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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years.	Rulemaking R.17-09-020

COMMENTS OF THE GREEN POWER INSTITUTE ON THE TRACK III RA PROPOSALS

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Pursuant to the January 29, 2019, *Amended Scoping Memo and Ruling of Assigned Commissioner*, as modified by the February 22, 2019, email Ruling of the ALJ, in the **Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years**, Rulemaking R.17-09-020, the Green Power Institute (GPI), a program of the Pacific Institute for Studies in Development, Environment, and Security, provides these *Comments of the Green Power Institute on the Track III RA Proposals*.

Unbundle Flexible and System RA

As far as we know SDG&E was the first party to propose unbundling flexible and system RA, which happened in the previous RA proceeding, R.14-10-010. GPI supported the unbundling proposal then, and we have supported it consistently every time it has come up since then. Several parties, including SCE and CESA, have re-advanced the unbundling proposal in their Track 3 proposals, and the GPI continues to support this proposal. The timing of need for flexible capacity and system capacity is consecutive but not overlapping, so there is no good reason for prohibiting their unbundling. RA counterparties are of course welcome to strike deals for the two products bundled together, but they should not be required to do so. Adding flexibility to the market rules ensures greater competition in the marketplace, and therefore lower costs for ratepayers.

Multiyear Requirements for Flexible and System RA

Several parties, including IEP and Middle River Power, propose extending the multiyear RA obligation currently in place for LCR-designated areas, to flexible and system RA requirements across the board. The GPI has consistently cautioned against imposing

multiyear RA obligations for flexible and system power, citing the fact that the current RA regime, which is based on no more than annual requirements for flexible and system power, has served the state well without displaying any cracks in the armor, and that imposing longer-term obligations for RA products runs the very real risk of delaying the transition from obtaining RA services from the existing fleet of gas-fired generators that currently provide the service, to the next generation of clean-energy technologies that will provide the needed RA products without causing greenhouse-gas emissions.

We understand the concern on the part of a number of parties to this proceeding, including parties that have responsibilities for running grids, that a subset of the state's gas-fired generators that are at risk of retirement over the next couple of years may in fact be needed to be kept online in order to ensure grid reliability in the near-to-middle timeframe. If there are indeed generators in this category, then we believe that the best way to keep these generators in service beyond the point where their owners want to shut them down is to deal with them directly, rather than enacting statewide requirements that, it is hoped, will provide the incentives needed to keep them in service. The problem is that other uneconomic gas-fired generators that are not truly needed for reliability will likely also be prolonged under this policy. There are a number of ways in which the generators that have been designated as truly needed can be dealt with directly, including by contracting with a central procurement entity, should one or more be created. New or extended statewide programs are not the best approach.

Causation Based Allocation of Costs of Flexible RA

CalWEA identifies a serious crack in the existing RA program that is the result of changes currently roiling the retail electricity marketplace in California. As energy procurement responsibilities are being assumed by an exploding number of small entities, it is becoming increasingly difficult to know who should be responsible for the costs of balancing supply and demand on the grid on a real-time basis. LSEs of all kinds are able to meet their RPS procurement obligations on the basis of total quantities of eligible resources procured during three or four year compliance periods, and many of the new, small LSEs are not

responsible for matching their supply portfolio and load profile on a real-time, seasonal and diurnal basis.

The CalWEA proposal assesses the costs of flexible RA procurement to LSEs on the basis of their proportional contribution to the need for the procurement of flexible resources by system operators. LSEs whose procured energy portfolio closely matches their load profile on a real-time basis would face relatively low flexible RA cost allocations, while LSEs whose procured energy portfolio is well out-of-phase with their load would face relatively high flexible RA cost allocations. The GPI supports this proposal in principle, although we caution that developing the methodology needed to perform the allocation will be challenging.

