BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.	Rulemaking 12-03-014 (Filed March 22, 2012)

DISTRIBUTED ENERGY CONSUMER ADVOCATES COMMENTS IN RESPONSE TO THE ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENTS ON WORKSHOP TOPICS

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DISTRIBUTED ENERGY CONSUMER ADVOCATES
COMMENTS IN RESPONSE TO THE ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENTS ON WORKSHOP TOPICS

Distributed Energy Consumer Advocates ("DECA") hereby files comments in R.12-03-014 in response to the September 7, 2012 joint workshop in this proceeding and in the storage proceeding R.10-12-07.

I. Background

DECA is a nonprofit California public benefit corporation that advocates on behalf of its members and their broader customer class that either currently produce and consume electricity, or consume electricity and are considering producing it as well. DECA seeks to promote the optimal regulatory climate and market in which its members and others may invest in distributed clean energy infrastructure, without preference to any single technology. DECA's participation in this proceeding and its comments here focus on a broad range of issues that affect its members including the ability to produce electricity and the costs associated with not relying more heavily on infrastructure investments they might be willing to make to reduce the costs of renewables integration and the broader California electric grid.

DECA commends the Commission for considering the ability to consider whole-cloth changes to the procurement process that may facilitate addressing a great many pressing issues in a very short time frame. While not addressed explicitly below, DECA's proposals are also consistent with environmental justice concerns, recognition of the difficulties emitting resources in the LA basin face in obtaining air permits, and the governor's stated interested in green jobs. The ruling to which these comments respond specifically asked six questions which DECA addresses independently in section II.B, below.

II. DECA's Proposals and Comments

DECA comments here on the questions put forth in the ruling seeking these comments and makes two categories of proposals in the context of answering those questions. Of primary importance are the two mechanisms by which DECA suggests the Commission should address the more complex issues before it engages in Tracks 1 and 2 of the LTPP proceeding. Also in these comments DECA includes a series of smaller policy suggestions consistent with implementing DECA's core proposals.

DECA first proposes a procurement practice that allows for the aggregation of distributed generation to compete against fossil resources in local areas where there are high Locational Marginal Prices ("LMPs"). Second, DECA proposes the RFO process be slightly modified to facilitate smaller-scale and lower availability resources competing against larger traditional resources via a "small first" MCC bucket-oriented RFO.

A. DECA's core proposals.

DECA proposes two significant changes for the Commission's consideration that are designed to unleash the ability of end use customers to have a heightened beneficial impact on the grid as a whole. This is accomplished by increasing the penetration of smaller-scale scale Distributed Generation in areas where the grid as a whole and all ratepayers benefit from the increased participation of end use consumer-producers.

1. Direct and/or Aggregated Participation of Distributed Generation in Utility RFOs for new generation.

DECA recognizes that a residential rooftop photovoltaic installation is not easily compared to a 50 MW combustion turbine for a variety of reasons, some obvious and some oblique. However, if the Commission wishes to play an active role in helping reach the governor's 12 GW DG and green jobs goals, the upcoming OTC-retirement driven new capacity

RFOs remain the best vehicle for doing so. The Commission's Renewable Auction Mechanism (RAM) has demonstrated that the costs of PV based DG systems have come down to numbers that are fundamentally different than those that existed when the Commission undertook the CSI program. DECA's initial calculations suggest that PV DG can compete most effectively against traditional fossil generation in transmission constrained local areas recognized by the CAISO and the Commission's own RA program. These local areas are generally subject to high capacity prices for even small amounts of new capacity, while prices associated with a poorly planned RFO for a large number of repowers driven by OTC retirements may produce near-monopoly pricing for new generation. Additionally these areas see much higher LMPs" than the rest of the system on average. These LMPs are likely to be even higher than historically observed LMPs in the same area based on the OTC retirements and the lack of air permits for repowers. These factors, when combined, serve as the foundation for aggregated PV resources to be able to directly compete against fossil resources for providing on peak power.

DECA proposes that these resources, when aggregated, be compared directly against fossil resources in utility RFOs either directly or in the "by MCC bucket of increasing availability" order proposed below. Those RFOs should compare the aggregated PV resources based on calculated production curves, regardless of if these resources are in front of or behind the meter for purposes of the RFO. The DG resources do not need to be participating in any other Commission programs for DG such as the RAM, CSI, or NEM. Rather, any DG would be bidding in a capacity price based on the aggregator's choice of locations, customer load profiles, and other specifications.

