

CAC Item C7 Staff Report Item 18

TO: East Bay Community Energy Board of Directors

FROM: Marie Fontenot, Vice President of Power Resources

SUBJECT: ConEd Alpaugh BESS, Longroad Sun Pond Contract Approvals (Action)

DATE: February 15, 2023

Recommendation

Adopt two Resolutions authorizing the Chief Executive Officer to execute Agreements for two projects: Sun Pond developed by Longroad Energy (awarded short listing through the 2022 Long-Term Resources request for offers (RFO)) and Alpaugh BESS, LLC developed by ConEd (originated bilaterally). The project operational dates are listed below:

- a. Sun Pond: 20-year, 42.5 MW solar project paired with a 42.5 MW/85 MWh battery storage facility in Maricopa County, Arizona. April 2025 online date. Developed by Longroad Energy.
- b. Alpaugh BESS: 12-year, 5 MW Resource Adequacy (RA) from battery storage project in Tulare County. June 2024 online date. Developed by Consolidated Edison Development or ConEd.

Background and Discussion

The 2022 Long-Term Resource Request for Offers (RFO) is EBCE's third long-term contract solicitation. The RFO was launched in February 2022. The RFO sought several hundred megawatts (MW) of contracts with renewable energy and battery storage projects with a preference for projects located in California, and more preferentially, those located in Alameda County. EBCE's objective was to drive investments in new renewable and energy storage projects in Alameda County and California, while securing affordable resources to manage future power price risk. EBCE received a very healthy response to its RFO both in volume and quality of projects and proposals. EBCE administered the RFO and completed robust analytics using internal tools and the cQuant valuation platform to calculate the net present value of proposed projects and determine the optimal portfolio to meet its objectives. EBCE intends to bring additional contracts from this RFO to the Board for approval in the coming months. All of these contracts will be utilized to hedge EBCE against price fluctuation in the CAISO energy markets and they will also contribute to procurement mandates issued by the California Public Utilities Commission (CPUC). The 2021-2023 Electric Reliability Requirements procurement mandate identified volumes of RA capacity each CPUC-

jurisdictional load serving entity must procure and have online in the years 2021, 2022 and 2023. The second mandate requires additional volumes of RA come online in years 2023, 2024, 2025, and 2026. That mandate is the "Decision Requirement Procurement to Address Mid-Term Reliability 2023-2026". ²

The Longroad Energy contract is for half of the output from the Sun Pond project, providing renewable energy, RA, renewable energy credits, and ancillary services. The full Sun Pond project is an 85 MW solar project paired with an 85 MW/170 MWh Lithium-Ion battery located in Maricopa County, Arizona. The contract has a 20-year delivery term with a planned commercial operation date of April 1, 2025. Longroad Energy is an experienced developer with a focus on the development and operation of utility-scale wind, solar, and battery storage energy projects across the United States. It has successfully brought online 1.9 GW of solar projects online since 2019. The contracting entity is Sun Pond, LLC.

The Alpaugh BESS project was offered to EBCE bilaterally, concurrent to ongoing negotiations underway in EBCE's 2022 Long-Term Resource RFO and was evaluated against offers submitted to the RFO.

The Alpaugh BESS contract is for RA from half of a 10 MW/40 MWh battery storage project. The contracted project is located in Tulare County. The contract is for 10 years with an expected commercial operation date of June 1, 2024. ConEd is an experienced developer having 1.5 GW solar and 150 MW storage projects in operation in California with an additional 2.5 GW in development in California. The contracting entity is Alpaugh BESS, LLC.

<u>Attachments</u>

- A. Resolution Authorizing the CEO to Negotiate and Execute a Twenty-Year Renewable Energy and Battery Storage Agreement with Sun Pond, LLC
- B. Resolution Authorizing the CEO to Negotiate and Execute a Twelve-Year Resource Adequacy Agreement with Alpaugh BESS, LLC
- C. PowerPoint Presentation

¹ https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K825/319825388.PDF

² https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K603/389603637.PDF

RESOLUTION NO. R-2023-XX A RESOLUTION OF THE BOARD OF DIRECTORS

OF THE EAST BAY COMMUNITY ENERGY AUTHORITY AUTHORIZING THE CEO TO NEGOTIATE AND EXECUTE A RESOURCE ADEQUACY AGREEMENT WITH SUN POND, LLC

WHEREAS, The East Bay Community Energy Authority ("EBCE") was formed as a community choice aggregation agency ("CCA") on December 1, 2016, Under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.*, among the County of Alameda, and the Cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Piedmont, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy-related climate change programs in all of the member jurisdictions. The cities of Newark and Pleasanton, located in Alameda County, along with the City of Tracy, located in San Joaquin County, were added as members of EBCE and parties to the JPA in March of 2020.

