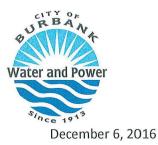
DOCKETED	
Docket Number:	20-MISC-01
Project Title:	2020 Miscellaneous Proceedings.
TN #:	233145
Document Title:	AB 2514 Burbank Water and Power 2014 Energy Storage Compliance Report
Description:	N/A
Filer:	Courtney Wagner
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Mr. John Mathias California Energy Commission 1516 Ninth Street, MS-20 Sacramento, CA 95814 john.mathias@energy.ca.gov

SUBJECT : BURBANK WATER AND POWER COMPLIANCE REPORT ON AB2514 COMPLIANCE FOR PERIOD ENDING DECEMBER 31, 2016

Dear Mr. Mathias:

Pursuant to the requirements of Assembly Bill 2514 (Skinner, Chapter 469, Statutes of 2010) ("AB2514"), Burbank Water and Power ("BWP") hereby reports to the California Energy Commission ("CEC") regarding the energy storage system targets and policies adopted by BWP's governing board. BWP's governing board is the City of Burbank City Council ("Burbank City Council").

On November 25, 2014, the Burbank City Council declared, consistent with BWP staff's recommendation, that there are no viable and cost-effective energy storage opportunities for BWP and, therefore, no targets were to be set pursuant to AB2514. A copy of the Staff Report recommending that action is attached. As such, BWP has not made any energy storage commitments to-date.

That said, BWP's efforts on energy storage have been and continue to be substantial, however. For example, BWP's efforts to catalyze a compressed air energy storage (CAES) pilot project at the Intermountain Power Project site in Delta, Utah are well-known. BWP is hopeful that such a project proves viable and cost-effective, as it should allow BWP to absorb significant amounts of additional, intermittent renewable energy (like wind and solar) while maintaining the high reliability and low rates that Burbank has come to expect from BWP. In this way, a CAES project could also assist BWP in continuing to reduce the greenhouse gas production associated with serving Burbank.

BWP is also actively investigating energy storage through its membership in the Southern California Public Power Authority (SCPPA), specifically its Energy Storage and Renewable Working Groups. For example, SCPPA's Renewable Working Group issues an annual request for proposals (RFP) for renewable energy, inclusive of a request for information (RFI) for storage projects, which receives hundreds of responses every year. A copy of that RFP/RFI is attached. While most of those responses concern renewable energy generation projects, an increasing number are storage projects and renewable-plus-storage projects. The Energy Storage Working Group goes even deeper, bringing in storage technology vendors, storage project developers, storage control and analysis software vendors, and fellow utilities for detailed discussions. BWP has already reached 33% renewables and is now planning, through an Integrated Resource Planning process, for the next RPS target of 50% by 2030. BWP currently anticipates that many, if not all, of those renewables will be intermittent and thus require investigation of options to integrate these future resources. BWP anticipates that energy storage systems will play an important role in this future integration.

Please contact Lincoln Bleveans, BWP's Power Resources Manager, with any questions about this report. He can be reached at 818-238-3651 and <u>lbleveans@burbankca.gov</u>.

Sincerely,

Jorge Somoano

General Manager Burbank Water and Power

Encs: BWP Staff Report dated November 25, 2014 SCPPA Request for Proposals for Renewable Energy Resources (Including Request for Information for Energy Storage Projects)



CITY OF BURBANK

Burbank Water and Power

STAFF REPORT

DATE: November 25, 2014

TO: Mark Scott, City Manager

FROM: Ron Davis, General Manager, Burbank Water and Power

SUBJECT: ENERGY STORAGE PROCUREMENT TARGET SETTING PURSUANT TO ASSEMBLY BILL 2514

RECOMMENDATION

Declare there are no viable and cost-effective energy storage opportunities for Burbank Water and Power; therefore, no targets are to be set in compliance with AB 2514.

BACKGROUND

AB 2514, signed into law in September 2010, requires among other things, that the governing board of each publicly-owned California electric utility (such as BWP) undertake a process to evaluate energy storage opportunities and, by October 1, 2014, adopt targets, if any, for the procurement of "viable and cost-effective" energy storage systems by December 31, 2016 and December 31, 2020. In this review, utilities may consider a variety of possible policies to encourage the cost-effective deployment of energy storage systems. AB 2514 also requires that each utility report these targets and policies, if any, to the California Energy Commission (CEC) following such adoption.

Utilities are further required to re-evaluate these targets and policies not more than every three years, with a report to the CEC.

DISCUSSION

The basic function of an energy storage system is to absorb energy when it is not needed, store it for a period of time with minimal loss, and then release it when needed. When deployed in the utility electric system, energy storage can serve a number of important roles in balancing generation and load, especially as increasing amounts of intermittent renewable energy resources are brought onto the system. These applications can occur on a large, regional scale (e.g., within the bulk electric system) and at a more local scale (e.g., on the local distribution system or "behind the meter" on a customer's site), and can comprise a wide variety of technologies in various stages of development, including various battery technologies, flywheels, and compressed air energy storage.

Energy storage is a potential enabling tool to continue to achieve BWP's commitment to provide reliable, sustainable, and affordable electric service to Burbank. For example, energy storage has the potential to effectively integrate intermittent renewable energy resources (such as solar and wind energy) by better matching the output of those resources to Burbank's needs. Energy storage also has the potential to allow BWP to better control its system (i.e., those resources and loads) relative to neighboring systems such as the Los Angeles Department of Water and Power, which may allow meaningful cost control opportunities for BWP. Finally, energy storage may allow BWP to better manage its distribution system and also allow BWP's customers to manage their energy use for increased reliability and cost-effectiveness.

