

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Board Meeting Date: Tuesday, December 10, 2024

***Request to Approve an Extension of the 15% Purchase Requirement Timeframe
Initial Term of the Regulatory Agreement, and to Amend the Sales and Use Tax
Exclusion Award Resolution to Add a Participating Party¹***

**BHE Renewables, LLC and its Subsidiaries Magma Power Company;
CE Generation, LLC; and Black Rock Geothermal, LLC
Application No. 22-SM019**

Tuesday, December 10, 2024

Prepared By: *Jeannie Yu, Program Analyst*

SUMMARY

Applicant: BHE Renewables, LLC and its subsidiaries Magma Power Company;
CE Generation, LLC; and Black Rock Geothermal, LLC (previously applied
as BHE Renewables, LLC and its subsidiaries Magma Power Company and
CE Generation, LLC)

Location: Calipatria, Imperial County

Industry: Geothermal Brine and Steam Production

Project: New Geothermal Brine and Steam Production Facility (Alternative Source)

Total Amount Qualified Property Approved: \$188,422,290

Estimated Sales and Use Tax Exclusion Amount at Approval:² \$16,015,895

Initial Board Approval Date: June 21, 2022

Amount of Time Requested:

- Requesting a two-year and 25-day extension, until July 16, 2027, for the 15% purchase requirement timeframe (five years and 25 days from the date of initial CAEATFA Board approval)

¹ All capitalized terms not defined in this document are defined in the Sales and Use Tax Exclusion Program's statutes and regulations.

² This amount is calculated based on the average statewide sales tax rate of 8.5%.

- Requesting a three-year and 16-day extension, until January 16, 2030, for the initial term of the Regulatory Agreement (seven years, six months and 26 days from the date of initial CAEATFA Board approval)

Staff Recommendation: Approval

BACKGROUND

On June 21, 2022, the CAEATFA Board approved a Sales and Use Tax Exclusion (“STE”) award for BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC (the “BHE and Subsidiaries”) for the purchase of up to \$188,422,290 in Qualified Property to build a new geothermal steam production facility located in Calipatria (the “Project”). The Regulatory Agreement (“Agreement”) provided the Applicant with 18 months from the date of CAEATFA Board approval to purchase or execute purchase orders for at least 15% of the total Qualified Property amount approved. Also, the Agreement initial term provided the Applicant with three years from the date of CAEATFA Board approval to utilize its STE award.³ However, at the time of award, the CAEATFA Board approved the Applicant for a one-year and six month extension of the 15% purchase requirement from December 21, 2023 to June 21, 2025, and a one-year, six-month, and 10-day extension of the initial term from June 21, 2025 to December 31, 2026.

As of July 2024, BHE Renewables and Subsidiaries have not purchased any Qualified Property. BHE Renewables and Subsidiaries is requesting to extend the 15% purchase requirement timeframe to accommodate a delay in permitting and to extend the Agreement’s initial term for the same accommodation.

On October 15, 2024, BHE Renewables and Subsidiaries submitted a request to add Black Rock Geothermal, LLC (“Black Rock”) as a participating party on the STE award approval resolution.

THE APPLICANT

BHE Renewables, LLC, and its subsidiaries Magma Power Company; CE Generation, LLC; and Blackrock Geothermal, LLC (collectively the “Applicant”), are Delaware and Nevada companies that formed in 2011, 1981, 1999, and 2022, respectively. BHE and Subsidiaries are all subsidiaries of Berkshire Hathaway Inc., a publicly traded company on the NSYE under the symbol BRK.A. The Applicant has its corporate headquarters in Urbandale, Iowa.

Previously, other subsidiaries of Berkshire Hathaway Inc. have received STE awards for separate projects including:

- June 2022, the CAEATFA Board granted BHE Renewables, LLC and its subsidiaries Magma Power Company; BHER Minerals, LLC; and CE Generation, LLC an STE award for the purchase of up to \$21,434,530 in Qualified Property

³ California Code of Regulations Title 4, Division 13, Section 10035(b)(1)(A)

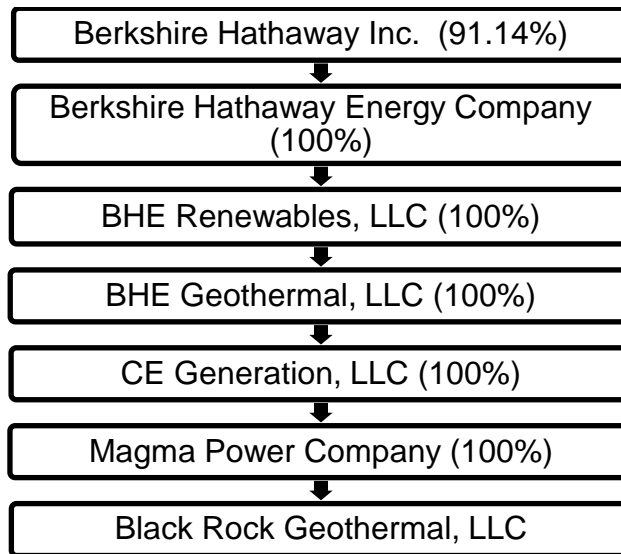
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for an estimated STE value of \$1,821,935 to build a new lithium recovery and processing demonstration facility located in Calipatria. As of July 2024, approximately \$3.7 million of the Qualified Property (17% of the total Qualified Property approved) has been purchased. At this Board meeting, this applicant also has an extension and modification request before the Board.

