SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

NOTICE OF SPECIAL MEETING
Board of Directors

NOTICE IS HEREBY GIVEN by the undersigned, as the Acting Executive Director of the Southern California Public Power Authority, that a special meeting of the Board of Directors is to be held as follows:

Wednesday, January 31, 2024

9:00 AM

Southern California Public Power Authority
Training Center
1172 Nicole Court
Glendora, CA 91740

The meeting will be also conducted by teleconference from:

Anaheim Public Utilities
11th Floor Large Conference Room
201 S. Anaheim Blvd. #1101
Anaheim, CA 92805

Azusa Light & Water
729 N Azusa Ave,
Azusa, CA 91702

City of Banning
176 East Lincoln St.
Banning, CA 92220

Burbank Water & Power
164 West Magnolia Blvd.
Burbank, CA 91502

Cerritos City Hall
Public Works Conference Room
18125 Bloomfield Ave.
Cerritos, CA 90703

Colton Electric Utility
150 S. 10th Street
Colton, CA 92324

Glendale Water & Power
GWP Administration Office
141 N. Glendale Ave. Suite 450
Glendale, CA 91206

Riverside Public Utilities
Mission Square 5th Floor
3750 University Ave Suite 500
Riverside, CA 92501

Vernon City Hall
General Manager Office
3rd Floor
4305 S. Santa Fe Ave
Vernon, CA 90058

Imperial Irrigation District
Energy Administration Office – Conference B
1653 W. Main St.
El Centro, CA 92243

Los Angeles Department of Water & Power
111 North Hope St. Room 1132
Los Angeles, CA 90012

Members of the public may attend the public portion of the meeting in person at any of the above locations or access the meeting using the following link or call-in number:

Call	Meeting
Dial: 888-788-0099 Meeting ID: 923 7238 1802 Passcode: 914368	Zoom: Join Meeting Meeting Materials: Access Here

SCPPA, upon request, will provide reasonable accommodation to the disabled to ensure equal access to its meetings. To ensure availability, such request should be made 24 hours in advance by contacting the Authority at (626) 793-9364 or administration@scppa.org during business hours.

The following matters are the business to be transacted and considered by the Board of Directors:

1. **NOTICE / AGENDA AND OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD**
   Members of the public may address the Board at this time on any item on today's agenda. Comments from members of the public shall be limited to three (3) minutes unless additional time is approved by the Board. Any member of the Board may request that items on the agenda be taken out of order, or that items be added to the agenda pursuant to the provisions of Section 54954.2(b) of the California Government Code.

2. **PROJECT DEVELOPMENT**
   - **A. Resolution 2024-003**
     Approve Amendment No.2 to the Eland Solar and Storage Center, Phase 1 Project Power Purchase Agreement; Find such Action Exempt from the California Environmental Quality Act (CEQA)
   - **B. Resolution 2024-004**
     Approve Amendments No.1 and No. 2 to the Eland Solar and Storage Center, Phase 2 Project Power Purchase Agreement and Amendment No. 1 to the Eland 2 Option Agreement; Find such Action Exempt from CEQA.

3. **CLOSED SESSION**
   - **A. Conference with Legal Counsel – Anticipated Litigation. Significant Exposure to Litigation Pursuant to Paragraphs d(2) and (e)(2) of Govt. Code §54956.9: One potential case**
   - **B. Public Employment – Executive Director**

4. **NEW BUSINESS AND REPORTING OUT OF CLOSED SESSION**

5. **ADJOURNMENT**

DocuSigned by:
Mario De Bernardo
731F2E05FAF7414...

Mario De Bernardo
Acting Executive Director
Southern California Public Power Authority

AGENDA ITEM STAFF REPORT

MEETING DATE: January 31, 2024 **RESOLUTION NUMBER:** 2024-003

SUBJECT: Amendment No. 2 to the Power Purchase Agreement for the Eland Solar & Storage Center, Phase 1 Project with 68SF 8ME LLC; finding such action exempt from the California Environmental Quality Act (CEQA)

DISCUSSION: ☒ **OR** **CONSENT:** ☐

Select the appropriate box(es):

FROM:		**METHOD OF SELECTION:**	
Finance	☐	Competitive	☒
Project Development	☒	Cooperative Purchase	☐
Program Development	☐	Sole Source	☐
Regulatory/Legislative	☐	Single Source	☐
Project Administration	☐	Other *(Please describe):*	
Legal	☐		
Executive Director	☐		

MEMBER PARTICIPATION:

Sponsoring Member: Glendale and LADWP

Other Members Potentially Participating: None

Approved by Acting Executive Director: DocuSigned by: Mario De Bernardo 731F2E05FAF7414...

RECOMMENDATION:

Authorize the negotiation and approval of Amendment No. 2 to the Power Purchase Agreement ("PPA") regarding the Eland Solar & Storage Center, Phase 1 Project ("Eland 1" or the "Project") with 68SF 8ME LLC ("Seller") to provide assurances and stability ensuring the completion of construction and commercial operation of a solar plus battery energy storage facility delivering energy and storage capacity through the Southern California Public Power Authority ("SCPPA", "the Authority" or "Buyer") to two of its participating members, the City of Glendale ("Glendale") and Glendale Water

and Power and the City of Los Angeles acting by and through the Department of Water and Power ("LADWP") for the purpose of satisfying each utility's renewable electrical energy and energy storage resource goals. Find such action exempt from CEQA.

BACKGROUND:

The Project is to provide and deliver 200MWac solar photovoltaic energy supply and a 150MW/600MWh battery energy storage system (BESS) at the Barren Ridge Switching Station. LADWP will have an 87.5% share and Glendale a 12.5% share of all Project output for 25 years to facilitate the purchase of solar energy, usage of the BESS, and other rights and resources associated with the Project. Buyer and Seller entered into an amended and restated Power Purchase Agreement, dated as of July 21, 2020 ("PPA"). The Project currently has a Guaranteed Commercial Operation Date ("GCOD") of December 31, 2023, and an Outside Commercial Operation Date ("OCOD") of December 31, 2024. OCOD is the final date that Seller can achieve commercial operation of the facility unless a delay is solely the result of Force Majeure. The Amendment does not modify GCOD nor OCOD.

DISCUSSION:

- **Scope of Amendment:**
  Arevon Energy, owner of the special purpose entity 68SF 8ME LLC for the Project, requested SCPPA and its Participating Members to change some of the battery storage specifications and Appendices.

  The amendment brought before the Board for consideration and approval is Amendment No. 2 to the Eland 1 Project PPA. An amendment is necessary to change the Frequency Rate of Change Response Mode to a Frequency-Watt Curve to align with LADWP's balancing authority needs and to add additional flexibility to the frequency bands. In addition, during the facility design phase discussions by the parties, it became apparent to all parties that as the battery Round-Trip Efficiency (RTE) decreased the calculations for the RTE Underperformance Deduct decreased, which was not the intent of the parties. The RTE Underperformance Deduct should increase as the battery RTE decreased. These changes to the RTE Performance Test calculations are needed in the contract to be consistent with what was originally contemplated during the initial negotiations between SCPPA, LADWP, and the Seller. This also required corresponding changes to the definition of "Actual Round-Trip Efficiency" in Appendix U of the Eland 1 PPA.

- **Environmental Review:**
  This action is exempt from the requirements of CEQA pursuant to Section 21065 of the California Public Resources Code as it is not a "project" and will not result in a direct or reasonably foreseeable indirect effect on the environment and Section 15061(b)(3) of the State CEQA Guidelines because the action does not have the potential to cause a significant effect on the environment.

- **SCPPA's Authority:**
  In accordance with the Joint Powers Agreement, SCPPA may facilitate contracts and/or amendments for transactions involving procurement and development of electric generation capacity for SCPPA Members.

FISCAL IMPACT:

There is a de minimis impact on SCPPA's Administrative and General Budget outside of staff time to administer Amendment No. 2.

Glendale and LADWP have committed in writing to pay for any, and all, energy products and services from the Project over the term of the Agreements through project billing.