Because of these potential benefits, BWP has been an early and active leader in investigating energy storage systems and applications for the benefit of its customers.

For example, BWP has been an important catalyst for the investigation of compressed air energy storage (CAES) at the Intermountain Power Project (IPP) site in Delta, Utah. The geology of this site, featuring a major underground salt deposit capped by solid rock, is particularly well-suited to CAES. A CAES project at this site has the potential to access low-cost, high-quality wind resources in Wyoming, store that energy and make it dispatchable through CAES, and transmit it down the existing direct current transmission line that currently brings IPP's output to Southern California. Such a project also has the potential to relieve solar-driven, over-generation issues in California, by absorbing that over-generation and then retransmitting it back to California when needed. Among other BWP efforts in support of this concept over the last few years, the Western Electricity Coordinating Council (WECC), which oversees the Western U.S. electrical grid, recently approved a BWP proposal to study CAES at IPP. A number of other market participants joined BWP in this proposal, including Wyoming wind project developer Pathfinder Wind, transmission developer Duke American Transmission Company (DATC), salt cavern developer Magnum Resources, and technology provider ABB. BWP and its partners are currently working to support this study with planning models and the assumptions necessary for the study. The study is the first of its kind for WECC and should be complete by the end of 2014.

More generally, BWP is preparing its system for distribution-level and customer-owned energy storage in a number of ways, including a study of customer-focused demandside management opportunities with Schneider Electric; continued roll-out of BWP's innovative Integrated Automated Dispatch System, which has the potential to optimize energy storage and other resources as loads fluctuate; and the development of a stateof-the-art, energy storage-ready interconnection agreement. At the same time, BWP is working closely with the Southern California Public Power Authority (SCPPA) and its fellow SCPPA member utilities in investigating potential energy storage technologies and projects, through leadership in SCPPA's Energy Storage Working Group as well as participation in SCPPA's Renewable Energy and Energy Storage Request for Proposals and SCPPA's Post-2020 Generation and Energy Storage Request for Information. Finally, BWP is considering energy storage as an integral part of its Integrated Resource Plan (IRP), currently underway. A CAES facility at the IPP site may be a potential replacement for, or component of a replacement for, the IPP generating facility.

BWP continues to vigorously pursue these initiatives in furtherance of its commitment to provide reliable, sustainable, and affordable electric service for Burbank. However, these initiatives have not yet resulted in viable and cost-effective energy storage opportunities for BWP. Therefore, staff recommends that no targets be established at this time for the procurement of energy storage systems by December 31, 2016 and December 31, 2020.

FISCAL IMPACT

No direct fiscal impact to BWP.

CONCLUSION

Staff recommends the City Council pass a motion which declares there are no viable and cost-effective energy storage opportunities for Burbank Water and Power; therefore, no targets are to be set in compliance with AB 2514.



SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY Request for Proposals for Renewable Energy Resources (Includes Request for Information for Energy Storage Projects)

Issuance Date: January 1, 2016 Response Deadline: December 31, 2016

Introduction

The Southern California Public Power Authority (SCPPA) is soliciting competitive proposals for renewable energy projects or products consistent with the California Renewable Energy Resources Program (Public Resources Code sec. 25740 et seq.) and the California Renewables Portfolio Standard Program (Public Utilities Code sec. 399.11 et seq.), including amendments enacted in 2011 by passage of California Senate Bill X1 2 (SBX1 2), and energy storage projects. SCPPA is targeting proposals for renewable resources with commercial operation or delivery starting in 2017 and beyond, but resources commencing operation or delivery sooner will be considered. RFP responses may propose (i) project ownership by SCPPA, (ii) a power purchase agreement with an ownership option or (iii) a power purchase agreement with an ownership option or (iii) a power purchase agreement without an ownership option. Effective January 1, 2016 this Request for Proposals (RFP) replaces all previous RFPs for renewable energy or energy storage projects posted by SCPPA.

Background

SCPPA, a joint powers authority (JPA) and a public entity organized under the laws of the State of California, was created pursuant to the Government Code of California and a Joint Powers Agreement for the purpose of planning, financing, developing, acquiring, constructing, operating and maintaining projects for the generation or transmission of electric energy and associated products and services. SCPPA is a "Cafeteria Style" JPA where the Member Agencies have the ability to "opt-in" to the projects they are interested in. SCPPA can procure resources on behalf of Member Agencies with one or more participants.

SCPPA is governed by its Board of Directors, which consists of a representative from each of its Member Agencies. The management of SCPPA is under the direction of an Executive Director who is appointed by the Board.

Member Agencies are twelve publicly owned utilities that supply electric energy within Southern California, including the municipal utilities of the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the Imperial Irrigation District (Member Agencies). Anaheim, Azusa, Banning, Cerritos, Colton, Pasadena, Riverside and Vernon are in the California Independent System Operator's (CAISO) Balancing Authority; the Los Angeles Department of

Water and Power (LADWP), Burbank and Glendale are in the LADWP Balancing Authority; and the Imperial Irrigation District operates its own Balancing Authority.

Member Agencies" electric utilities are governed by their respective city councils or other locally elected governing bodies. Many Members established voluntary renewable targets before SBX1 2 went into effect, including the percentage of renewable energy they wish to obtain within their portfolio. Some have set targets as high as 40% by the year 2020. Most of our Members have already exceeded their interim targets of 20% renewable energy and are now updating their objectives to meet 33% by 2020 as mandated by SBX1 2 and an even higher renewables target of 50% by 2030 as per the recently enacted SB350 sets.

