June 16, 2017 – *via e-mail to Suzanne Casazza*

President Picker and Honorable Commissioners
California Public Utilities Commission
505 Van Ness Ave
San Francisco, CA 94102

Chair Weisenmiller and Honorable Commissioners
California Energy Commission
1516 9th St
Sacramento, CA 95814

Re: Sunrun's Response to President Picker's Informal Request for Comments

Honorable Commissioners,

Sunrun, Inc. ("Sunrun") and I appreciate the opportunity to both submit these comments and to speak with you as a panelist at the Joint California Public Utilities Commission ("CPUC") and California Energy Commission ("CEC") *En Banc* on The Changing Nature of Consumer and Retail Choice in California, held on May 19, 2017 ("Retail Choice *En Banc*").

Sunrun works to empower customers across California's diverse communities to help meet the State's renewable energy and climate goals. The distributed energy resource ("DER") services we provide assist retail electric providers, such as investor-owned utilities ("IOUs"), community choice aggregators ("CCAs"), and electric service providers ("ESPs"), to meet their obligations. Both existing State law and policy recognize DER service providers and our customers as complementary to, yet distinct from, retail electric providers and departing load customers. The surging popularity of CCA programs does not warrant changing this approach since DERs are compatible with all forms of retail choice, and the CPUC has only recently implemented its net energy metering ("NEM") successor tariff.

Rather, Sunrun urges the CPUC, CEC and the California Independent System Operator ("CAISO") to allow the on-going work within their respective agencies to build on the State's DER foundation and leverage the DER value stack in its efforts to address climate change, diversify our clean energy resources and empower consumers. Building upon California's progress towards a more customer-centric distributed clean energy grid requires minimizing, to the extent possible, the potential for regulatory uncertainty.

Sunrun responds below to the CPUC Staff paper entitled "Consumer and Retail Choice, the Role of the Utility, and an Evolving Regulatory Framework," published May 9, 2017 ("White Paper"). We also address the questions posed in President Picker's request for responses to the first, second and fourth panels, primarily focusing on those related to the second panel, the State of Customer Choice in California. Answers to specific questions are provided in the attached

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Appendix.

About Sunrun

California is our home. We are headquartered in San Francisco and have 21 facilities around the State. We provide service nationwide but approximately half of our customers are Californians. Our success is evidence of California's policy and regulatory leadership on DERs both within the State and across the country. Sunrun pioneered the concept of "solar as a service" model in 2007 with assistance from the California Solar Initiative and other-forward thinking policies. We have built on our success here and, to date, have nearly 150,000 DER customers nationwide.

We recognize our responsibility to be a good grid citizen and to ensure our systems provide net benefits to all ratepayers, whether they take service from an IOU, CCA, or ESP. We have developed BrightBox, an advanced DER that combines solar PV, advanced inverter technology and an energy storage system. Starting in Hawaii, and now in California, we have sold over 1,000 of these advanced systems. BrightBox systems also have been awarded incentives from California's Self-Generation Incentive Program and successfully bid into a demand response request for offers ("RFOs") in the State.

Sunrun takes seriously its responsibilities as a business working in California's diverse communities. We are committed to serving disadvantaged and low-income communities and part of that commitment includes helping make DERs more accessible to all residents, resulting in the installation of hundreds of solar PV systems for low-income households annually across the country. In California, we have participated in the Single-Family Affordable Solar Homes Program in partnership with GRID Alternatives as both a philanthropic supporter and a channel partner, enabling the broad benefits the program creates in participating communities. We also help advance the State's economic opportunities by creating jobs and hiring from all communities to ensure our workforce reflects the communities we work in. We partner with workforce development organizations at the local, state and national level.

DER Service Providers Are Distinct From Retail Electric Providers.

While Sunrun appreciates the opportunity the Commissions gave us to speak at the Retail Choice *En Banc*, it is important to emphasize that the services we provide are complementary to, yet distinct from, those provided by retail electric providers, such as CCAs, ESPs and IOUs.