ATTACHMENTS:

1. Resolution 2024-003
2. Eland Solar & Storage Center, Phase 1 Project, PPA Amendment No. 2

RESOLUTION NO. 2024-003

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AMENDMENT NO. 2 TO THE ELAND SOLAR & STORAGE CENTER, PHASE 1 PROJECT POWER PURCHASE AGREEMENT AND SUCH OTHER DOCUMENTS, INSTRUMENTS AND AGREEMENTS AS MAY BE NECESSARY OR APPROPRIATE; AND FINDING SUCH ACTION EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, the Southern California Public Power Authority ("SCPPA" or "the Authority") owns interests in various generation and transmission projects, the output or services of which has been sold to Members of the Authority ("Members"); and

WHEREAS, certain SCPPA Members are engaged in the generation, transmission, and distribution of electrical energy to retail customers; and

WHEREAS, on May 16, 2019, after a competitive bid process followed by negotiations between SCPPA, certain Members, and developers, the SCPPA Board of Directors approved a Power Purchase Agreement (the "PPA") for the Eland Solar & Storage Center, Phase 1 Project (the "Project"), along with Power Sales Agreements with the City of Los Angels acting by and through the Department of Water and Power and the City of Glendale (the "Project Participants"); and

WHEREAS, the Project Participants and the Project developer have agreed to enter Amendment No. 2 to the PPA (the "Amendment") to modify calculations and formulas in the PPA related to performance of the battery energy storage system; and

WHEREAS, the Project Participants have reviewed and considered the revisions contained in the Amendment and concluded that it is in their respective best interests to implement such revisions; and

WHEREAS, this action is not a "project" under the California Environmental Quality Act ("CEQA") as it would not result in a direct or reasonably foreseeable indirect change in the physical environment and further, the action does not have the potential to cause a significant effect on the environment and is thus exempt from CEQA.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Southern California Public Power Authority as follows:

1. This action is exempt from the requirements of CEQA pursuant to Section 21065 of the California Public Resources Code and Section 15061(b)(3) of the State CEQA Guidelines.

2. The Amendment (including such other agreements, documents and instruments the form of which is attached to the Amendment or is referenced therein) is hereby approved in substantially the form as provided under this resolution. The Executive Director is hereby delegated all right power and authority to negotiate and finalize, and each of the President, Vice President and Executive Director of the Authority is hereby authorized and directed to execute and deliver the Amendment in substantial form as presented herewith, and each of such other agreements, documents and instruments the substance or form of which are referenced in or otherwise attached to the Amendment or which may be contemplated by the terms of the Amendment and to which the Authority is to be a party or is to sign, each with such changes, insertions and omissions as shall be approved by said President, Vice President or Executive Director (such approval to be conclusively evidenced by her or his execution and delivery thereof), and each of the Secretary and any Assistant Secretary is hereby authorized to attest to such signature.

3. This Resolution shall become effective immediately.

THE FOREGOING RESOLUTION is approved and adopted by the Authority on the 31st day of January 2024.

_____
PRESIDENT
Southern California Public Power Authority

ATTEST:

_____
Mario DeBernardo
ACTING EXECUTIVE DIRECTOR
On behalf of Michael S. Webster
EXECUTIVE DIRECTOR AND
ASSISTANT SECRETARY
Southern California Public Power Authority

AMENDMENT NO. 2
TO
POWER PURCHASE AGREEMENT

THIS AMENDMENT NO. 2 TO POWER PURCHASE AGREEMENT, dated as of this __ day of _____, 2024 (this "**Amendment**"), is being entered into by and among the SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY, a public entity and joint powers authority formed and organized pursuant to the California Joint Exercise of Powers Act (California Government Code Section 6500, et seq.) ("***Buyer***"), and 68SF 8me LLC, a limited liability company organized and existing under the laws of the State of Delaware ("***Seller***"). Each Buyer and Seller is referred to individually in this Amendment as a "***Party***" and together as the "***Parties***." Capitalized terms used but not defined herein shall have the meanings set forth in the Amended and Restated Power Purchase Agreement by and among the Parties, dated as of July 21, 2020, as amended from time to time in accordance with its terms (the "***Agreement***").

RECITAL

WHEREAS, the Parties wish to amend the provisions of the Agreement with respect to the matters set forth in this Amendment in order to correct certain mathematical and computational errors.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recital, which is incorporated herein, the mutual covenants and agreements herein set forth, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I
AMENDMENTS

Section 1.1 Section 1.1 to the Agreement shall be amended to delete the following defined terms: "Actual RTE Recovery Factor"; "Frequency Response Power"; "Recovery Ramp Rate"; "Response Period"; and "Rolling Average Period".

Section 1.2 Section 11.1(b)(xxi) to the Agreement shall be amended and restated in its entirety as follows:

(xxi) The amount of the RTE Underperformance Deduct, if any.

Section 1.3 Section 5 of Appendix S to the Agreement shall be amended and restated in its entirety as follows:

5. Control Modes

The general purpose of the BESS is to provide the BESS Products, which consist of different control modes listed and outlined in the following Table 1 of this Appendix S ("***Control Modes***"). Control Modes consist of settable functional parameters that trigger responses that the BESS can provide. The operation of any Control Mode or simultaneous Control Modes are subject to the BESS

Operating Limitations, Control Mode setpoints and priorities as specified and scheduled by the Buyer, and the BESS conditions (e.g., state-of-charge, temperature, etc.) at the time of operation of such Control Mode(s). Buyer shall have the ability to provide Control Mode set points for charge and discharge of the BESS as well as the ability to set specific MW charge/discharge values and priorities, subject to those limitations and conditions.

Table 1

The following Control Modes are from the MESA-ESS Specification, and reference should be made to either the MESA-ESS Specification or IEC 61850-90-7, (or the applicable IEC 61850-90-7 replacement), or standard mutually agreed upon by the Buyer and Seller for further details with respect to each Control Mode.

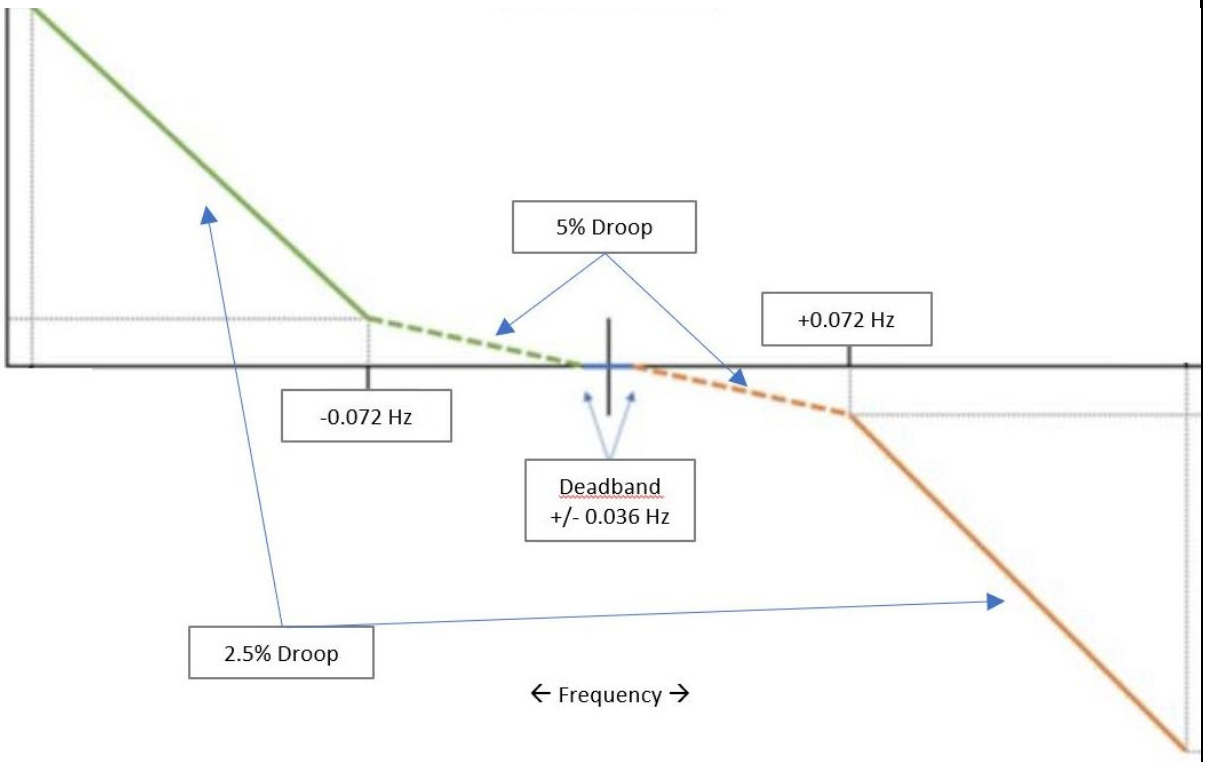
Control Mode Category	Control Mode
Emergency Modes	1. Voltage Ride-Through
	2. Frequency Ride-Through
	3. Dynamic Reactive Current
	4. Dynamic Volt-Watt
	5. Frequency-Watt (implement NERC Inverter-Based Resource Performance Guideline)[1]
Active Power Modes	6. Charge-Discharge Storage
	7. Coordinated Charge-Discharge
	8. Active Power Limit
	9. Active Power Response (configurable as Peak Power Limiting, Load Following, or Generation Following modes)
	10. Automatic Generation Control
	11. Active Power Smoothing
	12. Volt-Watt
	13. Frequency-Watt Curve
	14. Pricing Signal
Reactive Power Modes	15. Fixed Power Factor
	16. Volt-VAR Control
	17. Watt-VAR
	18. Power Factor Correction