SCPPA has an active working group focused on renewable energy development. This group, with representation from all twelve of the Member Agencies, meets twice a month and has reviewed over eight hundred sixty (860) individual proposals since 2007. As a result, around 1,700 MW of capacity is now being or will be delivered through SCPPA resources in support of its members" renewable objectives.

Ownership Participation

SCPPA is well positioned and experienced in facilitating joint ownership structures for renewable power or other projects for the benefit of its Member Agencies. SCPPA can acquire an ownership interest in a project and sell 100% of the output to interested Member Agencies at its cost. SCPPA would also consider power purchase agreements, either with or without an option to purchase the project during the term of the agreement or energy prepayment structures. There is a strong preference by most of the Member Agencies for optionality to purchase a project during the term of the power purchase agreement.

RPS and EPS Compliance

SCPPA continues to seek cost effective resources to support its members" Renewable Portfolio Standard (RPS) objectives for 2017 and beyond. This rolling RFP¹ seeks to find a best combination of projects or products to deliver energy from facilities that will be RPS compliant (pursuant to Public Utilities Code Sections 399.16 (b)(1) and (b)(2), i.e., energy and associated RECs in Portfolio Content Category 1, which is strongly preferred, or Portfolio Content Category 2) and compliant with the emissions performance standard (EPS) regulations adopted by the California Energy Commission (20 Cal. Code of Regulations section 2900 et seq.) upon COD and throughout the term of the agreement.

This rolling RFP also seeks to find the best combination of projects or products to store energy, including for the purpose of integrating RPS-compliant intermittent renewable energy into our members" systems.

SCPPA requires that during the term of any agreement, the Seller shall assume the risk of maintaining and bringing the facility or project into compliance should there be a change in law that renders the facility noncompliant with either RPS or EPS. Since this is one of the critical elements of a renewable project or product for SCPPA, please describe how this risk would be assumed and addressed by Seller.

SCPPA will consider Renewable Energy Credit (REC) only proposals for any term.

¹ See discussion of "rolling RFP" in Proposal Delivery Requirements.

Proposal Delivery Requirements

One electronic copy of your proposal must be e-mailed to <u>renewablesrfp@scppa.org</u> or delivered on CD or USB flash drive to the address below by no later than 12:00 p.m. on December 30, 2016:

Southern California Public Power Authority Attention: 2016 Renewable RFP 1160 Nicole Court Glendora, California 91740

For general questions, please call the SCIPPA offices at (626) 793-9364.

Clarification questions regarding this RFP may be addressed to renewablesrfp@scppa.org

SCPPA members seek tangible and timely opportunities to add renewable technologies to their generation portfolios and/or add storage facilities to their operations and thus will not entertain research or speculative proposals.

Since this is a "rolling RFP," proposals may be submitted at any time during the calendar year 2016. SCPPA reserves the right to review all proposals throughout the process of this rolling RFP, to contact proposers at any time to start negotiations, and to execute one or more agreements before the deadline for delivery of proposals.

Respondents who have previously submitted proposals for consideration and have not received formal regrets notifications from SCPPA may submit updates or revisions to the previous submittals with clearly noted reference to the prior submittal(s) and identify proposed changes, all under a new Transmittal Letter.

Newly submitted proposals by a prior Respondent may make reference to prior submittals for any required elements that have not changed (such as experience) rather than resubmitting boilerplate information.

No contact may be made with the Board of Directors, Committee Members, or SCPPA Member Agencies concerning this Request for Proposals.

All information received by SCPPA in response to this Request for Proposals is subject to the California Public Records Act and all submissions may be subject to review in the event of an audit.

Required Elements of Proposals

1. Transmittal Letter: Provide a brief statement of the Respondent's understanding of the work to be done and commitment to perform the work as scheduled, including a summary of any exceptions taken to the RFP requirements, statement of work, specifications, and reference to any proposed contractual terms and conditions required by the Respondent. An officer authorized to bind must sign the proposal on behalf of the Respondent and must include the following declarations on the Transmittal Letter:

> "This proposal is genuine, and not sham or collusive, nor made in the interest or in behalf of any person not herein named; the respondent has not directly or indirectly induced or

solicited any other respondent to put in a sham bid, or any other person, firm or corporation to refrain from submitting a proposal; and the respondent has not in any manner sought by colusion to secure for themselves an advantage over any other respondent."

- 2. Applicant Information: Provide the legal name of the company or entity making the proposal, the legal structure or form of the entity (e.g., Corporation, or LLC), physical address, e-mail address, telephone, and names and titles of individuals authorized to represent the Respondent.
- **3. Renewable Category:** Clearly identify the proposal as one or more of a combination of the following eligible renewable energy resource electricity products:
 - a. Wind, including all air-flow technologies involving a turbine of any type
 - b. Geothermal, including all temperature gradient technologies
 - c. Biomass, including dedicated waste feedstock or energy crops
 - d. Biomethane, including landfill, digester gases and gas conversion or gasification technologies where the conversion to electricity occurs on the same premises as the source of fuel
 - e. Biomethane of pipeline quality to be delivered and consumed at SCPPA's conventional thermal facilities on the Southern California Gas Company system. Bidders should include in their offers a NAESB base contract and a transaction confirmation proposing term, quantities, point(s) of delivery, price and other relevant terms. Bidders please note that offers will need to comply with the current edition of the California Energy Commission Renewable Portfolio Standard Eligibility Guidebook (presently version 8). Biomethane resources from California are highly recommended. A brief statement describing bidder's experience in conducting natural gas and biomethane transaction are encouraged
 - f. Hydro, including all mass-in-motion technologies involving fluids and hydro efficiency improvements
 - g. Solar, including all photo-voltaic and photo-optic technologies where light is directly converted to electricity
 - h. Solar Thermal, including all concentration technologies where a heat transfer medium is used to generate electricity
 - i. Municipal Solid Waste (MSW) or Waste to Energy technologies that can demonstrate the absence of incineration and are able to obtain certification as a Renewable Resource by the California Energy Commission
 - j. Fuel cell utilizing a renewable fuel
 - k. Permanent Load Shifting (PLS), including energy storage and permanent load-shifting technologies with a total round-trip efficiency generally greater than eighty percent (80%)
 - I. Environmental attributes not bundled with energy (Renewable Energy Credits)

