



CAC Item C6
Staff Report Item 13

TO: East Bay Community Energy Board of Directors

FROM: Marie Fontenot, Vice President of Power Resources

SUBJECT: Broad Reach Power Noosa and Broad Reach Power Cascade Contract Approvals (Action)

DATE: October 19, 2022

Recommendation

Adopt three Resolutions authorizing the Chief Executive Officer to execute Agreements for two projects awarded short listing through the 2022 Long-Term Resources request for offers (RFO): Noosa Energy Storage LLC (Broad Reach Power) and Cascade Energy Storage LLC (Broad Reach Power). The two battery storage projects listed below are expected to be operational starting in 2024:

- a. Cascade: 10-year, 5 MW RA-only from battery storage project in San Joaquin County. June 2024 online date. Developed by Broad Reach Power.
- b. Noosa: 10-year, 30 mega-watts (MW) Resource Adequacy (RA) from battery storage project in San Joaquin County. June 2024 online date. Developed by Broad Reach Power.

Background and Discussion

The 2022 Long-Term Resource Request for Offers (RFO) is EBCE's third long-term contract solicitation. The RFO that was launched in November 2020. 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 2023.¹ 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 Broad Reach Power Cascade contract is for RA from a 10 MW/40 MWh battery storage project. The contracted project, Cascade, is located in San Joaquin County. The contract is for 10-years with an expected commercial operation date of June 1, 2024. Broad Reach Power is an experienced developer having 17 battery storage projects in operation in Texas with an additional 800 MW in development in Texas. The Cascade battery storage project will be Broad Reach’s second project to achieve commercial operation in California. The contracting entity is Cascade Energy Storage LLC.

The Broad Reach Power Noosa contract is for RA from a 60 MW/240 MWh battery storage project. The contracted project, Noosa, is located within Stockton in San Joaquin County. The contract is for 10-years with an expected commercial operation date of June 1, 2024.

Attachments

- A. Resolution Authorizing the CEO to Negotiate and Execute a Ten Year Resource Adequacy Agreement with Cascade Energy Storage LLC
- B. Resolution Authorizing the CEO to Negotiate and Execute a Ten Year Resource Adequacy Agreement with Noosa Energy Storage TBD
- 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-2022-XX

A RESOLUTION OF THE BOARD OF DIRECTORS

**OF THE EAST BAY COMMUNITY ENERGY AUTHORITY AUTHORIZING THE CEO TO
NEGOTIATE AND EXECUTE A TEN YEAR RESOURCE ADEQUACY AGREEMENT WITH
CASCADE ENERGY STORAGE 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, EBCE issued the 2022 Long-Term Resources request for offers (RFO) in February, 2022; and

WHEREAS, Cascade Energy Storage LLC, proposed a 5 MW of Resource Adequacy (RA) from a 10 MW/40 MWh battery energy storage project in San Joaquin County, developed by Broad Reach Power; and

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

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 ten-year RA agreement with Cascade Energy Storage LLC for a 5 MW RA-only battery energy storage project in San Joaquin County. The final agreement shall include the key terms outlined in the staff report associated with this Resolution.

ADOPTED AND APPROVED this 19th day of October, 2022.

Dianne Martinez, Chair

ATTEST:

Adrian Bankhead, Clerk of the Board

RESOLUTION NO. R-2022-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 NOOSA
ENERGY STORAGE 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, EBCE issued the 2022 Long-Term Resources request for offers (RFO) in February 2022; and

WHEREAS, Noosa Energy Storage LLC, proposed a 30 MW of Resource Adequacy (RA) from a 60 MW/240 MWh battery energy storage project in Stockton in San Joaquin County, developed by Broad Reach Power; and

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

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 ten-year RA agreement with Noosa Energy Storage LLC for a 30 MW RA-only battery energy storage project in San Joaquin County. The final agreement shall include the key terms outlined in the staff report associated with this Resolution.

ADOPTED AND APPROVED this 19th day of October, 2022.

Dianne Martinez, Chair

ATTEST:

Adrian Bankhead, Clerk of the Board



2022 Long-Term Resource RFO: Project Update

PRESENTED BY: Marie Fontenot

DATE: October 19, 2022



Agenda

Attachment Staff Report Item 13C

- 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
- Construction Status: 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

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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 <u>at least 5 MWh of energy for every 1 MW of incremental capacity</u>	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: two RA-only agreements submitted into EBCE and SJCE's joint 2022 Long-Term Resource RFO

- 10-year, 5 MW RA-only contract for battery storage resource in San Joaquin county (Cascade) with Broad Reach Power. Expected to be operational June, 2024.
- 10-year, 30 MW RA-only contract for battery storage resource in Stockton, San Joaquin county (Noosa) with Broad Reach Power. Expected to be operational June, 2024.

Broad Reach Power – Cascade

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Project Details

- Selected via the 2022 Joint CAA Long-Term Resource RFO
- Contract for 5 MW Resource Adequacy from energy storage project in San Joaquin County
- Total project size is 99 MW
- 10-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 Broad Reach Power is Cascade Energy Storage LLC.

Broad Reach Power - Noosa

Project Details

- Selected via the 2022 Joint CAA Long-Term Resource RFO
- Contract for 30 MW Resource Adequacy from energy storage project in Stockton, San Joaquin County
- Total project size is 60 MW
- 10-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 Broad Reach Power is Noosa Energy Storage LLC.

Overview

- Broad Reach Power (BRP) is led by a team who have delivered more than four gigawatts of complex projects and who have a combined experience of more than 80 years.
- Founded in 2019, BRP is a utility-scale developer with 350 MW of battery storage projects in operation and over 10 GW in development pipeline.
- BRP is financially backed by prominent investors EnCap Energy Transition Fund, Apollo Global Management, Yorktown Partners, and Mercuria Energy
- BRP's California development team is comprised of three individuals who all live in the state. The transmission team is comprised of well known and highly regarded individuals in California energy.
- BRP has some experience with CCAs; owns and operates at least 1 executed contract with CCAs:
 - RA contract with Redwood Coast Energy Authority; energy storage project to COD 5/2023

Portfolio Characteristics

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	Developer	Project	Location	Product	Offtake	COD	Nameplate	Sept NQC
Gener-ation		None at this time						
Storage		None at this time						
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.
- Complete negotiations of projects under consideration. Anticipate presentations to Board through the fall into winter.
- 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 February 1, 2023.
- CPUC's 2022 IRP cycle provides formal opportunity for portfolio review and analysis of open position, cost and risk. Further engagement with board and community in spring/summer of 2022 timeframe.

Appendix

Portfolio Summary

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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
Idemitsu 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