The Parties acknowledge their understanding that the functionality set forth in Tables 2-6 below are covered in the various DNP 3.0 Control Modes in Table 1 above and will be implemented by such Control Modes. Setpoints to some Control Modes are included below to establish a common understanding of expected operations but Buyer shall have the right to direct changes to these setpoints at any time during the Agreement Term. In addition to the MESA Control Modes, the Parties agree that

[1] A frequency function/set point is needed to facilitate LADWP's compliance to NERC Reliability Standard BAL-003-1.1, requirement R1 or its successor. That would be a temporary MW output or input triggered by a configured change in frequency.

the BESS shall implement the Frequency Watt Curve as described below in Table 2 and shall not implement a "Frequency Rate of Change Response."

Table 2 – AUTONOMOUS FUNCTIONS

AUTONOMOUS FUNCTIONS *Certain functions shall be available to be simultaneously armed and actively operated. Initial priorities of such functionality shall be further specified by BESS Administrative Matters Protocol and further specified and prioritized through BESS Instructions.*
Frequency Watt Curve
Monitor grid frequency on the BESS side of the Point of Delivery. Continuously compute rate of frequency change.
The BESS plant controller shall alternately have setpoints for positive or negative rate of change of frequency below or above which the BESS will respond. The Frequency-Watt Curve shall allow for a two-level response characteristic. The first level will activate when the frequency moves past a dead-band and will respond at some specified droop percent or MW/Hz. Then, at some higher frequency excursion, the first level characteristic would shut off and the response would follow a different droop percent or MW/Hz. The following is an example (Actual frequency and droop numbers to be programmable by LADWP): Level one activates at +/- 0.036 Hz and responds at a 5% droop. Level two activates at +/- 0.072 Hz and responds at a 2.5% droop. 

Response time to the event shall comply with Table 2.1 in the NERC Inverter-Based Resource Performance Guideline.

Table 2.1: Dynamic Active Power-Frequency Performance

Parameter	Description	Performance Target
For a step change in frequency at the POM of the inverter-based resource…		
Reaction Time	Time between the step change in frequency and the time when the resource active power output begins responding to the change[31]	< 500 ms
Rise Time	Time in which the resource has reached 90 percent of the new steady-state (target) active power output command	< 4 seconds
Settling Time	Time in which the resource has entered into, and remains within, the settling band of the new steady-state active power output command	< 10 seconds
Overshoot	Percentage of rated active power output that the resource can exceed while reaching the settling band	< 5 percent**
Settling Band	Percentage of rated active power output that the resource should settle to within the settling time	< 2.5 percent**

** Percentage based on final (expected) settling value

Dynamic Reactive Current Support Mode Requirements
Monitor voltage at Point of Delivery
Default hold time (HoldTmms) for Dynamic Reactive Current Support Mode after voltage returns to inside the deadband is five (5) seconds. Default to Frequency Response and Frequency-Watt Curve are higher priority than Dynamic Reactive Current Support.
Ability to respond in a minimum of 1-3 Cycles from detecting and to provide reactive power in response to Point of Delivery voltage falling below 0.8 pu.
Reactive Power Control Modes Requirements
Monitor voltage on BESS side at Point of Delivery.
While voltage remains between 1.1 and 0.8 pu respond to deviations in voltage outside a defined deadband with proportional reactive power.
Ramp rate (MVAR / Sec) for adjustment of reactive power.
Scheduled (day/night) fixed power factor setting for reactive power support.

State of Charge Management (Coordinate Charge/Discharge Control Mode) Requirements
Monitor BESS SOC and provide a mechanism to regulate SOC, principally to recover SOC after discharge events (both manual and automatic).

Table 3 – EXTERNAL OVERRIDE CONTROLS

Provide functionality to trigger manual discharge, using the following parameters:
Continuous discharge power
Operator set point discharge time
Operator set point "On" ramp rate (MW / min or immediate)
Operator set point "Off" ramp rate (MW / min or immediate)
Reactive power set point (MVAR)
Reactive power set point timer (Hours)
Power factor set point
In addition to the MESA-ESS specification of Charge/Discharge Storage Control Mode, provide the following functionality when the BESS is in Charge/Discharge Control Mode:
10 seconds maximum response time after receiving external command to execute manual discharge or apply reactive power
If present conditions do not permit requested discharge (e.g., SOC is too low), BESS shall report the maximally conforming parameters which are available over DNP 3.0.
During manual discharge or manual reactive control, BESS shall indicate which, if any, autonomous functions are disabled or degraded.
After manual discharge cycle is complete, BESS shall resume autonomous functions including automatic SOC management.

Table 4 – CONNECTION AND DISCONNECTION FROM LADWP GRID

CONNECTION AND DISCONNECTION FROM LADWP GRID
While voltage and frequency remain within the specified voltage and frequency windows, the BESS shall remain connected to the LADWP grid unless instructed otherwise by disconnection signal or otherwise unavailable. System will stay connected and operational pursuant of Section 9.5 (Guaranteed Availability) of the Agreement.
Provide function for commanded disconnection from LADWP grid both remotely and via local HMI. This is to be used for routine disconnection when sufficient warning is available to permit normal standard disconnect procedures by the BESS.
Provide functionality to accept an emergency disconnect input in the form of a dry contact. If instructed to open the BESS must immediately cease operation.
Startup and connection time from an "Off" or "Disconnected" state to "Connected and Idle" shall be no more than 300 seconds if the battery and inverter thermal management loads are energized and the inverters are not set to "Sleep Mode". If the BESS is "Disconnected" but the main breaker is still closed, the BESS shall provide Buyer a timeout setpoint that causes the BESS to transition to a "Disconnected" state with the breaker closed but the inverters set to "Sleep Mode" after a Buyer setpoint number of minutes. The time to return from "Disconnected" and "Sleep Mode" to "Connected and Idle" shall be no more than 600 seconds if the BESS main breaker is closed and thermal management loads are energized. If a "Disconnected" or "Off" state opens the BESS main breaker, which removes battery and inverter thermal management power, then startup and connection time will be dependent on local temperature conditions and may exceed 600 seconds. The BESS shall report estimated time to "Connected and Generating" at all times. Inverters in "Sleep Mode" represents state where inverters are not switching and not synchronized to the grid.
4 seconds maximum time for BESS Point of Delivery disconnection after receiving emergency stop signal.
Behavior of BESS while the control systems are powered by a UPS, or an alternative auxiliary power supply, when the mains power line is shorted or opened shall be to disconnect until normal operations are restored.
Behavior of BESS when the mains power returns while the control systems are still powered by the UPS or an alternative power source shall be to reconnect as directed by Buyer.
The BESS shall have a microprocessor-based relay protection system (such as SEL 351) with CTs and PTs to detect overcurrents and to disconnect the AC breaker.

Table 5 – REMOTE MONITORING AND CONTROL

REMOTE MONITORING AND CONTROL Requirements
1 second sampling time for BESS-LADWP communication mechanism for data transfer during faults/triggered actions.
Connection to external communications systems via one console for LADWP EMS and one console for local control
Heartbeat timer to ensure communication path is online and processor is functioning
Minimum available metrics via both data transfer and operator control updated by event driven data or buffers.
Current operational status

REMOTE MONITORING AND CONTROL Requirements
Total real power (MW)
Total reactive power (MVAR)
Total complex power (MVA)
SOC (expressed as percent) SOC = State of Energy / Actual BESS Energy Amount (MWh)
State of Energy (Expressed as MWh of real power (alternating current)) State of Energy = MWh ready to discharge (under real time conditions)
Current power capabilities in all quadrants
Voltage and frequency as measured at Point of Delivery
Operation mode
Fault codes / description
Contractor to supply points list and sampling frequency
2 seconds maximum response time for implementing changes to set points

Table 6 – PERFORMANCE VALIDATION

PERFORMANCE VALIDATION
BESS SCADA must compute and deliver in accordance with Section 7.3 and store in accordance with Section 11.5 of the Agreement. Buyer and Seller shall agree on form of monthly performance report.
Audit data must be accessible via an onsite HMI. Seller may select appropriate methods to supply this function.
Audit data must be accessible to LADWP's emergency management system. Seller may recommend appropriate methods to supply this function.