The Commission's White Paper, and many of the questions raised for stakeholders, appear to conflate the related, but critically distinct, concepts of "customer choice" and "retail choice".[1] Customer choice embodies a customer's ability to invest in onsite DERs, energy efficiency equipment and other measures to take control of the level, content and cost of the electricity he or she consumes. Retail choice embodies a customer's ability to take retail electric service from an electric provider other than the incumbent IOU. DER service providers like Sunrun decidedly

[1] *See, e.g.*, questions II.B and IV.B.

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participate in the former but are distinguishable from the latter.

Both California law and policy recognize this distinction. Companies like Sunrun that offer third party-owned systems to customers through power purchase agreements and leases are specifically exempted from regulation as public utilities or other forms of load-serving entities ("LSEs").[2] The purpose of this exemption is to encourage the financing we offer to our customers, which unlocks the ability to invest in DERs for residents who are unable to afford the upfront payment that would otherwise be necessary to make such an investment. Without this exemption, rate-based regulation designed to ensure that monopoly LSEs operate in the public interest would effectively limit customers' ability to choose residential DER solutions, which can have high upfront costs but are affordable over the longer-term.

Because the CPUC does not regulate the rates DER companies offer to customers, in addition to the lack of statutory provision providing oversight, we have no direct obligations to meet the Renewable Portfolio Standard ("RPS") or integrated resource planning ("IRP") mandates. Instead of these obligations, we provide renewable energy resources to customers which assist the retail electric providers in meeting their obligations by lowering the baseline of renewables needed to comply overall with the RPS and IRP mandates. The surging popularity of CCA programs does little to change this calculus since DERs are compatible with all forms of retail choice, as evidenced by the NEM programs put in place by Marin Clean Energy, Sonoma Clean Power Authority and Peninsula Clean Energy.

This approach makes sense for the State. The nature of service a DER company provides is different than that from a retail electric provider. We tailor our service to respond to the goals of an individual customer in relation to their existing electricity usage. We do not procure any generation on our customers' behalf, we cannot serve every customer in a particular geographic area, and we are not providers of last resort. Treatment of third-party DER owners like other retail electric providers is also inconsistent with the fact that many customers purchase DER systems outright, meaning there is no service provider other than the customer's utility or CCA.

DER Customers Are Distinct From Departing Load Customers.

DER customers remain bundled customers of whichever retail electric provider serves them. Even for customers with onsite storage, the generating profile of most existing DERs means the energy and capacity the IOU, ESP or CCA has procured are still used to serve customers with onsite DERs. Such customers continue to take service from the same procurement sources as other bundled ratepayers, they simply purchase less of it. In this way, DER customers are similar to customers that have simply reduced the amount of electricity they purchase from utilities via energy efficiency, family members leaving home or other reasons. These reductions in load should be included in utility load forecasts already and do not require special treatment.

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[2] *See* Cal. Pub. Util. Code §§ 218(e), 2868(b) (Deering 2009) (specifically exempting "independent solar energy producer" from regulation as "electrical corporation").

California law recognizes the difference between DER customers and departing load customers. AB 327 established a separate standard regarding fairness in relation to cost allocation for NEM customers than State law and policy has established for CCAs; combined heat and power; direct access; and other departing load customers. Much of the controversy for CCA customers, for example, surrounds ensuring the concept of ratepayer "indifference." Participating CCA customers must ensure the "indifference" of non-participating ratepayers, a question focused on the costs that remaining ratepayers must bear on account of those departing.[3]

AB 327 established a more comprehensive test for DER customers. As the CPUC's D.16-01-044 explains, the Legislature deleted the reference to ratepayer indifference in AB 327, instead requiring "total benefits" of the CPUC's DER tariff to be "approximately equal" to the "total costs" of the tariff.[4] Since non-participants are not the focus of concern in Section 2827.1(b) of the Public Utilities Code, tests measuring the impact on non-participating ratepayers "cannot be the exclusive way to look at impacts" from customers participating in DER programs.[5] That is, for DER customers, fairness is a question of total benefits to the State rather than a question of non-participating ratepayer indifference. For this reason, the treatment of DER customers should remain separate from the treatment of departing load customers.