RA Values for Generator / Storage Hybrids

Several parties, including SCE and CESA, propose various approaches to assessing RA values for hybrid generator/storage projects. In the opinion of the GPI, if a generator of any kind installs and operates an associated storage system on the same side of the meter as the generator, then the RA value of the hybrid facility as a whole should be based on the profile of power that comes through the meter, regardless of whether the power is coming from the generator or the storage system. This is equivalent treatment to what is afforded a generator without associated storage. Per established practice, the initial RA value should be based on the initially projected output profile, while in subsequent years the RA value can be based on historical experience with the facility. As long as the hybrid facility is receiving revenues that are properly profiled to reflect seasonal and diurnal market values, the operator is motivated to operate the combined facility in such a way as to provide as much power as possible when power is at its highest value, which is exactly when it is most needed.

Flexible RA Product Enhancements

IEP proposes that Track 3 of the current RA proceeding, R.17-09-020, is a convenient point in which to make some useful enhancements to the existing, interim flexible capacity

program. The GPI agrees. We discuss below two program enhancements to the flexible capacity program that would facilitate the participation of existing and emerging clean technologies in the Commission's flexible RA program.

Fast and Slow Ramping Flexible RA

During the Track 1 of this proceeding, R.17-09-020, the CAISO, whose brief Track 3 proposal embraces previous proposals made during the course of this proceeding, made a proposal to split the flexible RA market into two components, one for slow-ramping flexible resources that can be scheduled in the day-ahead market, and one for rapid-response flexible resources that have response times on the order of five and fifteen minutes. The GPI supported the CAISO proposal when it was offered, and we continue to support it. Quantitatively the market for slow-ramping flexible RA capacity will represent the bulk of the MW needed to meet the afternoon ramp, while the smaller market for rapid-response flexible capacity will command a commensurately higher price. The slow-ramping market is designed to serve the predictable portion of the afternoon ramp (e.g. predictable on a day-ahead basis), while the rapid-response market is designed to cover the unpredictable, fluctuating portion of the afternoon ramp.

The renewable resources that are capable of supplying flexible capacity products, including biomass, biogas, and geothermal, are all fully capable of participating in the day-ahead-scheduled market. In order to serve grid needs biomass generators, for example, can dial down output to approximately 50 percent of rated capacity during days when there is surplus midday renewable power available to the grid, and ramp back up to full capacity during the course of the two-or-three-hour afternoon ramp. On the other hand, most preferred flexible resources are incapable of participating in the short-term markets. The separation of these two segments of the flexible-capacity market into the predictable and unpredictable portions provides an opportunity to the baseload renewables to participate effectively in the flexible RA capacity markets.

Flexible RA Portfolio Values

CEERT makes an interesting Track 3 proposal to the effect that rather than focusing on the RA values of individual resources, an LSE should have its RA status based on the assessed RA value of its integrated system. The rationale behind this proposal is that there may well be components in an LSE's integrated system that confer RA value to the system, but that are not credited with RA value as individual components. Examples of components in this category include slow-response clean generating resources, and storage of less than four-hours generating duration.

The GPI believes that the CEERT approach is fundamentally sound, although we are concerned about the difficulty of putting it into practice. As a possibly simpler alternative, we note that it should be possible to assess the RA value of the currently unvalued system components that CEERT is concerned about. For example, the GPI has long supported giving partial RA credit for storage of less than four-hours generating duration, and as detailed above under *Fast and Slow Ramping Flexible RA*, we support the proposal to bifurcate the flexible RA market into slow-response and fast-response components, which provides an entre for slow-response, flexible-capacity preferred generators to be assessed RA values, and participate in the flexible RA markets.

Conclusion

The GPI supports several of the Track 3 RA proposals put forward by the parties. In particular, we support the proposal to bifurcate the flexible-capacity RA market into slow-response and fast-response components. This proposal would facilitate the participation by several clean-energy alternatives in the Commission's flexible-capacity RA market. We also support the proposal to unbundle flexible RA products from system RA products, cost allocation for the costs of the flexible RA program to the LSE on the basis of causation. We oppose extending the flexible and system RA programs to be multiyear contracting obligations.

We recommend that the Commission adopt the recommendations of the GPI with respect to the Track 3 proposals in the RA proceeding.

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Respectfully Submitted,

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