Section 1.4 Section 6 of Appendix U to the Agreement shall be amended and restated in its entirety as follows:

6. **RTE Performance Test**.

The "***RTE Performance Test***" shall calculate the Actual Round-Trip Efficiency, where:

"***Actual Round Trip Efficiency***" = 100% * (Total Dischargeable Energy/Total Chargeable Energy), terms which are calculated as described in the BESS Performance Test(s) in this Appendix U.

Following the Commercial Operation Date, if the results of an RTE Performance Test demonstrate that the Actual Round Trip Efficiency is less than the Guaranteed Round Trip Efficiency, then, until such time as a subsequent RTE Performance Test is performed that demonstrates that the

Actual Round Trip Efficiency is equal to or greater than the Guaranteed Round Trip Efficiency, Seller shall incur an "***RTE Underperformance Deduct***", which shall be calculated as follows:

RTE Underperformance Deduct = MWhLOST * Full Contract Price

Where,

MWhLOST = (Guaranteed Round Trip Efficiency - Actual Round Trip Efficiency) * (the sum of the Charging Energy (measured in MWhs) for each day of underperformance starting from the day following a RTE Performance Test where the Actual Round Trip Efficiency is less than the Guaranteed Round Trip Efficiency and ending on the day following a subsequent RTE Performance Test where the Actual Round Trip Efficiency is equal to or greater than the Guaranteed Round Trip Efficiency)

The RTE Underperformance Deduct shall be applied in the manner set forth in Appendix A.

For example:

If, during a BESS Performance Test:

Total Dischargeable Energy = 400 MWh
Total Chargeable Energy = 500 MWh

Then,

Actual Round Trip Efficiency = 80%

And,

Guaranteed Round Trip Efficiency = 85%
∑ Charging Energy for each day of the month during the period of underperformance = 10,000 MWh
Full Contract Price = $39.62/MWh

Then,

MWhLOST = (85% - 80%) * 10,000 = 500MWh

And,

RTE Underperformance Deduct = 500 * 39.62 = $19,810

ARTICLE II
MISCELLANEOUS

Section 2.1 Representation and Warranty. Each Party represents and warrants that as of the date of execution by such Party, it is authorized to enter into this Amendment, that this Amendment does not conflict with any contract, lease, instrument, or other obligation to which it is a party or by which it is bound, which conflict could reasonably be expected to have a material adverse effect on the ability of such party to perform its obligations hereunder, and this Amendment represents its valid and binding obligation, enforceable against it in accordance with its terms.

Section 2.2 Incorporations by Reference. Section 14.3, Section 14.4, and Sections 14.7 through 14.16 of the Agreement are incorporated by reference into this Amendment, *mutatis mutandis*.

Section 2.3 No Other Amendments. Except as specifically provided in this Amendment, no amendments, revisions or changes are made or have been made to the Agreement. All other terms and conditions of the Agreement remain in full force and effect.

Section 2.4 Effective Date. This Amendment shall become effective on the date (the "***Amendment Effective Date***") that it is duly executed and delivered by all Parties.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment as of Amendment Effective Date.

BUYER: SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

By:_____
Its:_____

Date:_____

SELLER: 68SF 8ME LLC

By:_____
Its:_____

Date:_____

By:_____
Its:_____

Date:_____

AGENDA ITEM STAFF REPORT

MEETING DATE: January 31, 2024 **RESOLUTION NUMBER:** 2024-004

SUBJECT: Amendment Nos. 1 and 2 to the Power Purchase Agreement and Amendment No. 1 to the Option Agreement for the Eland Solar & Storage Center, Phase 2 Project with 69SV 8ME LLC and finding such action exempt from the California Environmental Quality Act (CEQA)

DISCUSSION: ☒ **OR** **CONSENT:** ☐

Select the appropriate box(es):

FROM:

Finance	☐
Project Development	☒
Program Development	☐
Regulatory/Legislative	☐
Project Administration	☐
Legal	☐
Executive Director	☐

METHOD OF SELECTION:

Competitive	☒
Cooperative Purchase	☐
Sole Source	☐
Single Source	☐
Other *(Please describe):*	

MEMBER PARTICIPATION:

Sponsoring Member: LADWP

Other Members Potentially Participating: None

Approved by Acting Executive Director: DocuSigned by: Mario De Bernardo 731F2E05FAF7414...

RECOMMENDATION:

Authorize the negotiation and approval of Amendment Nos. 1 and 2 to the Power Purchase Agreement (PPA) and Amendment No. 1 to the Option Agreement regarding the Eland Solar & Storage Center, Phase 2 Project ("Eland 2" or the "Project") with 69SV 8ME LLC ("Seller") to provide assurances and stability ensuring the completion of construction and commercial operation of a solar plus battery energy storage facility delivering energy and storage capacity through the Southern

California Public Power Authority ("SCPPA", "the Authority" or "Buyer") to one of its participating members, the City of Los Angeles acting by and through the Department of Water and Power ("LADWP") for the purpose of satisfying the utility's renewable electrical energy and energy storage resource goals. Find such action exempt from CEQA.

BACKGROUND:

The Eland Solar & Storage Center, Phase 2 Project is to provide and deliver 200MWac solar photovoltaic energy supply and a 150MW/600MWh 4-hour battery energy storage system (BESS) at the Barren Ridge Switching Station. LADWP will have a 100% share of all Project output for 25 years to facilitate the purchase of solar energy, usage of the BESS, and other rights and resources associated with the Project. Buyer and Seller entered into an amended and restated Power Purchase Agreement, dated as of July 21, 2020 ("PPA"). The Project currently has a Guaranteed Commercial Operation Date ("GCOD") of December 31, 2023, and an Outside Commercial Operation Date ("OCOD") of December 31, 2024. The OCOD is the final date that Seller is permitted to achieve commercial operation of the facility, unless a delay is solely the result of Force Majeure. Failure to achieve commercial operation by OCOD shall be an immediate default by the Seller, unless modified by an Amendment.

DISCUSSION:

- **Scope of Amendments:**
  Arevon Energy, owner of the special purpose entity 69SV 8ME LLC for the Project, requested of SCPPA and its Participating Member, contract price increase and relief of certain milestone delays and damages due to supply chain issues (specifically regarding solar panel and battery deliveries), interconnection upgrade delays, and procurement and construction costs.

  The amendments that are brought before the Board for consideration and approval are as follows:

- Amendment No. 1 to the Eland 2 Project PPA requires revisions to OCOD, Section 3.3(e), and to the Full Contract Price. The OCOD needs to change from December 31, 2024, to August 1, 2026, due to Barren Ridge to Haskell Transmission Line 1 upgrade delays, required to be completed before the Eland 2 project can deliver test energy, per the Large Generator Interconnection Agreement ("LGIA"). Section 3.3(e) changes are needed to allow for any future day-for-day delays under the LGIA to extend the OCOD. Amendment No. 1 also modifies the Milestone Dates for the GCOD and OCOD in Appendix B of the PPA. Lastly, this Amendment will change the Full Contract Price for the Project. The Full Contract Price will be amended from $39.62 to $50.20 per MWh due to an increase in procurement and construction costs, battery costs, fuel and delivery costs, solar module costs, steel costs for the racking system, and borrowing costs.

- Amendment No. 2 to the Eland 2 Project PPA requires a change in the battery storage specifications. An amendment is necessary to change the Frequency Rate of Change Response Mode to a Frequency-Watt Curve to align with LADWP's balancing authority needs and to add additional flexibility to the frequency bands. In addition, during the facility design phase discussions by the parties, it became apparent to all parties that as the battery Round-Trip Efficiency (RTE) decreased the calculations for the RTE Underperformance Deduct decreased, which was not the intent of the parties. The RTE Underperformance Deduct should increase as the battery RTE decreased. These changes to the RTE Performance Test calculations are needed in the contract to be consistent with what was originally contemplated during the initial

negotiations between SCPPA, LADWP, and the Seller. This also required corresponding changes to the definition of "Actual Round-Trip Efficiency" in Appendix U of the Eland 2 PPA.