It is Premature to Revise the CPUC's Cost Recovery Framework for DER Customers.

Sunrun agrees with the White Paper that the CPUC's task is to seek to continue to adjust rates and tariffs like NEM "in ways to both allow customers to continue to make the choices they want while ensuring that all other customers are not left with an unfair allocation of costs."[6] While Sunrun continues to believe the evidence has shown, and will continue to show, that DER customers provide more grid benefits than costs to the electric system, the question of cost shifts related to DER customers is settled for the time being.

The CPUC recently issued D.16-01-044 to shore up the question of whether DER customers are paying their fair share. Specifically, the Commission:

- Aligned the way NEM 2.0 customers pay non-bypassable charges ("NBCs") that "support important programs that are used by and benefit all ratepayers" with the way non-participating customers pay NBCs;[7]

- Required all NEM 2.0 customers to take service under time-of-use rates to more closely align the value of the power such customers consume and export with system costs;[8] and

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3 Cal. Pub. Util. Code § 365.2 (requiring CCAs to ensure non-participating customers' are indifferent to participating CCA customers).

4 *See* CPUC, D. 16-01-044, p. 54-55 (Jan. 28, 2016) ("D.16-01-044").

5 *Id.* at 56, 58.

6 *Id.* at 89-91.

7 White Paper at 9.

8 *Id.* at 10; D.16-01-044 at 91.

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- Recognized that AB 327 allows the CPUC to consider allowing a utility to collect up to a $10 fixed charge to make sure customers who zero out the volumetric portion of their bills are still covering the customer-related costs they cause.[9]

It is premature to determine whether the NEM 2.0 framework is achieving its goals. The TOU rates under which NEM 2.0 customers will take service are subject to at least five different ongoing proceedings that could affect those rates for different types of customers.[10] Similarly, the methodology for determining the appropriate level of fixed charges for DER customers is still being determined.[11] It remains to be seen whether a CPUC staff proposal regarding the societal cost test, which is intended to determine whether NEM customers provide net benefits or costs to the system, will be the subject of formal hearings in the Integrated Distributed Energy Resources docket at the CPUC.[12] Thus, components critical to the evaluation of NEM 2.0 as a policy remain outstanding, let alone any evidence suggesting the policy is inadequate.

If, after these components are in place, and the implementation of the NEM 2.0 framework is complete, the Commission determines DER customers are not meeting the standard the Legislature has set for equity in cost allocation, then the Commission can, and should, work to revise the existing framework as part of its considerations of NEM 3.0. Additional regulation of how DER customers are credited for energy they export to the grid is unnecessary at this time and would exacerbate the significant market uncertainty DER providers are currently experiencing due to the unresolved questions from the current implementation of NEM 2.0.

Incumbent Retail Electric Providers Should Not Be Allowed to Pass On the Costs of Poor Planning.

Finally, certain utilities currently propose billions of dollars in grid infrastructure investments to modernize their distribution and transmission systems.[13] Many of these costs are excessive and represent poor planning on behalf of the utility, especially in light of the distribution and transmission deferrals DERs can provide. [14] Regardless of whether the Commission is addressing

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9 White Paper at 10.

10 *See, e.g.*, A.15-04-012 (SDG&E Phase 2 General Rate Case ("GRC")); A.16-06-013 (PG&E Phase 2 GRC); A.17-04-015 (SCE's application to implement default TOU rates); R.12-06-013 (the rulemaking considering residential rates); and A.16-09-003 (SCE's 2016 rate design window application). SCE's Phase 2 GRC is expected to be filed by June 30 this year.