WHEREAS, Sun Pond, LLC proposed 42.5 MW of renewable energy, environmental attributes, Ancillary Services (AS) and Resource Adequacy (RA) from an 85 MW/170 MWh solar photovoltaic project and battery energy storage facility in Maricopa County, AZ developed by Longroad Development Company, LLC;

WHEREAS, the project is expected to be operational by April 1, 2025 and will deliver renewable energy, environmental attributes, AS, and RA for a term of twenty years; and

WHEREAS, EBCE staff considers this is a competitive proposal based on submissions to the 2022 Long-Term Resources Request For Offers (RFO).

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

<u>Section 1.</u> The CEO is hereby authorized to negotiate and execute a twenty-year agreement with Sun Pond, LLC for a 42.5 MW solar and battery energy storage project in Maricopa County, AZ. The final agreement shall include the key terms outlined in the staff report associated with this Resolution.

ADOPTED AND APPROVED this 15th day of February, 2023.

Jen Cavenaugh, Acting Chair	

ATTEST:		
Adrian Bankhead, Clerk of the Board		

RESOLUTION NO. R-2023-XX A RESOLUTION OF THE BOARD OF DIRECTORS

OF THE EAST BAY COMMUNITY ENERGY AUTHORITY AUTHORIZING THE CEO TO NEGOTIATE AND EXECUTE A RESOURCE ADEQUACY AGREEMENT WITH ALPAUGH BESS, LLC

WHEREAS, The East Bay Community Energy Authority ("EBCE") was formed as a community choice aggregation agency ("CCA") on December 1, 2016, Under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.*, among the County of Alameda, and the Cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Piedmont, Oakland, San Leandro, and Union City to study, promote, develop, conduct, operate, and manage energy-related climate change programs in all of the member jurisdictions. The cities of Newark and Pleasanton, located in Alameda County, along with the City of Tracy, located in San Joaquin County, were added as members of EBCE and parties to the JPA in March of 2020.

WHEREAS, Alpaugh BESS, LLC proposed 5 MW of Resource Adequacy (RA) from a 10 MW/40 MWh battery energy storage project in Tulare County, developed by Consolidated Edison Development, LLC;

WHEREAS, the project is expected to be operational by June 1, 2024 and will deliver RA for a term of twelve years; and

WHEREAS, EBCE staff considers this is a competitive proposal based on submissions to the 2022 Long-Term Resources Request For Offers (RFO).

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE EAST BAY COMMUNITY ENERGY AUTHORITY DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The CEO is hereby authorized to negotiate and execute a twelve-year RA agreement with Alpaugh BESS, LLC for a 5 MW RA-only solar and battery energy storage project in Tulare County. The final agreement shall include the key terms outlined in the staff report associated with this Resolution.

ADOPTED AND APPROVED this 15 th	day of February, 2023.
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J	len Cavenaugh, Acting Chair

ATTEST:

Attachment	Staff	Report	Item	18F

Adrian Bankhead, Clerk of the Board



Agenda

- Solicitation Overview
- Participation
- Evaluation Process
- Current RFO Portfolio Characteristics
- Challenges in Marketplace
- Next Steps
- Appendix: Portfolio Summary



Solicitation Overview

Goals & Objectives

- Secure a portfolio of contracts to provide EBCE customers with affordable renewable and clean energy sources
- Meet IRP Near- and Mid-Term Resource Adequacy Reliability Procurement mandates
- Meet a significant percent of SB350 long-term contracting requirements, equal to 65% of RPS obligations
- Create new renewable energy projects to deliver PCC1 RECs
- Contract low-cost energy hedges to compliment existing portfolio
- Partner with SJCE for efficiency, to minimize expenses, and lead the market in contract terms

Project Characteristics

Facilities:

- Location: Projects may be within or outside of California. All energy must be deliverable to CAISO & must provide RA
- <u>Construction Status</u>: Energy and related products may come from new resources or add incremental capacity to existing resources.