- Amendment No. 1 to the Eland 2 Project PPA Option Agreement changes the Tax Equity Component Limitations Table in Exhibit 2.5 of the Option Agreement. The Tax Equity Limitation Component is part of the definition of "Facility Debt." Facility Debt establishes the minimum amount that must be paid by the buyer in the event the option to purchase the project is exercised following a seller event of default, ensuring that debt and some tax equity will be paid off in that instance. This concept was required to make the purchase option financeable by tax equity investors. The Option Agreement provides for the party to recalculate the table prior to funding by Tax Equity Investors. LADWP and SCPPA negotiated the revision to the table, which reduces the Tax Equity Limitation Component in early years and increases in later years.

- **Environmental Review:**
  This action is exempt from the requirements of CEQA pursuant to Section 21065 of the California Public Resources Code as it is not a "project" and will not result in a direct or reasonably foreseeable indirect effect on the environment and Section 15061(b)(3) of the State CEQA Guidelines because the action does not have the potential to cause a significant effect on the environment.

- **SCPPA's Authority:**
  In accordance with the Joint Powers Agreement, SCPPA may facilitate contracts and/or amendments for transactions involving procurement and development of electric generation capacity for SCPPA Members.

FISCAL IMPACT:

There is a de minimis impact on SCPPA's Administrative and General Budget outside of staff time to administer PPA Amendment Nos. 1 and 2 and Option Agreement Amendment No. 1.

LADWP has committed in writing to pay for any, and all, energy products and services from the Project over the term of the Agreements through project billing.

ATTACHMENTS:

1. Resolution 2024-004
2. Eland Solar & Storage Center, Phase 2 Project, PPA Amendment No. 1
3. Eland Solar & Storage Center, Phase 2 Project, PPA Amendment No. 2
4. Eland Solar & Storage Center, Phase 2 Project, Option Agreement Amendment No. 1

RESOLUTION NO. 2024-004

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE AMENDMENTS NO. 1 & NO. 2 TO THE ELAND SOLAR & STORAGE CENTER PHASE 2 PROJECT POWER PURCHASE AGREEMENT AND AMENDMENT NO. 1 TO THE ELAND SOLAR & STORAGE CENTER PHASE 2 PROJECT OPTION AGREEMENT AND SUCH OTHER DOCUMENTS, INSTRUMENTS AND AGREEMENTS AS MAY BE NECESSARY OR APPROPRIATE, AND FINDING SUCH ACTION EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, the Southern California Public Power Authority ("SCPPA" or "the Authority") owns interests in various generation and transmission projects, the output or services of which has been sold to members of the Authority ("Members"); and

WHEREAS, certain SCPPA Members are engaged in the generation, transmission, and distribution of electrical energy to retail customers; and

WHEREAS, on May 16, 2019, after negotiations between SCPPA, the City of Los Angeles acting by and through the Department of Water and Power ("Project Participant"), and developer, the SCPPA Board of Directors approved a Power Purchase Agreement (the "PPA") for the Eland Solar & Storage Center, Phase 2 Project (the "Project") between SCPPA and 69SV 8me LLC ("Developer"), along with a Power Sales Agreements between SCPPA and the Project Participant; and

WHERAS, SCPPA and Developer executed an Option Agreement (the "Option Agreement") in connection with the Project, dated May 16, 2019; and

WHEREAS, SCPPA, Project Participant, and Developer have agreed to enter Amendment No. 1 to the Option Agreement (the "Option Agreement Amendment") which shall replace the table of Tax Equity Component Limitations set forth in Exhibit 2.5 of the Option Agreement in its entirety with the table shown in Section 1.1 of the Option Agreement Amendment; and

WHEREAS, SCPPA, Project Participant, and Developer have agreed to enter Amendment No. 1 to the PPA ("Amendment No. 1") to extend the outside commercial

operation date from December 31, 2024, to August 1, 2026, and to increase the contract price from $39.62 to $50.20 per MWh; and

WHEREAS, SCPPA, Project Participant, and Developer have agreed to enter Amendment No. 2 to the PPA ("Amendment No. 2") to update terms and specifications related to the battery energy storage system; and

WHEREAS, Project Participant has reviewed and considered the revisions contained in Amendment No. 1, Amendment No. 2, and the Option Agreement Amendment (together, the "Amendments"), and concluded that it is in Project Participant's best interests to agree to such revisions; and

WHEREAS, Project Participant has requested that the Amendments be brought before the Board for the Board's approval and authorization to execute the Amendments; and

WHEREAS, this action to approve the Amendments and take other related actions is not a "project" under the California Environmental Quality Act ("CEQA") as it would not result in a direct or reasonably foreseeable indirect change in the physical environment and further, the action does not have the potential to cause a significant effect on the environment and is thus exempt from CEQA.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Southern California Public Power Authority as follows:

1. This action is exempt from the requirements of CEQA pursuant to Section 21065 of the California Public Resources Code and Section 15061(b)(3) of the State CEQA Guidelines.

2. The Amendments (including such other agreements, documents and instruments the form of which are attached to the Amendments or is referenced therein) are hereby approved in substantially the form as provided under this resolution. The Executive Director is hereby delegated all right power and authority to negotiate and finalize, and each of the President, Vice President and Executive Director of the Authority is hereby authorized and directed to execute and deliver the Amendments in substantial form as presented herewith, and each of such other agreements, documents and instruments the substance or form of which are referenced in or otherwise attached to the Amendments or which may be contemplated by the terms of the Amendments and to which the Authority is to be a party or is to sign, each with such changes, insertions and omissions as shall be approved by said President, Vice President or Executive Director (such approval to be conclusively evidenced by her or his execution and

delivery thereof), and each of the Secretary and any Assistant Secretary is hereby authorized to attest to such signature.

3. This Resolution shall become effective immediately.

THE FOREGOING RESOLUTION is approved and adopted by the Authority this 31st day of January 2024.

PRESIDENT
Southern California Public Power Authority

ATTEST:

Mario DeBernardo
ACTING EXECUTIVE DIRECTOR
On behalf of Michael S. Webster
EXECUTIVE DIRECTOR AND
ASSISTANT SECRETARY
Southern California Public Power Authority

Execution Version

AMENDMENT NO. 1
TO
POWER PURCHASE AGREEMENT

THIS AMENDMENT NO. 1 TO POWER PURCHASE AGREEMENT, dated as of this ___ day of _____, 2024 (this "**Amendment**"), is being entered into by and among the SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY, a public entity and joint powers authority formed and organized pursuant to the California Joint Exercise of Powers Act (California Government Code Section 6500, et seq.) ("***Buyer***"), and 69SV 8me LLC, a limited liability company organized and existing under the laws of the State of Delaware ("***Seller***"). Each Buyer and Seller is referred to individually in this Amendment as a "***Party***" and together as the "***Parties***." Capitalized terms used but not defined herein shall have the meanings set forth in the Amended and Restated Power Purchase Agreement by and among the Parties, dated as of July 21, 2020, as amended from time to time in accordance with its terms (the "***Agreement***").

RECITAL

WHEREAS, the Parties wish to amend the provisions of the Agreement with respect to the matters set forth in this Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recital, which is incorporated herein, the mutual covenants and agreements herein set forth, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I
AMENDMENTS

Section 1.1 Section 3.3 (e) to the Agreement shall be amended and restated in its entirety as follows:

(e) Seller shall cause the Commercial Operation Date to occur no later than August 1, 2026 (the "***Outside COD***"), and except in the case of (x) a delay by LADWP to achieve the In-Service Date), as defined in the Generator Interconnection Agreement (an "***Interconnection Delay***") by July 31, 2024 (the "***Interconnection Date***"), or (y) a delay that is solely the result of Force Majeure, the failure to achieve the Commercial Operation Date by the Outside COD shall be an immediate Default by Seller, not subject to extension or cure of any kind. If the failure to achieve the Commercial Operation Date by the Outside COD is a result of an Interconnection Delay, the Outside COD shall be extended on a day-for-day basis for each day after the Interconnection Date until LADWP achieves the In-Service Date. If the failure to achieve the Commercial Operation Date by the Outside COD is the result of Force Majeure, then either Party may terminate this Agreement, in its sole discretion, and in the event of such termination, Seller shall not be deemed to be in Default under this Agreement on account of such failure to achieve the Commercial Operation Date prior to the Outside COD, and Buyer shall return the Development Security to Seller less (i) any amounts that are due and owing to Buyer under this Agreement and (ii) any amounts previously drawn by Buyer in accordance with this Agreement.