The total benefits and costs of that capacity bid would, as part of the RFO, be compared against the benefits and costs of fossil resources participating in the RFO. The aggregated DG resources would, as part of the analysis, be credited for forecasted avoided LMPs for all of its generation as well as for the avoided costs of gas hedges and the forecast avoided gas prices at

the point of delivery based on the next highest bid fossil-based resource. It is expected that these resources would be oriented westward to maximize the avoided LMP calculus in the RFO analysis rather than southward to maximize the total number of MWh.

2. Structuring RFOs around sequentially filling Maximum Cumulative Capacity buckets

DECA proposes that the existing RFO structure be slightly modified to produce results that are more consistent with the state's preferred loading order and the governor's 12 GW DG and green jobs goals by re-orienting the traditional "product and attribute" utility RFO as a sequentially filled MCC bucket auction from least available to most available. The Commission's MCC buckets provide a mechanism by which the Commission can target procurement not by technology but by an availability-oriented targeted resource mix. In this proposal a utility RFO would order bids for new capacity based on availability characteristics of the resources bid into the RFO starting with the least available resources first. Those resources would clear the RFO within each MCC bucket, with the bucket size being based on the amount of space left in each bucket from the year prior's cumulative RA filings as adjusted for retirements. Once a particular bucket is filled, the next most available MCC bucket would be filled until the RFO's procurement target had been met. Under this proposal a resource that does not clear the auction in the MCC bucket in which it fits could be joined with other resources in order to compete in a subsequent, and therefore more available, MCC bucket as long as the paired resources are cost competitive.

B. DECA's answers to the questions as laid out in the ruling.

1. What changes should be made to the rules governing the Investor-owned Utilities (IOUs') procurement process that would allow all resources [...] to compete fairly in meeting identified needs?

DECA cautions that the ability for all resources to compete fairly to meet resource needs

cannot be ensured by a single action, but rather will require a series of changes related to both planning and procurement oversight. DECA's comments here are framed with regard to the ability of Distributed Generation resources to be able to compete fairly against traditional fossil resources to meet identified need. While DECA's examples here focus on small scale photovoltaic generation, the same mechanism can and should apply to demand response, load shifting energy efficiency investments, or storage. With that thought in mind DECA proposes here a number of mechanisms that will significantly help a broader range of loading order preferred resources to compete in the IOU procurement process. This proposal utilizes the Vote Solar framework as presented in the September 7, 2012 workshop as a stepping off point, but expands it to consider a variety of other factors.

DECA proposes eight changes that will help facilitate all resources from competing in head to head RFOs:

≅ Encouragement of Aggregated Distributed Generation ("ADG") in utility RFO process.

≅ Rule changes in other proceedings to ensure that a program such as CSI's goal of maximizing MWh does not prevent resources from providing the most value relative to peak load or avoided LMPs.

≅ The procurement process should value ADG based on the Locational Marginal Price of its generation as exported to the grid, the avoided cost of the generation when consumed behind the meter, and the avoided cost of fuel hedges for offset fossil resources.

≅ Utility RFOs should evaluate more highly preferred resources in the loading order based on the opportunity cost of the next resource "down" in the loading order's bid into the RFO. The difference between the clearing price of preferred resource and the full cost of the next resource should be allocated to other higher in the loading order needs.

≅ Ramping needs should not drive OTC replacement procurement policies or practices and the

Commission should not ignore cheaper system resources' incremental ramping capability outside of local areas.

≅ Target procurement for local areas first with an effort to maximize resources that fill the "less available" Maximum Cumulative Capacity ("MCC").

≅ IOUs should be required to study how to optimize Distributed Generation, Demand Response, and Storage resources that are paired with traditional scheduled resources with the goal of minimizing emissions and high wholesale prices that are not coincident with peak load.

≅ The Commission should remove control of the Independent Evaluators ("IEs") from the utilities and IEs should be directed to prioritize the preferred loading order in the procurement oversight process

These eight proposals are addressed in greater detail in subsections a. though h. on the subsequent pages. DECA's MCC bucket-oriented RFO proposal is addressed in greater detail in response to question 5, below.

a. The Commission should allow Aggregated Distributed Generation ("ADG") aggregated small scale demand response and aggregated small scale storage to compete against other resources in meeting Local Capacity Requirements ("LCR") in a utility RFO process.