- July 2023, the CAEATFA Board granted BHE Renewables, LLC, and its subsidiaries, Magma Power Company; Elmore North Geothermal LLC; and CalEnergy Operating Corporation an STE award for the purchase of up to \$239,233,728 in Qualified Property for an estimated STE value of \$19,999,940 to construct a new geothermal brine and steam production facility located in Calipatria. As of November 2024, no purchases of Qualified Property have been made. This applicant also has an extension and modification request before the Board.

- July 2024, the CAEATFA Board granted BHE Renewables, LLC and its subsidiaries, Magma Power Company and Morton Bay Geothermal LLC an STE award for the purchase of up to \$236,966,824.64 in Qualified Property for an estimated STE value of \$20,000,000 to construct a new geothermal brine and steam production facility located in Calipatria. As of November 2024, no purchases of Qualified Property have been made.

The ownership structure of the Applicant is as follows:



The company officers of BHE Renewables, LLC

Alicia Knapp, President, Chief Executive Officer, and Manager
James W. Dougherty, Senior Vice President, Operations
Kristina M. Williams, Senior Vice President, Chief Executive Officer, and Manager
Todd A. Anliker, Vice President and Treasurer
Jake S. Anonson, Vice President
Eric Bowen, Vice President, Wind & Gas Ops
Alan Brown, Vice President
Jeffrey B. Erb, Secretary
James C. Galt, Vice President and Assistant Treasurer
Robert D. Garman, Vice President and Assistant General Counsel
Jonathan D. Hale, Vice President, Taxation
Matt A. Mitchell, Vice President
Steven C. Rowley, Vice President, Energy Marketing & Trading
Eric J. Smith, Vice President
Bryan Whitcomb, Vice President, Geothermal & Solar Ops

THE PROJECT

The Applicant received an STE award to build a new geothermal steam production facility located in Calipatria. The Applicant plans to construct a steam Resource Production Facility (“RPF”), which will use production and injection wells to produce geothermal brine from the Salton Sea Known Geothermal Resource Area (“Salton Sea”). The RPF will use a flash steam design to produce both geothermal brine and steam. Once extracted, the steam will be used as an alternative source fuel to generate electricity at a Power Generator Facility (“PGF”). The PGF will use a three-pressure geothermal steam turbine and generator to produce a gross generation of 81.9 megawatts. The geothermal brine will be transported from the RPF via cross-country pipelines to injection wells to recharge the geothermal reservoir in the Salton Sea. According to the Applicant, CalEnergy, a subsidiary of the Applicant’s parent company, holds the appropriate minerals rights and surface rights for the RPF and PGF as well as access rights for the RPF’s planned wells and pipelines.

Consistent with CAEATFA policy at the time of award, the Qualified Property in this Application will be used to manufacture geothermal steam; the Qualified Property also includes a portion of the power generation equipment used to power the facility. The Project’s equipment will consume approximately 10 percent of the total amount of available energy generated from the geothermal steam; therefore, 10 percent of the power generation equipment is eligible for an STE. However, 90 percent of the power generation equipment cost is not included in this Application, as it represents the proportion of available energy in the form of electricity.

15% PURCHASE REQUIREMENT TIMEFRAME EXTENSION REQUEST

The Applicant has requested that the 15% purchase requirement timeframe be extended from June 21, 2025, to July 16, 2027, in order to accommodate permitting delays.

AGREEMENT INITIAL TERM EXTENSION REQUEST

The Applicant has requested that the initial term of the Agreement be extended from December 31, 2026, to January 16, 2030, for the same accommodations.