Section 1.2 Section A. 3. of Appendix A to the Agreement shall be amended and restated in its entirety as follows:

3. Payment for Delivered Energy After Facility Commercial Operation Date: Full Contract Price. Commencing on the Commercial Operation Date of the Facility, Buyer shall purchase and pay for all Delivered Energy (along with all associated Environmental Attributes, Capacity Rights and BESS Products but excluding Excess Energy and its associated Environmental Attributes, Capacity Rights and BESS Products) for an aggregate price equal to $50.20 per MWh (the "***Full Contract Price***").

Section 1.3 Article I and Article II of Appendix B to the Agreement shall be amended and restated in its entirety as follows:

ARTICLE I. FACILITY DESCRIPTION

1.	Name of Facility:	Solar photovoltaic powered electric generating facility combined with a battery energy storage system, together known as the "Eland Solar & Storage Center, Phase 2"
2.	Facility Site:	Kern County, CA The Project site is located generally south and east of the Barren Ridge Substation and generally east of State Route 14, north of California City Blvd, and south of Redrock Randburg Rd. Other included facilities: N/A
3.	Generator Owner:	69SV 8ME LLC
4.	Generator Operator:	69SV 8ME LLC, or a Qualified Operator
5.	Equipment: (a) Type of Facility	Photovoltaic solar generation and battery energy storage system
	(b) Contract Capacity	200 MW-ac at the Point of Delivery
6.	Target Commercial Operation Date:	March 31, 2025
7.	Other included facilities:	N/A

ARTICLE II. MILESTONE SCHEDULE

Note - a "*" designates a Key Milestone.
Shaded items are complete as of the Effective Date.

	Milestone Date	Milestone Description
1.	No later than twenty (20) Business Days after Effective Date	Seller shall deliver to Buyer the Development Security in accordance with Section 5.6.
2.	Effective Date	Seller shall deliver a fully executed copy of the Interconnection Agreement to Buyer.
3.	Ninety (90) days prior to GCOD	Seller shall provide evidence reasonably acceptable to Buyer that final delivery of all major Facility components, including with respect to both the PV System and the BESS, have been delivered to the Project Site.
4.	May 31, 2024	* The Construction Commencement Milestone as defined in the Agreement has been achieved and evidence thereof has been delivered to Buyer.
5.	November 30, 2024	The First MW Milestone as defined in the Agreement has been achieved and evidence thereof has been delivered to Buyer.
6.	December 31, 2024	The Facility has achieved Initial Synchronization as defined in the Agreement and evidence thereof has been delivered to Buyer.
7.	July 31, 2025	* The Guaranteed Commercial Operation Date occurs.
8.	Within six (6) months after each Circuit COD and after the Commercial Operation Date	Seller shall furnish proof reasonably acceptable to Buyer that CEC Certification as defined in the Agreement has occurred.

ARTICLE II
MISCELLANEOUS

Section 2.1 Representation and Warranty. Each Party represents and warrants that as of the date of execution by such Party, it is authorized to enter into this Amendment, that this Amendment does not conflict with any contract, lease, instrument, or other obligation to which it is a party or by which it is bound, which conflict could reasonably be expected to have a material adverse effect on the ability of such party to perform its obligations hereunder, and this Amendment represents its valid and binding obligation, enforceable against it in accordance with its terms.

Section 2.2 Incorporations by Reference. Section 14.3, Section 14.4, and Sections 14.7 through 14.16 of the Agreement are incorporated by reference into this Amendment, *mutatis mutandis*.

Section 2.3 No Other Amendments. Except as specifically provided in this Amendment, no amendments, revisions or changes are made or have been made to the Agreement. All other terms and conditions of the Agreement remain in full force and effect.

Section 2.4 Effective Date. This Amendment shall become effective on the date (the "***Amendment Effective Date***") that it is duly executed and delivered by all Parties.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment as of Amendment Effective Date.

BUYER: SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

By:_____
Its:_____

Date:_____

SELLER: 69SV 8ME LLC

By:_____
Its:_____

Date:_____

By:_____
Its:_____

Date:_____

AMENDMENT NO. 2
TO
POWER PURCHASE AGREEMENT

THIS AMENDMENT NO. 2 TO POWER PURCHASE AGREEMENT, dated as of this __ day of _____, 2024 (this "**Amendment**"), is being entered into by and among the SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY, a public entity and joint powers authority formed and organized pursuant to the California Joint Exercise of Powers Act (California Government Code Section 6500, et seq.) ("***Buyer***"), and 69SV 8me LLC, a limited liability company organized and existing under the laws of the State of Delaware ("***Seller***"). Each Buyer and Seller is referred to individually in this Amendment as a "***Party***" and together as the "***Parties***." Capitalized terms used but not defined herein shall have the meanings set forth in the Amended and Restated Power Purchase Agreement by and among the Parties, dated as of July 21, 2020, as amended from time to time in accordance with its terms (the "***Agreement***").

RECITAL

WHEREAS, the Parties wish to amend the provisions of the Agreement with respect to the matters set forth in this Amendment in order to correct certain mathematical and computational errors.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recital, which is incorporated herein, the mutual covenants and agreements herein set forth, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I
AMENDMENTS

Section 1.1 Section 1.1 to the Agreement shall be amended to delete the following defined terms: "Actual RTE Recovery Factor"; "Frequency Response Power"; "Recovery Ramp Rate"; "Response Period"; and "Rolling Average Period".

Section 1.2 Section 11.1(b)(xxi) to the Agreement shall be amended and restated in its entirety as follows:

(xxi) The amount of the RTE Underperformance Deduct, if any.

Section 1.3 Section 5 of Appendix S to the Agreement shall be amended and restated in its entirety as follows:

5. Control Modes

The general purpose of the BESS is to provide the BESS Products, which consist of different control modes listed and outlined in the following Table 1 of this Appendix S ("***Control Modes***"). Control Modes consist of settable functional parameters that trigger responses that the BESS can

provide. The operation of any Control Mode or simultaneous Control Modes are subject to the BESS Operating Limitations, Control Mode setpoints and priorities as specified and scheduled by the Buyer, and the BESS conditions (e.g., state-of-charge, temperature, etc.) at the time of operation of such Control Mode(s). Buyer shall have the ability to provide Control Mode set points for charge and discharge of the BESS as well as the ability to set specific MW charge/discharge values and priorities, subject to those limitations and conditions.

Table 1

The following Control Modes are from the MESA-ESS Specification, and reference should be made to either the MESA-ESS Specification or IEC 61850-90-7, (or the applicable IEC 61850-90-7 replacement), or standard mutually agreed upon by the Buyer and Seller for further details with respect to each Control Mode.

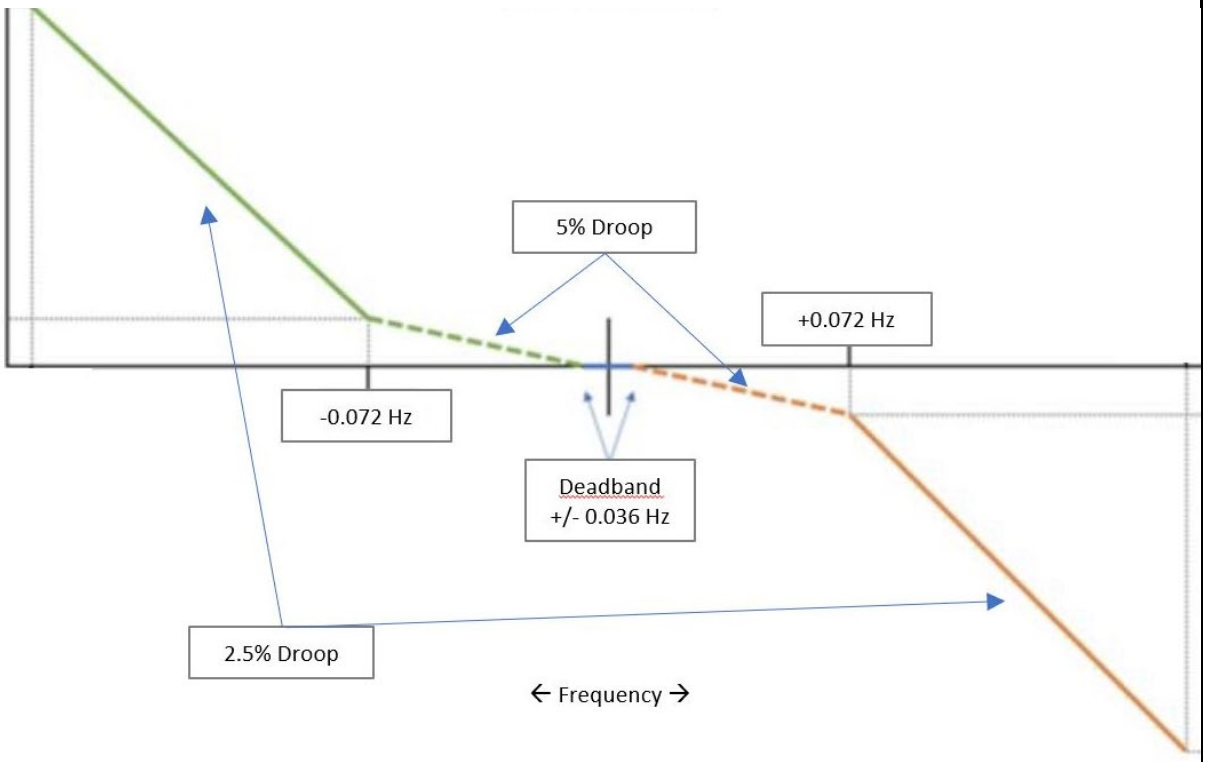
Control Mode Category	Control Mode
Emergency Modes	1. Voltage Ride-Through
	2. Frequency Ride-Through
	3. Dynamic Reactive Current
	4. Dynamic Volt-Watt
	5. Frequency-Watt (implement NERC Inverter-Based Resource Performance Guideline)[1]
Active Power Modes	6. Charge-Discharge Storage
	7. Coordinated Charge-Discharge
	8. Active Power Limit
	9. Active Power Response (configurable as Peak Power Limiting, Load Following, or Generation Following modes)
	10. Automatic Generation Control
	11. Active Power Smoothing
	12. Volt-Watt
	13. Frequency-Watt Curve
	14. Pricing Signal
Reactive Power Modes	15. Fixed Power Factor
	16. Volt-VAR Control
	17. Watt-VAR
	18. Power Factor Correction