The aggregation of DG by third parties or by a mechanism in the RFO is essential for ensuring DG is adequately rewarded for all of the contributions it is capable of bringing to a local area and to enable an apples to apples comparison of DG with larger scale fossil resources.

b. The Commission should consider changing rules in other proceedings to ensure that a desire to maximize the amount of MWh does not prevent resources such as solar from providing the most valuable DG resources based on maximizing avoided LMPs.

Commission policies such as the California Solar Initiative, the Renewable Auction Mechanism, and Net Energy Metering are misaligned with the cost avoidance methodologies that

would benefit a DG resource or aggregation of DG resources from maximizing their competitiveness in utility run RFOs because they may favor maximizing the total number of kWh rather than maximizing the avoided LMPs. The utilities themselves however, and their rate payers, are exposed to the actual incurred costs of the load in those LMPs. While some of these programs are intended to reflect avoided costs, the unique constraints of a local area and the high LMPs associated with them are not reflected in those programs. The benefits of avoiding those costs help ensure that all customers, regardless of where they are located, benefit from this geographically targeted procurement mechanism.

c. The procurement process should value that ADG based on the combination of the Locational Marginal Price of such generation if exported to the grid and the avoided cost of such generation when consumed behind the meter, as well as the avoided cost of fuel hedges for fossil resources including both statewide average fuel use and those unique to the local area and those unique to the other bids into a utility RFO.

A utility procurement process in which geographically targeted DG procurement is competing against traditional resources to help meet a utility's local capacity requirement should be sure to include the full value of the avoided cost of the LMP for the production of the ADG, regardless of if or how much that resource is exporting to the grid. The evaluation process should also include the avoided cost of the gas hedge. This can include the hedges associated with TeVaR or other hedging mechanisms, but should also reflect the real world risk that prices for natural gas may increase from their current historic lows over the life of the resources in question.

d. The utility RFO process should evaluate more highly preferred resources in the loading order based on the opportunity cost of the next resource "down" in the loading order's bid into

the RFO. Incremental value, meaning the difference between the clearing price and imputed costs and benefits of the preferred resource, and the fully imputed cost of the next, non-winning and less desired resource, should be allocated not to the winning bid but to other, potentially above market, needs e.g. incremental ramp, or higher cost technologies that provide more flexibility than the winning resource.

With good reason a predominant concern of the CPUC and the ISO has been managing the integration of increasing amounts of renewable resources in the midst of an unprecedented retirement of older resources that rely on Once Through Cooling ("OTC") technologies. The effects of conflating these two separate and distinct issues may end up being incredibly expensive. It would be a terrible outcome for all of California to pay very high costs for replacement capacity in geographically constrained areas during a temporarily constrained timeframe and to end up with antiquated technologies simply because inertia favors them. An RFO that is designed to capture the promise and potential of developing technologies could hardly find a better confluence of scenarios. Resources such as ADG with relatively high capacity factors have the potential to create a small pool of avoided costs that could be allocated to other preferred resource at no additional cost to ratepayers than the next dirtier alternative. Once factors such as the cost of air permits or the cost of the externalities of air pollution are considered, the pool of above market preferred resource funds may be even larger.

e. Ramping needs associated with renewables integration should not drive OTC replacement procurement policies or practices. The Commission should not ignore the ability of incremental ramping capability outside of local areas to provide that ramp more cheaply than a resource inside the local area.

The Commission is right to be concerned with the ramping need associated with

increased renewable penetration, but the procurement of local capacity resources, especially those driven by OTC retirements, is an unwise and constrained market to be procuring ramping resources. DECA's targeted DG procurement proposal will mitigate some of the oligopoly pricing associated with OTC replacement, but not a sufficient amount to be procuring a resource needed by the system that can obtained though technologies such as the storage technologies presented during the September 7, 2012 workshop or incremental ramping technologies by resources such as those proposed by Calpine at the same workshop. DECA believes that the procurement of ramping resources may be able to be achieved at a lower overall cost by procuring less rampable resources inside the local area and incremental ramp on a system basis.

f. The Commission should target procurement for local areas first with an effort to maximize resources that fill the smaller of the Commission's Maximum Cumulative Capacity ("MCC") "buckets", including resources that are of limited hours but still provide capacity during annual peak oriented hours of highest demand.