4. Energy Storage Solutions (ESS):

SCPPA member utilities have a strong interest in the continued evaluation and analysis of the rapidly developing energy storage market. All types of energy storage technologies are open for consideration to be added into SCPPA member resource portfolios, if they are determined to be cost effective. In order to meet this need, SCPPA is conducting an energy storage request for information (RFI) where respondents can assist SCPPA members to better understand the current energy storage market landscape. In addition to the RFI, respondents are encouraged to submit ESS proposals or include future energy storage options to renewable energy project proposals to SCPPA.

5. Project Details: Clearly identify the proposed project, including the following information:

- a. Project Description: Project name and location, and phases of development if applicable.
- **b.** Contract Quantity: In MW and GWh/year, and by project phase if applicable, including nameplate rating and proposed amount of energy to be delivered. Please provide all MW increment options available for the project.
- **c.** Energy Price (variable): Expressed in nominal dollars (as of the year of COD) in \$/MWh, and itemized by cost components if applicable; the Energy Price, best and final, will start on the Commercial Operation Date (COD) and may include fixed price annual escalation rates or index plus fixed price component. Please provide all pricing structure options available, including a prepayment option.
- **d.** Energy Price (fixed): Expressed in nominal dollar value (as of the year of COD) in \$/MWh, with no escalation thereafter.
- e. Index Energy Price Plus Fixed REC Price: Expressed in nominal value (as of the year of COD) in \$/MWh with no escalation thereafter for the value of the RECs plus a price based on a published market index for the value of the energy.
- f. Delivery Term: Minimum term is 1 year with no maximum as the various Member Agencies are seeking both short-term and long-term delivery of energy. Please provide all delivery term options available.
- **g.** Energy Availability: Maximum and minimum monthly capacity factors, seasonal shapes, resource availability profile (i.e., 8760 wind profile of availability), reliability indices (reliability of the distribution system distribution indices to potentially Forced Outage Ratios or Planned Outage Ratios of generators), dispatchability (by unit or phase if applicable) and scheduling requirements/limitations, if any; any rights for SCPPA to perform full or partial dispatch.
- **h.** Buyer's Step in Right: Include SCPPA's requirement in the proposal that the Buyer may assume or cure any default by developer in the land lease.
- Point of Delivery (POD): Cost of transmission to a delivery point shall be included in the Cost of Energy to one of the following locations where one or more of the SCPPA Members can receive energy:
 - Marketplace
 - i) Westwing
 - i) NB

i)

- iv) Barren Ridge/Beacon
- v) Crystal 500 kV
- vi) Edorado 500 kV
- vi) Navajo 500 kV
- vi) Intermountain Power Project Station (IPP) switchyard
- ix) CAISO Grid (with preference of SP15)
- x) Mead 230 kV
- x) Mead 500 kV
- xi) Midpoint Victorville-Lugo
- xii) Bythe-Knob
- xiv) Mirage 230 kV
- x) Palo Verde 500 kV switchyard & ISO's Palo Verde/Hassayampa 500 kV tie with SRP BAA
- xvi) Imperial Valley 230 kV
- xvi) Perkins 500kV
- xvii) McCullough
- xix) North Gila 69 kV (ISO 69 kV tie with APS BAA)

The above listing represents locations where Member Agencies may have existing capacity rights. Other delivery points may be identified by Respondents on the condition that any and all associated costs of transmission ancillary services and scheduling are included up to the Point of Delivery. **Note:** Project evaluations will include the full cost of delivery to the customers of SCPPA Members within Southern California. The point of delivery to the CAISO must indicate whether the project qualifies for Resource Adequacy and/or Local Capacity Requirement capacity benefits.