The Parties acknowledge their understanding that the functionality set forth in Tables 2-6 below are covered in the various DNP 3.0 Control Modes in Table 1 above and will be implemented by such Control Modes. Setpoints to some Control Modes are included below to establish a common understanding of expected operations but Buyer shall have the right to direct changes to these setpoints at any time during the Agreement Term. In addition to the MESA Control Modes, the Parties agree that

[1] A frequency function/set point is needed to facilitate LADWP's compliance to NERC Reliability Standard BAL-003-1.1, requirement R1 or its successor. That would be a temporary MW output or input triggered by a configured change in frequency.

the BESS shall implement the Frequency Watt Curve as described below in Table 2 and shall not implement a "Frequency Rate of Change Response."

Table 2 – AUTONOMOUS FUNCTIONS

AUTONOMOUS FUNCTIONS *Certain functions shall be available to be simultaneously armed and actively operated. Initial priorities of such functionality shall be further specified by BESS Administrative Matters Protocol and further specified and prioritized through BESS Instructions.*
Frequency Watt Curve
Monitor grid frequency on the BESS side of the Point of Delivery. Continuously compute rate of frequency change.
The BESS plant controller shall alternately have setpoints for positive or negative rate of change of frequency below or above which the BESS will respond. The Frequency-Watt Curve shall allow for a two-level response characteristic. The first level will activate when the frequency moves past a dead-band and will respond at some specified droop percent or MW/Hz. Then, at some higher frequency excursion, the first level characteristic would shut off and the response would follow a different droop percent or MW/Hz. The following is an example (Actual frequency and droop numbers to be programmable by LADWP): Level one activates at +/- 0.036 Hz and responds at a 5% droop. Level two activates at +/- 0.072 Hz and responds at a 2.5% droop. 

Response time to the event shall comply with Table 2.1 in the NERC Inverter-Based Resource Performance Guideline.

Table 2.1: Dynamic Active Power-Frequency Performance

Parameter	Description	Performance Target
For a step change in frequency at the POM of the inverter-based resource…		
Reaction Time	Time between the step change in frequency and the time when the resource active power output begins responding to the change[31]	< 500 ms
Rise Time	Time in which the resource has reached 90 percent of the new steady-state (target) active power output command	< 4 seconds
Settling Time	Time in which the resource has entered into, and remains within, the settling band of the new steady-state active power output command	< 10 seconds
Overshoot	Percentage of rated active power output that the resource can exceed while reaching the settling band	< 5 percent**
Settling Band	Percentage of rated active power output that the resource should settle to within the settling time	< 2.5 percent**

** Percentage based on final (expected) settling value

Dynamic Reactive Current Support Mode Requirements
Monitor voltage at Point of Delivery
Default hold time (HoldTmms) for Dynamic Reactive Current Support Mode after voltage returns to inside the deadband is five (5) seconds. Default to Frequency Response and Frequency-Watt Curve are higher priority than Dynamic Reactive Current Support.
Ability to respond in a minimum of 1-3 Cycles from detecting and to provide reactive power in response to Point of Delivery voltage falling below 0.8 pu.
Reactive Power Control Modes Requirements
Monitor voltage on BESS side at Point of Delivery.
While voltage remains between 1.1 and 0.8 pu respond to deviations in voltage outside a defined deadband with proportional reactive power.
Ramp rate (MVAR / Sec) for adjustment of reactive power.
Scheduled (day/night) fixed power factor setting for reactive power support.

State of Charge Management (Coordinate Charge/Discharge Control Mode) Requirements
Monitor BESS SOC and provide a mechanism to regulate SOC, principally to recover SOC after discharge events (both manual and automatic).

Table 3 – EXTERNAL OVERRIDE CONTROLS

Provide functionality to trigger manual discharge, using the following parameters:
Continuous discharge power
Operator set point discharge time
Operator set point "On" ramp rate (MW / min or immediate)
Operator set point "Off" ramp rate (MW / min or immediate)
Reactive power set point (MVAR)
Reactive power set point timer (Hours)
Power factor set point
In addition to the MESA-ESS specification of Charge/Discharge Storage Control Mode, provide the following functionality when the BESS is in Charge/Discharge Control Mode:
10 seconds maximum response time after receiving external command to execute manual discharge or apply reactive power
If present conditions do not permit requested discharge (e.g., SOC is too low), BESS shall report the maximally conforming parameters which are available over DNP 3.0.
During manual discharge or manual reactive control, BESS shall indicate which, if any, autonomous functions are disabled or degraded.
After manual discharge cycle is complete, BESS shall resume autonomous functions including automatic SOC management.

Table 4 – CONNECTION AND DISCONNECTION FROM LADWP GRID

CONNECTION AND DISCONNECTION FROM LADWP GRID
While voltage and frequency remain within the specified voltage and frequency windows, the BESS shall remain connected to the LADWP grid unless instructed otherwise by disconnection signal or otherwise unavailable. System will stay connected and operational pursuant of Section 9.5 (Guaranteed Availability) of the Agreement.
Provide function for commanded disconnection from LADWP grid both remotely and via local HMI. This is to be used for routine disconnection when sufficient warning is available to permit normal standard disconnect procedures by the BESS.
Provide functionality to accept an emergency disconnect input in the form of a dry contact. If instructed to open the BESS must immediately cease operation.
Startup and connection time from an "Off" or "Disconnected" state to "Connected and Idle" shall be no more than 300 seconds if the battery and inverter thermal management loads are energized and the inverters are not set to "Sleep Mode". If the BESS is "Disconnected" but the main breaker is still closed, the BESS shall provide Buyer a timeout setpoint that causes the BESS to transition to a "Disconnected" state with the breaker closed but the inverters set to "Sleep Mode" after a Buyer setpoint number of minutes. The time to return from "Disconnected" and "Sleep Mode" to "Connected and Idle" shall be no more than 600 seconds if the BESS main breaker is closed and thermal management loads are energized. If a "Disconnected" or "Off" state opens the BESS main breaker, which removes battery and inverter thermal management power, then startup and connection time will be dependent on local temperature conditions and may exceed 600 seconds. The BESS shall report estimated time to "Connected and Generating" at all times. Inverters in "Sleep Mode" represents state where inverters are not switching and not synchronized to the grid.
4 seconds maximum time for BESS Point of Delivery disconnection after receiving emergency stop signal.
Behavior of BESS while the control systems are powered by a UPS, or an alternative auxiliary power supply, when the mains power line is shorted or opened shall be to disconnect until normal operations are restored.
Behavior of BESS when the mains power returns while the control systems are still powered by the UPS or an alternative power source shall be to reconnect as directed by Buyer.
The BESS shall have a microprocessor-based relay protection system (such as SEL 351) with CTs and PTs to detect overcurrents and to disconnect the AC breaker.