Capacity:

- Minimum Contract Capacity: 5 MW
- Maximum Contract Capacity: none

Delivery Date:

 Energy and RPS attribute delivery must be within calendar years 2023, 2024, 2025, or 2026 with a preference for projects that begin delivery earlier within this window.

Contract Duration:

10-20 year durations

Technology:

- Renewables, Large Hydro
- Storage short or long duration; any technology

Actions

- Issued a broad, open, competitive solicitation to ensure wide array of opportunities considered
- Evaluated combinations of projects to achieve desired volume targets
- Typically prioritize project risk, location, workforce development, economics, and other characteristics; limited ability to do so in this RFO due to limited offers in earlier years
- Encouraged RFO participants to be creative and provide proposal variations on individual projects and include battery storage



Solicitation Overview - Eligible Products

Product #	Product Name	Description	Example		
Product 1	As-Available RPS Product	New or incremental capacity to an existing stand- alone PCC1-eligible generating resource	solar, wind, geothermal, small hydro or ocean (thermal, wave, or current)		
Product 2	As-Available RPS plus Energy Storage	New or incremental capacity to an existing stand- alone PCC1-eligible generating resource with co- located energy storage	Same as above plus storage with 2-hr, 4-hr, or 4-hr+ duration capability		
Product 3	Firm or Shaped RPS Product	New PCC1-eligible generating resources; likely paired with energy storage	Energy delivered during specific hours		
Product 4	High Capacity Factor, No On-Site Emissions RPS Energy	New stand-alone PCC1-eligible generating resource	Geothermal or Biomass		
Product 5	Stand-Alone Energy Storage Toll or RA-Only offer	Energy storage may offer a full product "tolling" structure contract or and RA-only offer	Any storage technology with 2-hr, 4-hr, or 4-hr+ duration capability		
Product 6	Zero-Emitting Capacity Resources	Must be available every day from 5pm to 10pm (hours ending 17 through 22); must be able to deliver at least 5 MWh of energy for every 1 MW of incremental capacity	Emission-free generation resources, emissions-free generation paired with storage, or demand response		



Participation

- Less robust project offering than 2020 RFO. 44 unique project sites; 185
 contract variations (as compared to 70 sites; 400 project variations in 2020 RFO)
- All 6 products that were solicited were offered
- Offers included solar, wind, geothermal, pumped hydro, and storage
- Projects based in 6 different states (CA, AZ, ID, NM, NV, OR); predominantly CA
 - *Only 1 projects in EBCE service territory.



Evaluation Process

- Evaluation Rubric scored 3 areas:
 - Counterparty Execution, Offer Competitiveness, and Project Development Status
 - Multiple items under each area
- Two reviewers were assigned to each project.
- Staff reviewed all submitted information and provided scores for all categories except for Term Sheet Markups and NPV.
 - Each item has 10 point max. at its own weighting.
 - Term Sheet Markups were scored by one assigned reviewer.
 - NPV scores were directly incorporated into overall project score with a weighting of 45%.
 - The Net Present Value was calculated based on simulations on 3 different forward curves
 - For each forward curve we took a weighted average of the P5 (50%), P50 (25%), and P95 (25%) and then took a simple average across the 3 curves
 - We normalized this number on a \$/MW basis and the projects were then assigned a 0-10 score based on the NPV distribution
- Scoring and rubric were consistent with the selection process for the 2018 California Renewables RFP and 2020 RPS and Storage RFO.



Projects Proposed for Execution

Seeking approval for two contracts: one Power Purchase Agreement with Energy Storage (PPA, submitted into EBCE and SJCE's Joint 2022 Long-Term Resource RFO), and one RA-only Agreement

- Sun Pond: 20-year, 42.5 MW solar and battery storage project in Maricopa County, Arizona. Expected to be operational April 2025. Developed by Longroad Energy.
- Alpaugh BESS: 12-year, 5 MW RA-only from battery storage project in Tulare County. Expected to be operational June 2024. Developed by ConEd.



Longroad - Sun Pond Project Attachment Staff Report Item 180



Details

- Project Offered to EBCE/SJCE 2022 Long-Term Resource RFO
- Contract for half of all renewable energy, environmental attributes, Resource Adequacy, battery tolling rights, and ancillary services from solar project and battery storage facility in Maricopa County, AZ
- Total project size is 85MW solar + 85 MW/170 MWh energy storage
- 20-year contract
- Expected Commercial Operation Date is April 1, 2025
- The contracting entity under Longroad Energy is Sun Pond, LLC.