There is no quick fix to the difficulties the Commission faces with regard to resources that have different levels of flexibility, hours of availability, and fuel constraints, but the MCC buckets do provide a mechanism for ensuring that resources that are differently abled fit into a resource mix that is not too heavily weighted toward resources that by themselves are not adequate to ensure resource adequacy. The Commission can and should consider more broadly revisiting the MCC buckets with a mind toward resource mix on a forward going basis.

g. The Commission should require the IOUs to begin studying how to optimize Distributed Generation, Demand Response, and Storage resources with other scheduled resources with particular regard to morning and evening ramps and the goal of minimizing both emissions and high wholesale prices that are not coincident with peak load.

Reliance on a market simply because it is a "market" is unlikely to produce optimal outcomes for goals that are not explicitly designed to be captured by that market. The Commission should not expect wholesale energy markets, ancillary service markets, or capacity markets to produce results that it hopes for simply because they are markets. Rather, the Commission should utilize its authority of market participants to optimize their participation in those markets for the best interest of their ratepayers. This means taking the initiative to optimize factors both inside and outside of those markets to create efficiencies and not simply relying on the crutch that because a market produced the results it is therefore just and reasonable.

DECA supports utilizing the LTPP as a mechanism for considering these kinds of alternative solutions because the efficacy of such alternatives can be modeled and the relative merits debated in an open forum. As an example DECA suggests that a utility program that focuses on Electric Vehicle rates and technologies can be coordinated with the scheduling of flexible resources in the utilities RA portfolio more efficiently and effectively than a collection of resources with a particular set of characteristics would clear a wholesale market. Such a program could offer lower rates for EVs that allow the utility to set charge rates or times based on coordinated unit starts with the goal of reducing emissions or spreading a ramp need across a larger number of hours. Similarly, the utilities are better positioned to establish rate structures that expand the definition of demand response to both the up and down directions than wholesale markets.

h. The Commission should remove control of the Independent Evaluators ("IEs") from the utilities and those more independent IEs should be directed to prioritize the preferred loading order in the procurement oversight process

DECA believes that the utilities have not demonstrated an adequate adherence to the

preferred loading order in any of their RFOs and the blame for this lies in great part on their selection and management of the Independent Evaluator. To be certain the Commission itself shares blame in this regard, as does the efficacy of the Performance Review Group. Changing the IE program to preclude utility oversight of the IE will ensure that the utilities have done all they can objectively do to adhere to the preferred loading order in their procurement processes. Were the Commission to task the IEs with greater responsiveness to Energy Division staff or, alternatively, procurement review group members, much more responsive RFOs are likely to occur.

2. What amendments, if any, would be necessary to the most recent long-term Request for Offers issued by Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), and Southern California Edison (SCE) to ensure that all resources are eligible to compete in meeting future Request for Offers (RFO)? Are there any changes specific to meeting Local Capacity Requirements (LCR)?

See the response to question 5 below.

3. What specific characteristics or attributes must any resource -- including demand-side, energy storage, or distributed -- provide in order to meet future procurement needs? In the absence of a Net Qualifying Capacity, what methodology should be used to determine a proxy capacity value for resources lacking a Net Qualifying Capacity for use in LCR capacity accounting? How can these characteristics or criteria be turned into criteria to evaluate resources bid into a Request for Offers to meet LCR or other needs? How should those criteria be weighted?

DECA suggests generally supports the comments of TURN expert witness Kevin Woodruff at the September 7, 2012 workshop that the Commission only evaluate RA capacity in trying to meet the local capacity requirement of the LA basin with the additional consideration that the opportunity costs of energy and fuel costs should be factored into that consideration.

DECA strongly discourages the Commission from adopting a "ramp" capability to any

definition of capacity and encourages the Commission to take an active role in preventing the ISO from doing the same, especially with regard to local capacity requirements. There is little doubt that in a higher renewable penetration environment modeling the needs and capabilities of the grid will be more complicated than the grid during earlier eras, but creating a capacity product that is designed to protect ancient technology or limit the ability of new resources to provide many but not all things the grid needs is a costly and unwise undertaking.