- j. Environmental Attributes: Ensure that SCPPA shall receive any and all environmental attributes associated with the generating facility and the energy output, including but not limited to renewable energy credits and air emission credits or offsets (i.e., Greenhouse Gas Credits, at the location of source and for the gross output of the plant or otherwise credited).
- k. **Combustion:** For any proposals that involve combustion technologies, provide details on the forecasted emissions, emissions controls, and compliance with applicable emissions regulations.
- Category of Environmental Attributes: Specify whether the project qualifies for Portfolio Content Categories 1, 2 or 3 ("bucket 1, 2 or 3") under the California Public Resources Code (CPRC) and how the project would comply with the CPRC and any future interpretations of relevant statutes by the California Energy Commission.
- m. Capacity Rights/Shared Facilities: Ensure that SCPPA shall receive any and all capacity rights associated with the project and/or its produced energy.
 - i) Identify any energy and/or associated project capacity to be provided/committed to parties other than SCPPA.
 - ii) Identify any project supporting/associated facilities that require shared use or third party access rights, such as intermediate distribution infrastructure, control rooms, or other intermingled facilities. Describe any controls or provisions to assure the continuation of the described project capacity, e.g., for wind proposals any adjacent or future proposals encroaching on turbine spacing or airflow; for hydro proposals any limitations or regulations on water flow, diversion or water reservoir level maintenance requirements; and other potential impacts on the proposed project.
- n. **Ownership Options:** If the proposal includes an offer of ownership to SCPPA, describe the proposed ownership, terms and conditions, floors and ceilings for purchase prices at different option dates, beginning after ITC capture and up to the end of the term, and operational structures (e.g., 100% SCPPA-owned turn-key, corporation, general partnership, limited partnership).
 - In the case of an offer of initial ownership to SCPPA, a purchase price at Commercial Operation Date (COD) shall be specified (and expressed as \$/kW) along with an estimate of all recurring owner costs, including but not limited to operation and maintenance costs, taxes, lease payments, royalties, and insurance.
 - ii) In case of an offer of a Power Purchase Agreement (PPA) with a purchase option, the proposal shall include (a) a delivered energy price, in \$/MWh for the energy, environmental attributes and capacity (as Cost of Energy within Section 5.c.), (b) a buyout price or detailed formula to calculate such a buyout price for each future date on which a buyout would be offered; and (c) conditions for buyout, such as expiration of tax credits or other project events.
 - iii) For PPAs, terms up to the life of the facility will be considered.
 - iv) In order to get the lowest cost PPA by utilizing its low cost financing capability, when applicable, SCPPA would prefer to have the option to prepay for energy at the commercial operation date or use similar structures in any PPA.
 - v) No changes to a PPA will be expected during project financing or a change in control event.
- o. **Project Plan to Commercial Operation Date:** Identify the proposed commercial operation date with a satisfactory major milestone schedule that includes at least the following:

- i) Proposed schedule for obtaining and developing site access and control through executed leases, fee purchases, approvals, or other means.
- ii) Details of any prior or existing settlements made for environmental mitigation and clearly identified post-construction or pass-forward mitigation obligations that would be forwarded to SCPPA in the event a contract is executed (e.g., reserve or offset land for environmental habitat or reconstruction).
- iii) Proposed schedule for obtaining construction and operational permits and licenses, and construction financing.
- iv) Proposed construction schedule, including major equipment purchasing, anticipated Factory Acceptance Testing of major components, Site Tests, commencement of test-energy and Commercial Operation Date (COD).
- v) For projects or operations requiring water or make-up water, description of the water supply requirements and provisions for supply.
- vi) Proposed schedule or application status to acquire necessary transmission and interconnection service.
- vii) Description of whether and to what extent any environmental studies have been carried out with respect to the proposed project and how compliance with the California Environmental Quality Act (CEQA), which is a requirement before an agreement can be executed by SCPPA, might be effectuated, including, if the Project is located outside California, how Title 14 Section 15277 of the California Administrative Code is or will be addressed by the project.
- **p.** Future Energy Storage Options: Identify any energy storage solutions that can be included with the renewable energy project at some time in the future.
- **q.** Applicable to Renewable Energy Projects only: Please provide as much information as possible in the Preliminary Term Sheet in Appendix B (posted as a separate document below).
- r. Applicable to Energy Storage Solutions only: Provide the equivalent information, to the extent possible, for 5(a) through 5(n) above. In addition, please provide as much information as possible in the table in Appendix A (posted as a separate document below).
- s. Financing and Tax Equity Investor: Describe how the project will be financed such as; by parent company, backflip leverage, or some sort of Yieldco Structure.
- t. Credit Support and Security: Express in nominal dollars the amount of Performance Assurance provided from execution of the Power Purchase Agreement through COD and the amount of Performance Assurance provided after Commercial Operation Date as a letter of Credit, cash, or guaranty.
- u. Buyer Operational Reliability Curtailment: Express in MWh per year or hours per year the amount Buyer can curtail without compensation.
- 6. Experience: Respondent will clearly identify project participants and management team including those responsible for design, construction, permitting, operations and maintenance.
 - a. Describe your firm's organizational structure, management qualifications, and other contract related qualifications, including number of years the firm has been in business.
 - b. Specify key employees and describe their experience with the development, construction, finance closing, commercial operation, and maintenance of similar projects as proposed by Respondent in response to this RFP.
 - c. Provide current financial statements of all entities involved as Project participants or as part of the management team. This shall include items such as audited financial statements (not more than twelve months old) annual reports, FERC Form 1, and any other applicable financial information. If none of the above is available, Respondent shall provide verifiable financial statements for the past

three (3) years if available, and Respondent's Dunn & Bradstreet identification number, where available.

- d. Provide a commitment statement for the retention and use of key employees as proposed, their availability to initiate and sustain the proposal, as well as planned supplemental employees if key employees are not available to assure project delivery.
- e. Indicate any and all pending litigation that could affect the viability of Respondent's proposal or Respondent's financial stability.
- f. Identify existing projects in commercial operation that Respondent has developed and/or operates. Provide a list of references for similar projects completed, including a contact person, phone number and address.
- g. State whether Respondent will use subcontractors to perform services pursuant to the contract. Should the use of subcontractors be included, Respondent shall provide the same assurances of competence for the subcontractor, plus the demonstrated ability to manage and supervise the subcontracted work. Subcontractors shall not be allowed to further subcontract with others for work on this program. The provisions of this contract shall apply to all subcontractors in the same manner as to the Respondent.
- h. Describe the project/generation technology and technical resource data, including any studies or reports regarding the resource.