Longroad Company Overview

- Longroad is led by former executives of First Wind Energy.
- Longroad was founded in 2016 and focuses primarily on the development and operation of utility-scale wind, solar, and battery energy storage projects throughout the Unites states.
- Since 2019, Longroad has brought eleven major projects to COD, including 1.9 GW of solar projects.
- Longroad is currently contracted to operate 3.5 GW of operating or under-construction solar and wind projects across the United States, of which Longroad owns 1.8 GW.
- Longroad has some experience with CCAs; owns and operates at least 1 executed contract with CCAs:
 - PPA with MCE that achieved COD in 2020



ConEd – Alpaugh BESS Project ConEdison Development Details

- Originated and negotiated bilaterally
- Contract for 5 MW Resource Adequacy from energy storage project in Tulare County
- Total project size is 10 MW
- 12-year contract
- Expected Commercial Operation Date is June 1, 2024
- Project has an executed interconnection agreement and site control.
- Committed toward utilizing local and union labor and paying prevailing wages.
- The contracting entity under ConEd is Alpaugh BESS, LLC





ConEd Company Overview

- Consolidated Edison Development (ConEd) was founded in 1996 and has been focused on renewable development since 2008.
- ConEd is the second largest owner of solar capacity in North America and has delivered more than 1.5 GW of solar and storage projects in California or that interconnect into a California balancing authority.
- ConEd has over 150 MW of battery storage projects in operation, over 140 MW in construction, and over 2.5 GW in the development pipeline either in California or that interconnect into a California balancing authority.
- ConEd CCA experience
 - PPA with MCE; COD achieved 2018



	Developer	Project	Location	Product	Offtake	COD	Nameplate	Sept NQC
Gener -ation	Longroad	Sun Pond	Maricopa County, AZ	PV and ESA	EBCE	4/1/2025	85 MW	34.4
Stor -age	NextEra Energy	Kola Energy Storage	San Joaquin County (Tracy), CA	ESA	EBCE	6/1/2025	125 MW	116.75
	ConEd	Alpaugh BESS	Tulare County, CA	RA only	EBCE	6/1/2024	5 MW	4.5
<u>></u>	Vitol	Ocotillo Solar	San Diego County, CA	RA only	EBCE	8/1/2023	50 MW	50
RA Only	Broad Reach Power	Noosa Energy Storage	San Joaquin County, CA	RA only	EBCE & SJCE	6/1/2024	30 MW	27
	Broad Reach Power	Cascade Energy Storage	San Joaquin County, CA	RA only	EBCE & SJCE	6/1/2024	5 MW	4.5



Next Steps

- Finalize the two contracts and execute agreements.
- Assess projects as they hit key milestones and mature further.
- Update filing to CPUC on status of 2021-2023 and 2023-2026 Electric Reliability Requirements due June 1, 2023.



Appendix



Portfolio Summary

Attachment Staff Report Item 18C

DEVELOPER	PROJECT Name	TECHNOLOGY	NAMEPLATE MW	STORAGE MW/MWH	COUNTY	ONLINE	TERM (YEARS)
Clearway Energy Group	Golden Fields Solar	Solar	112	N/A	Kern	December 2020	15
Greenbacker Capital	Scott Haggerty Wind Energy Center	Wind	57.5	N/A	Alameda	July 2021	20
Convergent Energy and Power	Henrietta D Energy Storage	Storage	0	10/40	Kings	January 2022	15
Pattern Energy	Tecolote Wind	Wind	100	N/A	Torrance and Guadalupe (NM)	December 2021	10
ldemitsu Renewables	Tulare Solar Center	Solar	56	N/A	Tulare	May 2022	15
Terra-Gen	Sanborn Storage	Storage	0	47/188	Kern	December 2022	12
EDP Renewables	EDPR Solar Park	Solar + Storage	100	30/120	Fresno	December 2022	20
Terra-Gen	Edwards Solar	Solar + Virtual Storage	100	TBD	Kern	December 2022	15
Clearway Energy Group	Daggett 3	Solar+ Storage	50	12.5/50	San Bernadino	April 2023	15
Intersect Power	Oberon	Solar+ Storage	125	125	Riverside	January 2024	10+
LS Power	Tumbleweed Energy Storage	Storage	0	50/200	Kern	June 2024	15