Some have in the past advocated and will undoubtedly here advocate that the Commission should create a list of characteristics that the grid "needs" and that each Resource Adequacy sub-attribute should aggregate across each utility portfolio to ensure that all of the grid's needs have been met. DECA cautions against this method for several reasons. Such a method runs a high risk of building inefficiencies from the wholesale market into procurement activities at great expense to end use customers. The Commission also runs a significant jurisdictional risk associated with too closely relying on wholesale products or markets to address the states environmental and other policy goals when FERC may have different preferences for how to structure California's market. Additionally, such a method also may unduly burden a utility with a particular kind of customer with the costs of a statewide average of needs that is unreasonable.

Instead, the Commission should maintain a peak load oriented Resource Adequacy perspective but direct utilities to develop their own approach to addressing system needs in light of the expected wholesale market needs. This approach should consider rate, policy, and technology solutions to potential market constraints. As an example DECA suggests the above referenced Electric Vehicle rates, technologies, and resource scheduling proposal. Such a program could offer lower rates for EVs that allow the utility to set charge rates or times based on coordinated unit starts with the goal of reducing emissions or spreading a ramp need across a

larger number of hours. As another example, reliance on non-optimized relationship between load and wholesale markets has produced market signals that are driving street light loads down precisely at the time when the wholesale market is struggling with morning and evening ramp issues and a higher night time load may be most desirable. Similarly, the utilities are better positioned to establish rate structures that expand the definition of demand response to both the up and down directions than wholesale markets.

DECA believes that Net Qualifying Capacity needs to be revisited but that Qualifying Capacity should remain a core element of its replacement. In particular the "once deliverable, always deliverable" granting of netted capacity is unfair to new resources and unwise from a system planning and operational perspective. Additionally, ADG resources do not fit well into a transmission-focused netting process. Instead the Commission should move forward in concert with the ISO on a de minimus and deemed deliverable paradigm for new resources. Under such a paradigm the CAISO's queue, which has proven to be untenable and become a market affecting force unto itself, would be reserved for resources 1) over a certain size (e.g. 20 MW) and 2) up to a certain amount in aggregate based on modeled busbars and segments (e.g. 30% of load at any given point). DECA proposes that all generation that is not behind the meter be re-evaluated on a regular basis (e.g. once every year). Utility procurement practices would likely need to be adjusted so that capacity payments were not subject to such revisions over time to avoid deleterious effects on financing of projects, but this is a relatively minor adjustment to the status quo.

4. What are the pros and cons of the following procurement methods with regard to: 1) local procurement considered in Track 1 of LTPP, and 2) operational flexibility and general system procurement considered in Track 2 of LTPP?

A. *Continuation of current practices for procurement with minor clarifications.*

DECA believes that minor clarifications as addressed elsewhere in these comments can

address both the local procurement considered in Track 1 and the operational flexibility of Track 2. In particular DECA believes that a combination of its ADG/LMP proposal can be implemented though its MCC bucket-oriented solution to provide additional funding for incremental ramping and other unique resources at little or no incremental cost to ratepayers than the opportunity cost of the "next" fossil resource.

B. *A "portfolio approach" that allocates, based on strategic/portfolio considerations, the total quantity of new flexible resources among various eligible resources; SCE's alternatives.*

DECA sees great value in the a strategic portfolio approach to procurement planning, but recognizes the difficulties of implementing such a plan in the timeframe necessary, as an example, to optimally address OTC replacement. However, Southern California Edison's ("SCE's") Colin Cushnie's characterization of there being only two alternatives does perhaps oversimplify the situation. DECA believes that its MCC bucket-oriented solution can provide a mechanism for procurement that will bring new resources online in the context of a traditional local capacity RFO while still ensuring adequacy of resources, but there may in fact be additional work necessary in the short term to consider some "out of the box" procurement alternatives. In particular DECA suggests the following three actions:

1. SCE can and should with our without the assistance of the CAISO run studies of the local capacity area in which voltage constraints are not binding to determine how many MW of local "need" can be replaced with non generation resources such as shunt capacitors and synchronous condensers. The CAISO has already demonstrated its ability to utilize these devices to mitigate capacity needs in local areas in response to the current SONGS outage[1].