Terms and Conditions

- 1. If selected, SCPPA desires to enter into exclusive negotiations with respondent as may be facilitated through an execution of a Letter of Intent (LOI), Exclusivity Agreement or other agreements.
- 2. SCPPA reserves the right to cancel this RFP at any time, reject any and all proposals and to waive irregularities, if any.
- 3. SCPPA shall determine at its sole discretion the value of any and/or all proposals including price and non-price attributes.
- 4. Proposals may be sub-divided or combined with other proposals, at SCPPA's sole discretion.
- 5. SCPPA shall perform an initial screening evaluation to identify and eliminate any proposals that are, for example, not responsive to the RFP, do not meet the minimum requirements set forth in the RFP, are not economically competitive with other proposals, or are submitted by Respondents that lack appropriate creditworthiness, sufficient financial resources, or qualifications to provide dependable and reliable services for this RFP.
- 6. SCPPA reserves the right to submit follow up questions or inquiries to request clarification of information submitted and to request additional information from any one or more of the Respondents.
- 7. SCPPA reserves the right, without qualification and in its sole discretion, to accept or reject any or all proposals for any reason without explanation to the Respondent, or to make any award to that Respondent, who, in the opinion of SCPPA, will provide the most value to SCPPA and its Members.
- 8. SCPPA may decline to enter into any potential engagement agreement or contract with any Respondent, terminate negotiations with any Respondent, or to abandon the request for proposal process in its entirety.

- 9. Those Respondents who submit proposals agree to do so without legal recourse against SCPPA, its Members, their directors, officers, employees and agents for rejection of their proposal(s) or for failure to execute or act on their proposal for any reason.
- 10. SCPPA shall not be liable to any Respondent or party in law or equity for any reason whatsoever for any acts or omissions arising out of or in connection with this RFP.
- 11. SCPPA shall not be liable for any costs incurred by any Respondents in preparing any information for submission in connection with this RFP process or any and all costs resulting from responding to this RFP. Any and all such costs whatsoever shall remain the sole responsibility of the Respondent.
- 12. SCPPA may require certain performance assurances from Respondents prior to entering into negotiations for work that may result from this RFP. Such assurances may potentially include a requirement that Respondents provide some form of performance security.
- 13. Prior to contract award, the successful Respondent may be asked to supply a detailed breakdown of the applicable overheads and fringe benefit costs that are part of the labor rates and other direct costs associated with the services to be performed.
- 14. SCPPA Members, either collectively or individually may contact Respondents to discuss or enter into negotiations regarding a proposal. SCPPA is not responsible or liable for individual Members interactions with the Respondent which are not entirely conducted through SCPPA or at SCPPA's option or election to engage the Respondent as defined within the RFP.
- 15. Submission of a Proposal constitutes acknowledgement that the Respondent has read and agrees to be bound by the terms and specifications of this RFP and any addenda subsequently issued by SCPPA.
- 16. Information in this RFP is accurate to the best of SCPPA's and its Members" knowledge but is not guaranteed to be correct. Respondents are expected to complete all of their due diligence activities prior to entering into any final contract negotiations with SCPPA.
- 17. SCPPA reserves the right to reject any Proposal for any reason without cause or explanation. SCPPA reserves the right to enter into an agreement with more than one Respondent, to choose not to contract with any Respondent with respect to one or more categories of services, and to choose to suspend this RFP or to issue a new RFP that would supersede and replace this RFP.
- 18. SCPPA reserves the right to negotiate definitive agreements including but not limited to power purchase agreements and other agreements with a Respondent with any and all terms and conditions that SCPPA and/or its Members deem appropriate or desirable, whether or not such terms or conditions are specifically set forth in this RFP.

Additional Requirements for Proposal

1. **Consideration of Responses:** Submitted proposals should be prepared simply and economically, without the inclusion of unnecessary promotional materials. Proposals should be submitted on recycled

paper that has a minimum of thirty percent (30%) post-consumer recycled content and duplex copied (double-sided pages) where possible. (Applicable when LADWP is a potential project participant)

- 2. Insurance, Licensing, or other Certification: If selected, the Respondent will be required to maintain sufficient insurance, licenses, or other required certifications for the type of work being performed. SCPPA or its Members may require specific insurance coverage to be established and maintained during the course of work and as a condition of award or continuation of contract.
- 3. Non-Discrimination/Equal Employment Practices/Affirmative Action Plan: If selected, the Respondent and each of its known subcontractors may be required to complete and file an acceptable Affirmative Action Plan. The Affirmative Action Plan may be set forth in the form required as a business practice by the Department of Water and Power of the City of Los Angeles which is SCPPA's largest Member. (Applicable when LADWP is a potential project participant)
- 4. Prevailing Wage Rates: If selected, the Respondent will be required to conform to prevailing wage rates applicable to the location(s) where any work is being performed. Workers shall be paid not less than prevailing wages pursuant to determinations of the Director of Industrial Relations as applicable in accordance with the California Labor Code. To access the most current information on effective determination rates, Respondent shall contact:

Department of Industrial Relations Division of Labor Statistics and Research PO Box 420603, San Francisco, CA 94142-0603 Division Office Telephone: (415) 703-4780 Prevailing Wage Unit Telephone: (415) 703-4774 Web: http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm

