operational and investment costs.[4]

Joint Utilities further assert that "The set of specifications would need to be developed for each distribution need, in specific locations, for a set amount of time (the deferral period), for specific hours of the year, while having specific DER technology requirements (that meet the need in question), and different compensation amounts based on the value that the particular DER provides relative to the deferral need. This would be very complex, both for the utility to administer and the DER provider to navigate."[5]

Again, this is not necessarily true. For example, tariff that simply offers real time or near real time pricing at the utility's preferred level of locational granularity is easily integrated with any controllable load or energy storage, which can be set to ramp up or down at a target price signal or forecast. This is complicated if relied upon to evaluate the cost effectiveness of a new investment due to the uncertain level of compensation over time, but this is not complicated for the existing customer resource owner or aggregator for whom it offers a clear operational incentive and can be managed by optimization software in the control device itself. Both existing resources and additional resource development should be considered in relation to tariffs and other compensation mechanisms because the decision to change operational characteristics of installed resources is very different than the decision to make investment in new equipment for revenue generation purposes. In addition, we remind the Commission that it is incorrect to refer to "specific DER technology requirements" rather than specific performance; the tariff should be technology agnostic and only interested in the services provided.

[4] See for example the *Load Modifying Resource Demand Response Valuation Working Group's Report* submitted May 1, 2015 in R.13-09-011

[5] Joint Utilities at 6

While we do not wish to understate the work required for the utility to implement and administer such pricing mechanisms, it likewise should not be overstated. Existing smart meters monitor and report customer response and in many cases have additional communication capabilities. Smart inverters include complimentary capabilities as already determined or under development by the Commission. Utility billing and crediting programs already reflect time of use, demand, critical peak, net metering, and other factors, as well as performance-based incentives and billing for multiple LSEs within the same service territory or circuit. Development of additional pricing options and locational specificity is evolutionary, not revolutionary, and it is absolutely in the ratepayer's interest to leverage and optimize the use of DER which are proliferating across the grid. These changes warrant development of new tariffs and compensation mechanisms to guide both growth and operation of DER as the nature of our energy system changes to meet customer choice and broader societal interests.

Joint Utilities also incorrectly categorize tariffs, including feed-in tariffs, as having administratively-determined prices which are not reflective of market conditions or technological development. This is simply a "straw man" argument that bears little relationship to reality. The illustration provided in Fig. 1 by the Utilities posits a tariff price is set at the price of the wires solution such that there is no consumer surplus. This is simply bad tariff design. If the tariff is offered at the level bid by 'DER Provider 4', then the resulting cost would be equal to the competitive process, and better if offered at a lower price. While it is certainly possible to create a poorly designed tariff with pricing such as the utilities describe, it is equally possible and hardly uncommon to do the same with solicitation practices. Indeed, the DER Incentive Pilot for distribution investment deferral in this very proceeding is subject to the limitations created by the lengthy and uncertain solicitation process. The process of competitive solicitation can also drive up the costs of site selection and site lease rates as multiple bidders compete in the same area, and interconnection costs as multiple projects vie for the same grid hosting capacity, submitting interconnection applications far in excess of the need only to withdraw those applications if not winning a contract. Additionally, the inherent uncertainty of receiving a contract in a bidding process creates a disincentive to go through the very substantial cost and effort of submitting a bid. Removing that uncertainty through a tariff approach allows a market response at a lower price.

The purpose of this proceeding is to develop appropriate well-designed tariffs that result in savings to ratepayers. The Commission has some experience with this already, having implemented the Renewable Market Adjusting Tariff (ReMAT), which has delivered DER energy at rates competitive with large scale RPS procurement for comparable commencement of delivery dates, and done so with much faster development timeframes. The Clean Coalition has provided market analysis and tariff design to municipal utilities, CCAs, and even some of the Joint Utilities precisely to effectively target location specific preferred DER development to meet identified goals at the lowest market rate. To categorize tariffs as an inherently inefficient or ineffective mechanism is simply unfounded bias and suggests a fundamental lack of understanding or undisclosed motives.

B. Broad Agreement on the Importance of Coordination

While we believe we have demonstrated that the Joint Utilities errored extensively in their comments regarding tariffs, we believe there is broad agreement between most parties including the Joint Utilities on many other issues discussed in opening comments. In particular we believe there is broad agreement on the importance of coordination between CPUC-approved programs and incentives, plus CAISO programs, and the DRP, IDER, IRP and Rule 21 proceedings, and an open and transparent Distribution Resources Planning Process.

We note further that there has been a long standing disconnect between distribution and DER planning and the Transmission Planning Process (TPP). While DER forecasts are incorporated in to the TPP, non-transmission alternatives and the role of DER programs, tariffs, and compensation mechanisms are not considered for needs identified for TPP mitigation (unless specifically submitted to TPP as a mitigation project). As such, the opportunity for CPUC programs and tariffs to utilize modifiable customer load and DER as a cost-effective alternative to long term transmission investment is largely missed. Likewise, under current ISO tariff, energy supplied to customers from DER through the IOU distribution system is subject to Transmission Access Charges. This practice distorts the Least Cost Best Fit resource valuation methodology as well as procurement decisions by all LSEs within IOU service territories.[6] The

[6] See http://www.caiso.com/Documents/CleanCoalitionComments-ReviewTransmissionAccessChargeStructure-StrawProposal.pdf

ISO has recognized this issue and that coordinated action with the CPUC is required to address it.

Lastly, we bring to the Commission's attention the difference between demand side resources and DER. DER can be and are deployed throughout the distribution system both on the customer side and the utility side. IRP distinguishes demand side and supply side resources but did not distinguish distribution supply side resources from large scale transmission connected resources. This is a significant oversight and an important distinction to make in integrated planning and program coordination.

C. Mitigation of Impacts on Disadvantaged Communities

Sierra Club and NRDC each note in opening comments[7] that consideration should be given to disadvantaged communities in developing and targeting tariffs. The Clean Coalition strongly agrees. Because disadvantaged communities are disproportionately impacted by harmful air pollution, the mitigation of impacts on these communities associated generation and ratepayer energy use is properly attributable to ratepayers, and the replacement of emission sources associated with ratepayers should be prioritized in those areas. As such, tariffs should incorporate such societal value in location, rates, and emission criteria.

IV. CONCLUSION

The Clean Coalition appreciates this opportunity to provide reply comments and supports the Commission's continued work in IDER.

Respectfully submitted,
_____/s/____
Kenneth Sahm White
Director, Economic & Policy Analysis
Clean Coalition

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[7] See: Sierra Club at 2, NRDC at 6.