[1] See the CAISO report entitled "2013 LOCAL CAPACITY TECHNICAL ANALYSIS ADDENDUM TO THE FINAL REPORT AND STUDY RESULTS Absence of San Onofre Nuclear Generating Station (SONGS)

2. SCE should, rather than procure generic resources within the local area, target high priority DG areas within sub areas for the purpose of reducing risks of thermal overload and, should they occur, procurement within deficient sub areas that may require additional procurement in the local area even though the local area is already otherwise sufficient[2].
3. The Commission should direct SCE to expedite the development of three new rate or demand response programs, with at least one being a rate program and one being a demand response program that are designed to mitigate issues that exacerbate the local area need. Efforts should be made such that these programs could reduce the procurement of resources within the RFO, but no penalties would be associated with a failure to do so.

C. *Establishing a set of minimum criteria for operational flexibility characteristics for all acquired resources.*

DECA strongly opposes establishing a set of minimum criteria for operation flexibility characteristics for all acquired resources. Elsewhere it is comments DECA suggests revisions to the MCC buckets are a better mechanism for addressing renewables integration in the context of resource mix and fleet diversity than a universally applied set of operating requirements. DECA cautions that any such requirements are likely to be inexorably commingled with FERC-jurisdictional markets that will permanently reduce the state of California's ability to address its environmental and other policy goals without incurring significant costs in doing so.

D. *A "strong showing" requirement that the utility must demonstrate that its procurement process was substantially open to all resource types and appropriately considered*

August 20, 2012", pp.4-5.

[2] See, for example the deficient sub area issue as addressed by the CAISO for the SDG&E local area, *ibid*, pp. 2, fn *, 28, fn 10.

all of the values discussed above and that the resulting portfolio of resources is an optimal solution.

DECA does not believe that a ex post "strong showing" can be an effective mechanism for a utility to demonstrate that its procurement process was substantially open to all resource types or that it appropriately considered any particular values. Elsewhere in these comments DECA supports changing the role of IEs to help insure the Procurement Review Process is effective in helping ensure adherence to the preferred loading order.

DECA does support requiring the utilities to show that their resulting portfolio is an optimal solution, but such a showing cannot rely only on resource procurement but must also targeted coordination of procurement with rates and integrated demand side management including demand response and energy efficiency investments.

E. *Adjusting existing procurement mechanisms, such as the Renewable Auction Mechanism, to focus on the physical locations with needs that can be met by that programmatic resource.*

DECA supports geographic differentiation of procurement mechanisms based on the geographic value of that resource. This differentiation should not preclude cost effective resources in an area that could be considered a "system" resource from continuing to participate in procurement programs. By targeting procurement in areas with high capacity prices and high LMPs all ratepayers benefit from higher avoided costs for resources that would otherwise be procured in an area where they are less valuable. According to initial calculations by DECA, PV resources may be cost competitive against Combustion Turbines ("CTs") in areas with moderately high projected LMPs, avoided gas procurement and gas price hedging costs, and avoided capacity costs for fossil that would otherwise need to be procured. Additionally, the utility RFO process allows for greater control over the kind of resource that is brought online,

including the ability to, for example, reduce morning ramp needs by directing PV to be oriented toward the west to delay the onset of PV generation in the morning and extend it later into the evening when there are higher LMPs.

With regard to the RAM, the Commission should consider creating tranches of RAM authorization based on relative avoided energy and capacity costs across the RAM program rather than procure RAM only in particular geographies.

5. At the September 7th workshop, some parties discussed retrofits to existing generation assets as a potential source of incremental capacity. What, if any, changes would need to be made to the most recent long term RFO issued by PG&E, SDG&E, and SCE to allow for incremental capacity associated with retrofits to existing generation to compete to meet Local Capacity Requirements? Are there any differences in payment streams that should be given for existing capacity, as opposed to upgraded capacity?

a. The RFO process can be slightly modified to ensure both preferred loading order resources and incremental capacity can compete to provide local capacity.

DECA restates that local areas may not be the appropriate geographic area for procuring cost effective incremental capacity if the goal for such retrofits is ramping capability because "ramp" is generally regarded as a system rather than local need. However, truly incremental capacity, as opposed to ramp capability, can still be addressed in a local capacity area within the RFO process with minimal changes to the existing regulatory infrastructure and only slightly more changes to the traditional RFO process.