- 5. Child Support Policy: If selected, Respondent may be required to comply with the City of Los Angeles Ordinance No. 172401, which requires all contractors and subcontractors performing work to comply with all reporting requirements and wage earning assignments and wage earning assignments relative to court ordered child support. (Applicable when LADWP is a potential project participant)
- 6. Supplier Diversity: Respondents shall take reasonable steps to ensure that all available business enterprises, including Small Business Enterprises (SBEs), Disadvantaged Business Enterprises (DBEs), Women-Owned Business Enterprises (WBEs), Minority-Owned Business Enterprises (MBEs), Disabled Veteran Business Enterprises (DVBEs), and other Business Enterprises (OBEs), have an equal opportunity to compete for and participate in the work being requested by this RFP. Efforts to obtain participation of these business enterprises may reasonably be expected to produce a twenty-five percent (25%) participation goal for SBEs. For the purpose of this RFP, SCPPA's Supplier Diversity program is modeled after that of the Los Angeles Department of Water and Power. Further information concerning the Supplier Diversity Program may be obtained from the Supply Chain Services Division of the Los Angeles Department of Water and Power. (Applicable when LADWP is a potential project participant)
- 7. Equal Benefits Ordinance: If selected, the Respondent may be required to comply with the City of Los Angeles requirements of the Equal Benefits Ordinance ("EBO"), codified at Los Angeles Administrative Code ("LAAC") §10.8.2.1, which requires the Respondent who provide benefits to

employees with spouses to provide the same benefits to employees with domestic partners. (Applicable when LADWP is a potential project participant)

- 8. Contractor Responsibility Ordinance: If selected, the Respondent may be required to comply with the City of Los Angeles requirements of the Contractor Responsibility Ordinance ("CRO"), codified at LAAC §10.40 et seq., which requires the Respondent and each of its subcontractors to comply with all federal, state, and local laws regarding health and safety, labor and employment, wage and hours, and licensing laws, which affect employees. (Applicable when LADWP is a potential project participant)
- 9. Sweat-Free Procurement Ordinance: If selected, the Respondent may be required to comply with the requirements of the Sweat-Free Procurement Ordinance ("SFPO"), codified at LAAC §10.43 et seq., which requires the Respondent and each of its subcontractors to shun sweatshop practices and adhere to workplace and wage laws. (Applicable when LADWP is a potential project participant)
- 10.Iran Contracting Act of 2010: If selected, the Respondent may be required to comply with California Public Contract Code Sections 2200-2208, wherein all bidders submitting proposals for, entering into, or renewing contracts with Buyer for goods and services estimated at one million dollars (\$1,000,000) or more are required to complete, sign, and submit the "Iran Contracting Act of 2010 Compliance Affidavit". (Applicable when LADWP is a potential project participant)
- **11.Los Angeles Municipal Lobbying Ordinance:** If selected, the Respondent may be required to comply with the requirements and prohibitions established in the Los Angeles Municipal Lobby Ordinance if the Respondent qualifies as a lobbying entity under Los Angeles Municipal Code Section 48.02. (Applicable when LADWP is a potential project participant)
- **12.SCPPA-Furnished Property:** SCPPA or a Member's utility drawings, specifications, and other media furnished for the Respondent's use shall not be furnished to others without written authorization from SCPPA or the applicable Member(s).
- 13. Contractor-Furnished Property: Upon completion of all work under any agreement developed as a result of this RFP, ownership and title to reports, documents, drawings, specifications, estimates, and any other document produced as a result of the agreement shall automatically be vested to SCPPA and no further agreement will be necessary for the transfer of ownership to SCPPA. SCPPA has the sole right to distribute, reproduce, publish, license, or grant permission to use all or a portion of the deliverable documentation, work product or presentations as it determines in its sole discretion.

SYSTEM DESCRIPTON	Installed Cost (\$/kW)	Levelized Cost (\$/kW-yr)	Levelized Cost (\$/MWh)	Maturity (1 lo-5 hi)	Capacity (MW)	Cycle Duration (hours)	Energy Density (kWh/m3)	Energy Volume (kWh/ton)	Roundtrip Efficiency	Maintenance	Cycle Life (C) reved capacity)	Full Ramp Req. (sec./min.)	Calendar Life
Describe											Contrast since They in the Contrast Street Line.		
Minimum													
Maximum													
Average													
Describe													
Minimum													
Maximum													
Average													
Describe													
Minimum													
Maximum													
Average													

Bulk Se	rvices		And	illary Servic	ces		1	Fransmission 8	k Distributio	n	Commercial / Industrial				Residential				
Peak Load Shift	Supply Capacity	Frequency Regulation		Voltage Support	Black Start	VER Load Following		Congestion Relief	Trans. Capacity	Dist. Deferral	Power Quality	Power Reliability	Energy Time Shift	Dem. Charge Mngmnt	Inc. Cool. Capacity	Power Quality	Power Reliability	Energy Time Stiff	Inc. Cool Capacity



APPENDIX B SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY PRELIMINARY TERM SHEET

FOR

[Developer Name]

Date	[Date]	
Buyer	Southern California Public Power Authority ("SCPPA", "Buyer", or "Party")	
Seller	[<mark>Owner's Name, LLC] ("Short Owner Name</mark> ", "Seller", or "Party")	
Project Name	[Project Name] (the "Project"), a [indicate type] generating facility with a net nameplate capacity of [] MW located in [county and state].	
Technology	[Type of facility and tracking mechanism if any]	Example: Solar PV -Fixed Tilt