11 *See*, *e.g.*, A.16-06-013 (PG&E Phase 2 GRC).

12 *See Administrative Law Judge's Ruling Shortening Response Time to Motion*, R.14-10-003 (May 19, 2017).

13 *See* A.16-09-001, SCE's Phase 1 GRC, in which the utility is requesting $2.2 billion from 2016-2020 for grid modernization upgrades.

14 *See Direct Testimony of Curt Volkmann on Behalf of the Solar Energy Industries Association and Vote Solar*, A.16-09-001 (May 2, 2017).

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customer choice or retail choice, costs should not be considered "stranded" or "unavoidable" if the IOU fails to make reasonable adjustments to its planning to avoid such costs.

The questions the Commission raises in its White Paper are important to the future of our State. We look forward to continuing to partner with the State, the Commission and other stakeholders to find a fair and efficient path towards California's clean energy future.

Sincerely,

___/s/ Anne Hoskins_____

Anne Hoskins
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Cc: Service List for R.14-07-002.
Service List for A.16-09-001.

Appendix: Sunrun's Responses to Specific Questions

Question II A: Having heard from the customer panel, what value or services does your company/organization offer customers that is distinct from the distribution utility? Are there specific innovations in tariffs or services that you are better equipped to provide than the traditional utilities?

Answer: Sunrun is the largest dedicated residential solar company in the country and gives consumers access to rooftop solar which, in turn, enables customer choice, innovation, and clean air. We are distinct from the utility model because we give customers a chance to choose, and even own, their energy source. With the advent of smart inverters and batteries, we enable customers to be an even larger part of the solution to grid needs.

As DER providers and aggregators, we have the flexibility to build resources at appropriate locations and customize operations of the fleet to provide grid services. This distinguishes DER aggregators from centralized generation, and we are better equipped to handle services at a localized level and take advantages of tariffs and programs that are geographically targeted.

Question II B: As retail choice grows, whether through the growth in CCA programs or reinstatement of full direct access, what do you see as the role for the regulated utility and where do you see your company/organization competing and cooperating with the utility?

Answer: We work with direct access ESPs, CCAs and IOUs alike since we extend services to customers for all LSEs. From our perspective, we would like to see more uniformity across programs. Currently, customers and installers are facing some confusion related to rates, including related to the implementation of NEM in different service territories.

Customers need to understand the differences between the utility versus relevant CCA rates to make an informed decision about installing a solar system, potentially with the addition of battery storage. Due to differences in the approach to NEM between the annual utility "true-up" for net energy metering, and the monthly "bill settlement" approach employed by the CCAs with regard to the generation charge of the bill, it becomes difficult for customers and DER providers to keep up with different rules in the same service territory, which create customer confusion. Customers could benefit from a single site that provides an explanation of peak versus non-peak hours and rates, and an explanation of minimum bill, non-bypassable charges, Power Charge Indifference Adjustment and other required charges in simple language that customers can understand. It would be helpful for utilities and CCAs to work together and develop common methodologies across programs and develop simple tools to communicate the differences in rates and programs to customers.

Question II C: As competition evolves and as competitive suppliers and technologies presumably supply greater shares of customers' electric energy needs, what regulatory models do you believe are best suited to promote competition while ensuring that all

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necessary investments are made to achieve California's environmental goals while maintaining reliability? Why?

Answer: The current construct in which the CAISO governs the wholesale market, and the CPUC imposes resource adequacy requirements on LSEs is a good basic regulatory structure to maintain reliability. CCAs must procure system, local and flexible capacity in proportion to their share of peak load. In addition, they pay for new system resources contributing to system reliability through the cost allocation mechanism. Therefore, we believe that the current regulatory model ensures that all LSEs contribute towards meeting reliability needs.

With respect to the environmental goals, CCAs should be encouraged and funded to administer distributed generation programs like demand response, EV programs, and NEM to ensure continuity across the state. As more and more customers depart utility service, it is essential that they have alternatives under CCA service. We respect that CCAs wish to maintain autonomy for resource procurement; however, we also recommend that the CCAs and IOUs maintain continuity and uniformity across customer programs in the state.