Unfortunately the RFO process as it is usually conducted is not well designed to capture efficiencies that may fall into a non-traditional category. As a general rule RFOs are "product and attribute" oriented, where a utility's need is translated into a series of products and the attributes of of the resources bid into each product are weighed against each other based on some valuation that is applied to all bid resources equally. As an example a product may be New RA capacity within a local area and the attributes could include ramp capability in MW, ramp rate in

MW/min, Ancillary Services, etc.

When a utility is building a portfolio that includes a great many attributes that are likely to be provided by winning bidders, this relative flexibility is very helpful for sending signals about what kinds of tweaks to a traditional resource a bidder should consider. If a product requirement is likely to be met by a resource that is not "traditional" the inclusion of many attributes that are not separated out as individual products makes it very difficult for resources to bid effectively. As an example, an RFO for new RA capacity written with the expectation for receiving bids from 50 and 100 MW CTs will almost certainly emphasize a minimum capacity of 25 MW, higher rather than lower ramp rates, a broader range of operation, and a higher number of permitted starts. If an aggregated PV resource of 10MW were seek to bid into such an RFO how should it describe its permitted number of starts? Are those 10 MW of capacity any less valuable than the incremental capacity of a CT that is 35 MW instead of the minimum 25 MW?

To address this shortcoming DECA proposes utilities hold an RFO for new RA capacity that is focused on "filling" the "least available" MCC bucket first. Once a particular MCC bucket is full, resources with less than the minimum requirement for the next most available MCC bucket would not be eligible to have capacity clear in the RFO. Put another way the MCC bucket oriented RFO would clear bids starting with the least available category and then decrease the granularity of resource availability until the procurement target was met. Bids could include a capacity price and a heat rate and/or production curve and could be cleared based on the preferred loading order within each MCC bucket.

DECA recognizes that the Commission's Energy Division recently proposed changes to the MCC buckets in R.11-10-023[3]. The MCC bucket oriented RFO should work equally well with either the existing or the MCC buckets as proposed by Energy Division, but DECA cautions that the "culture" of current DG providers such as PV may prove to be a hurdle with regard to

[3] See table on p. 15 of D.12-06-025.

dispatchability in the Energy Division's proposed buckets because they have built business models on different operating assumptions. Regardless, such an issue can be resolved encouraging business models based on such technologies to successfully bid into these RFOs.

b. Upgraded capacity should be entitled to payment streams based on incremental additions to the resource, not the underlying RA capacity itself.

Such an RFO should not commingle upgraded and existing capacity. The ramping characteristics of existing resources were paid for as part of the past RFOs, in which a stated preference for certain ramp rates was frequently made explicit. All resources are equally advantaged to provide incremental ramping capabilities based on the cost of such upgrades, which avoids paying extra for something that was already paid for simply because more of that things is now desired. By assigning incremental value only to new amounts of a desired attribute, the Commission can avoid paying a second time for something it already owns and can better judge the value of the attribute in the market. Additionally, the concept of paying a centrally cleared price for a particular kind of capacity has been rejected by the Commission for RA capacity already and should not be developed for ramping capacity for many of the same reasons.

6. At the September 7th workshop, both SCE and Enernoc raised concerns that it would be difficult to procure demand response resources that match the online dates (2017 to 2020) and duration (e.g., 20 years) of the conventional generation that is being contemplated as a source of LCR capacity. How could a demand side program be authorized through this LCR procurement process that delivers an on-line date and a duration that is comparable to conventional generation? What additional values are currently attributed to demand response resources in other markets that are currently not accounted for in California, and that might be taken into account as part of an LCR procurement process?

DECA does not believe a demand response program should be required to bid into an RFO with a 20 year product, rather the Commission should assume that a shorter period (e.g. 5

years) could be executed repeatedly over time. A surety bond for replacement capacity in any form of at least the same MCC bucket should be considered as part of any head to head DR capacity product. Even if a five year period is longer than most DR contracts are signed for, the cost of a performance bond for a relatively prompt period should not add too much to the cost of DR.

III. Conclusion

DECA hereby files its comments in R.12-03-014 in response to the September 7, 2012 joint workshop in this proceeding and in the storage proceeding R.10-12-07.

Respectfully submitted this 9th day of October, 2012.

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