Point of Delivery	The energy point of delivery ("POD") shall be the [Substation] in [County]. All transmission and ancillary service costs, including scheduling from the generating facility to the POD and transformer crossover fee for transmitting energy between substations, must be included in the Contract Price. Buyer will only purchase and pay for energy delivered to Buyer at the POD which energy shall be net of parasitic load, transmission and transformation losses. If Project delivers energy through the CAISO system, the appropriate PNODE will be [POD]	Check appropriate box Agreed Not Agreed Comments:
First Point of Interconnection	Seller must have a fully executed generation interconnection agreement at the time of execution of the PPA. The first point of Interconnection will be: [POI]	Check appropriate box Agreed Not Agreed Comments:
Buyer Operational Reliability Curtailment	The Buyer may elect to curtail the Project output of up to 100 hours per year or 4% of the Annual Contract Quantity of the first full Contract Year after COD.	Check appropriate box Agreed Not Agreed Comments:
Guaranteed Energy Production	Seller warrants that the Project will generate no less than 80% of the expected annual energy generation from the project ("Annual Contract Quantity"), for wind or solar, and 90% of Annual Contract Quantity for, base-load or other non- intermittent eligible renewable energy, measured over a full	Check appropriate box Agreed

	Seller shall warrant that the facility will be RPS Compliant (CPUC Section 399.16 (b)(1), i.e., Portfolio Content Category 1 resource) and EPS Compliant at COD and throughout the term of the PPA, and Seller shall assume any risk of bringing the facility back into RPS or EPS compliance should the facility fall out of compliance with RPS or EPS after COD and throughout the term of the PPA.	Check appropriate bo
	Seller shall be responsible for compliance obligations and other obligations associated with the facility, including but not limited to costs and expenses incurred by Seller which shall be paid directly to the third parties in connection with or related to, Environmental liabilities or costs, Greenhouse Gas Emissions Reporting, WREGIS, and CEC certification and verification ("Seller's Compliance Obligations").	Comments:
RPS and EPS Compliant	If after the COD and throughout the term of the PPA the facility falls out of compliance with RPS or EPS, then Buyer and Seller agree to the following sequence of actions; first the (i) Seller will take all commercially reasonable actions to bring the facility back into compliance with RPS and EPS and will also continue to maintain compliance with EPS and RPS after having brought the facility back into compliance for the remainder of the term of the contract, in the event that the facility is still not in compliance with RPS and EPS despite the actions of Seller under (i) then (ii) Buyer and Seller will mutually agree upon energy index price that Buyer will pay to Seller in lieu of the original contract price, which index price will not include the value of the environmental attributes, but in no event shall the new contract price be more than the original contract price, the new contract price shall remain in place until the facility is brought back into compliance with RPS and EPS, however (iii) if RPS or EPS laws cease to be effective or it becomes impossible for Seller to bring the facility back into compliance with RPS and EPS, Buyer shall remain obligated to purchase facility product at a mutually agreed upon energy index price that is without the value of the environmental attributes throughout the term of the PPA, but in no event shall such energy index price be more than the original contract price.	

Full Capacity Deliverability (CAISO Projects)	terms and conditions in the Project Purchase Option agreement Seller has executed large generation interconnection agreement ("LGIA") or small generation interconnection agreement ("SGIA"), as applicable with the California Independent System Operator ("CAISO") for energy and full capacity deliverability for the Project to qualify for RA and LCR benefits (as available). Seller shall reasonably support Buyer in Buyer's efforts to obtain LCR.	Check appropriate box Agreed Not Agreed Comments:
Site Control	Seller must have full site control for the Project, including real property, water, necessary easements and access and related rights such as Project site lease agreements and easements for the term of the PPA and/or ownership interest therein. Seller to provide copies of such interests in the Project site to Buyer. All real estate and other associated rights including lease agreements shall be transferable to Buyer upon Buyer's exercise of the Project Purchase Option. Seller to provide Buyer with step in rights to cure any defaults under any lease or development agreement(s).	Check appropriate box Agreed Not Agreed Comments:

Daily Delay Damages from the date of any missed milestone and every intervening day between that date and the earlier of (x) the date the missed milestone is achieved, or (y) the date, if any, on which the PPA is terminated by Buyer.	Comments:
If multiple Key Milestones are missed on any given day, and each such milestone requires the payment of Daily Delay Damages as set forth in Appendix 2, then Seller shall pay to Buyer the aggregate amount of Daily Delay Damages for each milestone missed.	

Non-Binding Term Sheet	Seller and Buyer fully understand and agree that this Term Sheet does not contain all of the requisite terms and conditions of a definitive agreement and is not intended to create, nor does it create, a binding and enforceable commitment between the Parties. Seller and Buyer fully understand and agree that no binding contract will exist between the Parties until the Parties execute a definitive PPA, all required approvals are obtained and all conditions precedent to the effectiveness of that PPA have been satisfied. Seller and Buyer fully understand and agree that any costs or obligations incurred as a result of or during the course of negotiation or other associated work on this term sheet shall be the sole responsibility of each individual Party itself and shall not implicate the other Party for any costs whatsoever.	Check appropriate box Agreed Not Agreed Comments:
Authorized Contact Name	[Names and Titles]	Contact Information: [phones, emails, addresses, etc.]

Appendix 2: Milestone Schedule

(Table To be completed)

Pre-COD

No	Guaranteed Date	Milestone Description	Daily Liquidated Damages for Delay ()	Security deposit at milestone achievement
1	10 days following PPA execution or as a condition to effectivenes s of the PPA	Project Development security (initial)		
2	Earlier of 241days following PPA execution Or 12 months in advance of COD notification	Performance Term Security (at COD notice)		
2	[Date]	Execute Site Control Agreement	<mark>\$XX,000</mark> for up to 180 days of delay	
3	[Date]	Execute Interconnection agreement	Mitigation Plan to complete	
4	[Date]	Executes Project financing documents	Mitigation Plan to complete	
5	[Date] Or an earlier date notified by the Seller	Begins construction of the Project Facility.	\$XX,000 for up to 180 days of delay	

