STANFORD
UNIVERSITY

June 11, 2018

California Customer Choice Team
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94100

Via Email: customerchoice@cpuc.ca.gov

Re: Comments of Stanford University to the "Draft Green Book" (May 17, 2018 Revision)

Dear Customer Choice Team:

Stanford University ("Stanford") provides these comments on the May 17, 2018 revision of the California Customer Choice An Evaluation of Regulatory Framework Options for an Evolving Electricity Market ("Draft Green Book") to highlight an aspect of customer choice that does not appear to be sufficiently captured in the draft report. Specifically, Stanford wants to address how any discussion of retail competition in California should reflect the decarbonization actions by end-use customers. Stanford has made major direct investments in renewable and low-GHG technologies and other capital improvements that will continue over time, resulting in much more efficient use of energy with very low carbon intensity. We encourage the Draft Green Book to advance future energy policy development that will encourage and foster other larger customers to make similar investments to combat climate change and further sustainability.

The Stanford campus has historically operated its own energy facilities for both electric and thermal needs. For decades the campus took service from on on-site cogeneration facility that provided both electric and thermal energy needs for campus operations, with back-up supplies periodically provided through PG&E. When the cogeneration unit was reaching the end of its economic life, Stanford engaged in a detailed study process that resulted in a multi-year, multi-million dollar program of electrifying the district heating/cooling processes, installation of on-campus PV projects on various buildings, and the contracting for a long-term off-site PV project[1]. Prior to the cogeneration unit's retirement,

[1] In 2016, the Stanford Solar Generating Station project was dedicated as part of SESI, which would help reduce Stanford's GHG emissions by 68% and fossil fuel use by 65%. See, https://news.stanford.edu/2016/12/05/stanford-unveils-innovative-solar-generating-station/.

Stanford also became a direct access ("DA") customer to gain access to tailored energy services and procurement to advance its sustainability and decarbonization goals.

Stanford's actions and new systems were undertaken in recognition that climate change constitutes the greatest environmental and socioeconomic challenge and opportunity of our time. Stanford's efforts, including the Stanford Energy System Innovations ("SESI") program are comprehensive, utilizing data from plug load analysis and realtime telemetry, demand response, energy efficiency investments in buildings and equipment via an innovative electric heat recovery system, electrified bus and other transport, as well as other innovative retrofit efforts. Taken together, these programs have significantly reduced the campus GHG footprint. Put simply, Stanford has taken bold steps into the energy system of the future with demonstrable environmental benefits[2].

In addition to a major investment in behind the meter (BTM) rooftop solar on campus, Stanford entered a long-term contract for a new PV project located off-campus to advance its sustainability program. As a Direct Access customer, Stanford contracts with an ESP to act as its retailer to bring the benefits of the off-campus solar project output to campus. Stanford directly contracted for the 67 MW PV project at wholesale to supply approximately 50% of its campus energy needs. This is similar to a procurement approach of another direct access customer noted in the Draft Green Book[3]. A portion of the output delivered by the ESP is sold to them as renewable supply to cover the ESP's current RPS obligation for the load, with the balance of the project output (and renewable attributes) delivered to campus in conjunction with other power purchased through the ESP. While this multi-link commercial arrangement works with the current RPS program design and CPUC rules, the new rules that will be implemented for the post-2020 period pursuant to SB 350 present a material impediment to this type of direct customer investment.

Beginning in 2021, ESPs—like other LSEs—must supply 65% of their RPS procurement from long-term contracts. In the last RPS proceeding, Shell Energy North America, L.P. presented a proposal to modify D.17-06-026 to allow ESPs to utilize the "long-term" attribute of the customer-provided supplies, such as how Stanford has its long-term off-campus project output delivered. D.18-05-026 denied Shell's Petition for Modification of D.17-06-026[4]. Without squarely addressing the scenario that Stanford is describing here, that recent decision rejected Shell's request on the grounds that the topic was previously litigated in that portion of the docket leading up to D.17-06-026, the decision that adopted RPS program modifications required by SB 350.

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[2] See the overview of Stanford Energy System Innovations (SESI) project at https://sustainable.stanford.edu/campus-action/stanford-energy-system-innovations-sesi.

[3] See Draft Green Book, page 21, in the section referring to BTM projects where reference is made to the purchase of power plants and wheeling to loads through Direct Access.

[4] See, D.18-05-026, posted at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M215/K717/215717833.PDF.

Stanford believes it is imperative that this long-term contracting policy be revised, particularly in light of the type of innovation and long-term commitments that entities like Stanford have currently undertaken to tackle the existential challenge of climate change. Rather than impeding such investments by end-use Direct Access customers, California's policies should encourage such customers to do long-term capital programs that develop resources and apply innovative technologies to better manage the provision of no- and low-carbon energy supplies for increasingly electrified processes.

Stanford's sustainability efforts are central to its overall operations and run through all of its long-term campus development activities. Stanford anticipates further increasing its utilization of off-campus renewable resources to supply its energy needs and effectuating delivery through Direct Access. However, we do not wish to be forced into long-term commercial arrangements with a single ESP for ten or more years simply so that ESP can recognize for regulatory compliance purposes the self-provision of resources by an end-use customer like Stanford. Changes are necessary if the SB 350 RPS long-term contracting rules deny customers the ability to have their ESPs utilize the long-term nature of the customer's investment without entering into a back-to-back long-term contract with the ESP. The CPUC should recognize that any evolution of customer choice must also encourage customers to directly invest in no- and low-carbon resources and technologies while leveraging the expertise of ESPs to provide the LSE services to deliver those resources.

We thank you for this opportunity to provide brief comments on the Draft Green Book and invite Staff to contact us for additional information about SESI and Stanford's award-winning sustainability efforts. Please feel free to contact me at (650) 721-1888 or jstagner@stanford.edu if you have any questions or if there is any other way that we can be of assistance.

Sincerely,

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