Table 5 – REMOTE MONITORING AND CONTROL

REMOTE MONITORING AND CONTROL Requirements
1 second sampling time for BESS-LADWP communication mechanism for data transfer during faults/triggered actions.
Connection to external communications systems via one console for LADWP EMS and one console for local control
Heartbeat timer to ensure communication path is online and processor is functioning
Minimum available metrics via both data transfer and operator control updated by event driven data or buffers.
Current operational status

REMOTE MONITORING AND CONTROL Requirements
Total real power (MW)
Total reactive power (MVAR)
Total complex power (MVA)
SOC (expressed as percent) SOC = State of Energy / Actual BESS Energy Amount (MWh)
State of Energy (Expressed as MWh of real power (alternating current)) State of Energy = MWh ready to discharge (under real time conditions)
Current power capabilities in all quadrants
Voltage and frequency as measured at Point of Delivery
Operation mode
Fault codes / description
Contractor to supply points list and sampling frequency
2 seconds maximum response time for implementing changes to set points

Table 6 – PERFORMANCE VALIDATION

PERFORMANCE VALIDATION
BESS SCADA must compute and deliver in accordance with Section 7.3 and store in accordance with Section 11.5 of the Agreement. Buyer and Seller shall agree on form of monthly performance report.
Audit data must be accessible via an onsite HMI. Seller may select appropriate methods to supply this function.
Audit data must be accessible to LADWP's emergency management system. Seller may recommend appropriate methods to supply this function.

Section 1.4 Section 6 of Appendix U to the Agreement shall be amended and restated in its entirety as follows:

6. **RTE Performance Test**.

The "***RTE Performance Test***" shall calculate the Actual Round-Trip Efficiency, where:

"***Actual Round Trip Efficiency***" = 100% * (Total Dischargeable Energy/Total Chargeable Energy), terms which are calculated as described in the BESS Performance Test(s) in this Appendix U.

Following the Commercial Operation Date, if the results of an RTE Performance Test demonstrate that the Actual Round Trip Efficiency is less than the Guaranteed Round Trip Efficiency, then, until such time as a subsequent RTE Performance Test is performed that demonstrates that the

Actual Round Trip Efficiency is equal to or greater than the Guaranteed Round Trip Efficiency, Seller shall incur an "***RTE Underperformance Deduct***", which shall be calculated as follows:

RTE Underperformance Deduct = MWhLOST * Full Contract Price

Where,

MWhLOST = (Guaranteed Round Trip Efficiency - Actual Round Trip Efficiency) * (the sum of the Charging Energy (measured in MWhs) for each day of underperformance starting from the day following a RTE Performance Test where the Actual Round Trip Efficiency is less than the Guaranteed Round Trip Efficiency and ending on the day following a subsequent RTE Performance Test where the Actual Round Trip Efficiency is equal to or greater than the Guaranteed Round Trip Efficiency)

The RTE Underperformance Deduct shall be applied in the manner set forth in Appendix A.

For example:

If, during a BESS Performance Test:

Total Dischargeable Energy = 400 MWh
Total Chargeable Energy = 500 MWh

Then,

Actual Round Trip Efficiency = 80%

And,

Guaranteed Round Trip Efficiency = 85%
∑ Charging Energy for each day of the month during the period of underperformance = 10,000 MWh
Full Contract Price = $50.20/MWh[2]

Then,

MWhLOST = (85% - 80%) * 10,000 = 500MWh

And,

RTE Underperformance Deduct = 500 * 50.20 = $25,100

ARTICLE II

[2] The use of a Full Contract Price of $50.20/MWh is contingent on approval and execution of Amendment 1 to the Agreement.

MISCELLANEOUS

Section 2.1 Representation and Warranty. Each Party represents and warrants that as of the date of execution by such Party, it is authorized to enter into this Amendment, that this Amendment does not conflict with any contract, lease, instrument, or other obligation to which it is a party or by which it is bound, which conflict could reasonably be expected to have a material adverse effect on the ability of such party to perform its obligations hereunder, and this Amendment represents its valid and binding obligation, enforceable against it in accordance with its terms.

Section 2.2 Incorporations by Reference. Section 14.3, Section 14.4, and Sections 14.7 through 14.16 of the Agreement are incorporated by reference into this Amendment, *mutatis mutandis*.

Section 2.3 No Other Amendments. Except as specifically provided in this Amendment, no amendments, revisions or changes are made or have been made to the Agreement. All other terms and conditions of the Agreement remain in full force and effect.

Section 2.4 Effective Date. This Amendment shall become effective on the date (the "***Amendment Effective Date***") that it is duly executed and delivered by all Parties.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment as of Amendment Effective Date.

BUYER: SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

By:_____
Its:_____

Date:_____

SELLER: 69SV 8ME LLC

By:_____
Its:_____

Date:_____

By:_____
Its:_____

Date:_____

AMENDMENT NO. 1
TO
OPTION AGREEMENT

THIS AMENDMENT NO. 1 TO OPTION AGREEMENT, dated as of this ____ day of _____, 2024 (this "**Amendment**"), is being entered into by and among the SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY, a public entity and joint powers authority formed and organized pursuant to the California Joint Exercise of Powers Act (California Government Code Section 6500, *et seq.*) ("***Buyer***"), and 69SV 8me LLC, a limited liability company organized and existing under the laws of the State of Delaware ("***Seller***"). Each Buyer and Seller is referred to individually in this Amendment as a "***Party***" and together as the "***Parties***." Capitalized terms used but not defined herein shall have the meanings set forth in the original Option Agreement by and among the Parties, dated as of May 16, 2019 (the "***Agreement***").

RECITAL

WHEREAS, the Parties wish to amend the provisions of the Agreement with respect to the matters set forth in this Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recital, which is incorporated herein, the mutual covenants and agreements herein set forth, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE I
AMENDMENTS

Section 1.1 The table of Tax Equity Component Limitations set forth in Exhibit 2.5 of the Agreement shall be replaced in its entirety with the following:

Contract Year	Tax Equity Component Limitation ($ millions)
Event of Default in Contract Year 6	192
Event of Default in Contract Year 7	155
Event of Default in Contract Year 8	117
Event of Default in Contract Year 9	76
Event of Default in Contract Year 10	69
Event of Default in Contract Year 11	71
Event of Default in Contract Year 12	73
Event of Default in Contract Year 13	48

Contract Year	Tax Equity Component Limitation ($ millions)
Event of Default in Contract Year 14	25
Event of Default in Contract Year 15	0
Event of Default in Contract Year 16	0
Event of Default in Contract Year 17	0
Event of Default in Contract Year 18	0
Event of Default in Contract Year 19	0
Event of Default in Contract Year 20	0
Event of Default in Contract Year 21	0
Event of Default in Contract Year 22	0
Event of Default in Contract Year 23	0
Event of Default in Contract Year 24	0
Event of Default in Contract Year 25	0

Section 1.2 For clarity, except as set forth in this Amendment, the Tax Equity Component Limitation is not subject to further adjustment.

ARTICLE II
MISCELLANEOUS

Section 2.1 Representation and Warranty. Each Party represents and warrants that as of the date of execution by such Party, it is authorized to enter into this Amendment, that this Amendment does not conflict with any contract, lease, instrument, or other obligation to which it is a party or by which it is bound, which conflict could reasonably be expected to have a material adverse effect on the ability of such party to perform its obligations hereunder, and this Amendment represents its valid and binding obligation, enforceable against it in accordance with its terms.

Section 2.2 Incorporations by Reference. Sections 12.2 through 12.8, 12.13 through 12.15, and 12.17 of the Agreement are incorporated by reference into this Amendment, *mutatis mutandis*.

Section 2.3 No Other Amendments. Except as specifically provided in this Amendment, no amendments, revisions or changes are made or have been made to the Agreement. All other terms and conditions of the Agreement remain in full force and effect.

Section 2.4 Effective Date. This Amendment shall become effective on the date (the "**Amendment Effective Date**") that it is duly executed and delivered by all Parties.

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment as of Amendment Effective Date.

BUYER:

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

By:_____
Name: Michael S. Webster
Title: Executive Director

Approved as to legal form:

By:_____
Name: Armando Arballo
Title: Assistant General Counsel

SELLER:

69SV 8ME LLC

By:_____
Name:_____
Title: Authorized Signatory

By:_____
Name:_____
Title: Authorized Signatory