Question II D: What are important authorities that the CPUC should maintain or gain in the future to regulate the supply and resource adequacy portfolios as heavily for non-IOU suppliers as it does for IOUs? Should all retail sellers be required to procure long-term system and local capacity, or should the utilities continue to bear this responsibility? Are there other types of investments that should be made by the utilities or the ISO rather than by competitive suppliers representing many distributed decision makers?

Answer: IRP will help the CPUC have better management over resource procurement across the state and determine the extent to which utilities should be responsible to supply capacity. However, it is important that the Commission encourage flexibility and shorter term contracts, to the extent allowed by law, to avoid relying too heavily on long-term commitments that make it difficult for LSEs to give customers choices.

Question II E: Should the cap on retail choice be lifted? If so, for all customers or only for non-residential customers? Without any limits whatsoever? Should retail choice be available to residential customers in CCA territories? Who should bear the provider of last resort in any particular area?

Answer: We support retail choice but also believe uniformity should be maintained across customer programs in the state to ensure customer choice. Residential customers have and should continue to options to make decisions that are best suited to their objectives - whether these objectives are savings, clean energy, or customized rates. From our perspective, our customers benefit from the more generous NEM rates provided by Marin Clean Energy and Sonoma Clean Power, and they should have the ability to choose their retail electric provider.

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Question II F: Does the utility business model need to change fundamentally to accommodate greater choice? If so, in what ways? For example, should the utilities eventually become pure distribution providers with no retail function?

Answer: At this stage it is premature to say if utilities should become pure distribution providers with no retail function. It should be up to customers to decide whether they wish to buy power from the utility or an alternative retail electric provider.

Question II G: What role do you see yourselves as competitive suppliers playing in the provision of service to low-income and hard to serve customers? How do we ensure that these customers receive the same level and cost of service as higher income and easier to reach customers?

Answer: We are committed to serving harder-to-serve customers, including those in disadvantaged and low-income communities. In addition to offering our solar services directly, Sunrun partners with GRID Alternatives, the SASH administrator, to provide financial support, donate installation equipment, and encourages our employees to volunteer in installations. These efforts help extend the benefits of solar power to low-income communities at an equitable level of service and cost. We support the continuation of SASH and MASH, key programs enabling solar in harder-to-reach communities. We are involved in the proceeding for an alternative NEM tariff for disadvantaged communities and support a utility-administered Green Tariff Shared Renewables model targeted at low-income customers located in disadvantaged communities.

We also take seriously our position to create jobs and hire from all communities to help ensure our workforce reflects the communities we work in. We partner with about 20 workforce development organizations at the local, state and national level to recruit diverse candidates, particularly for sales and installations.

Question IV B. Two kinds of customer choice are accelerating: customer-sited DERs and retail choice (either through CCAs and/or through other customer-driven processes). Do you see this as inevitable, or not? Do you think that the CPUC should react to it and/or adopt policy changes to shape it, or some of both?

Answer: The CPUC should not attempt to adopt policy changes to DERs in the scope of reforms related to retail choice. The surging popularity of CCA programs does not warrant changing the CPUC's approach to DERs since DERs are compatible with all forms of retail choice. As stated earlier, DER customers remain bundled customers of whichever retail electric provider serves them. Even for customers with onsite storage, the generating profile of most existing DERs means the energy and capacity the IOU, ESP or CCA has procured are still used to serve customers with onsite DER. DER customers are similar to customers who have simply reduced the amount of electricity they purchase from utilities via energy efficiency, family members leaving home or other reasons. These reductions in load should be included in utility load forecasts already and do not require special treatment. Additional

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regulation of DER customers and DER providers is unnecessary and would exacerbate the significant market uncertainty DER providers are currently experiencing due to the unresolved questions from NEM 2.0.

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