STAFF EVALUATION

The CAEATFA Board can extend the 15% purchase requirement timeframe upon a finding of extraordinary circumstances and that an extension is in the public interest and advances the purposes of the STE Program.⁴

The CAEATFA Board can extend the initial term of the Agreement upon a finding that an extension is in the public interest and advances the purposes of the STE Program.⁵

According to the Applicant, the California Energy Commission’s (“CEC”) permitting process is taking longer than expected to reach a decision on power plant licensing. The Applicant states that the CEC has exclusive jurisdiction over the construction and operation of the thermal powerplants with a net generating capacity of 50 MW or more, which applies to the Project. The Applicant met with the CEC several times in September 2024:

1. On September 17, 2024, which led to the CEC issuing an order directing the involved parties to meet and confer project scheduling, and requests that Black Rock file a joint proposed schedule for the proceeding;
2. A September 19, 2024 workshop, which led to several requests for information from the CEC staff to Black Rock to further CEC staff’s environmental analysis of the Project; and
3. A September 24, 2024 meeting where the involved parties met to review several schedule proposals.

According to the Applicant, the CEC staff and Black Rock agreed upon a joint proposed schedule that anticipates a September 2025 final decision by the CEC. The Applicant also states the Imperial Irrigation District (“IID”) has begun reforming its open access transmission tariff, including an overhaul of the interconnection technical studies, which is expected to take until January 2026 to determine whether any IID transmission upgrades will be required for the Project.

Staff has reviewed the Applicant’s extension request and has taken into consideration the reasons for the delays are unforeseen and beyond the Applicant’s control. Given the fact that producing geothermal brine is complicated and labor-intensive process to

⁴ California Code of Regulations Title 4, Division 13, Section 10035(b)(1)(A)

⁵ California Code of Regulations Title 4, Division 13, Section 10035(b)(1)(B)

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achieve, the CEC is taking longer than expected to review and issue the necessary permits. Staff has considered that both the Applicant and CEC staff have proposed a schedule to complete the CEC permitting process by September 2025, but that a schedule has not yet been adopted by the CEC, and the IID will not be complete until January 2026. Due to the Applicant's current standing, and if any network transmission upgrades are identified, long-lead equipment cannot be ordered until approximately Q2 2027. For these reasons, the Applicant does not expect procurement to conclude until Q1 2030. Furthermore, the Applicant states that the Project will be critical as the Public Utilities Commission has recommended the California Department of Water Resources procure 1,000 MW of geothermal plant for Load Serving Entities (LSEs) and the solicitation is expected to begin early 2027.

Based on this information, Staff believes these are extraordinary circumstances, and that extending the 15% purchase requirement timeframe will allow for the Project to be completed, and is, therefore, in the public interest and advances the purposes of the STE Program. Staff also believes extending the initial term of the Agreement will allow for the Project to be completed, and is, therefore, in the public interest and advances the purposes of the STE Program.

Statute limits the use of CAEATFA's sales and use tax exclusion to any "participating party" (Revenue and Taxation Code Section 6010.8). Public Resources Code Section 26003(a)(7)(B) defines "participating party" as an entity that seeks financial assistance pursuant to Section 26011.8, which establishes the Sales and Use Tax Exclusion Program. Section 3 of the approval resolution provides that the Applicant is a "participating party" within the meaning of Public Resources Code Section 26003(a)(7).

Amending the resolution to add Black Rock Geothermal, LLC as a participating party will allow the proposed Project to continue and the state to receive the estimated benefits of the original Project.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's Legal Status portion of the extension request. No information was disclosed concerning the financial viability or legal integrity of this Applicant.

CAEATFA FEES

In accordance with STE Program regulations,⁶ the Applicant has paid an additional fee of \$2,750 because adding a participating party, and extending the 15% purchase requirement and initial term qualifies as a modification to the Applicant's Agreement.

RECOMMENDATION

Staff recommends that the Board approve the Applicant's request to extend the 15% purchase requirement timeframe by two years and 25 days, until July 16, 2027, as the Applicant has demonstrated extraordinary circumstances, and it is in the public interest and advances the purposes of the STE Program.

⁶ California Code of Regulations Title 4, Division 13, Section 10036(c)(1)(C)

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Staff recommends that the Board approve the Applicant’s request to extend the initial term of the Agreement by three years and 16 days, until January 16, 2030, as it is in the public interest and advances the purposes of the STE Program, and the remaining term shall be for a period of 19 years, six months, and 20 days, until January 11, 2042, for providing annual compliance reports.⁷

Staff recommends that the Board approve the Applicant’s request to amend Resolution No. 22-SM019-01 to add Black Rock Geothermal, LLC as a participating party.

ATTACHMENTS

Attachment A: BHE Renewables, LLC and its subsidiaries Magma Power Company; CE Generation, LLC; and Black Rock Geothermal, LLC’s letter requesting waiver (October 15, 2024)

Attachment B: BHE Renewables, LLC and its subsidiaries Magma Power Company; CE Generation, LLC; and Black Rock Geothermal, LLC’s staff summary at the time of approval

⁷ California Code of Regulations Title 4, Division 13, Section 10035(a)(2)

RESOLUTION APPROVING AN EXTENSION OF BHE RENEWABLES, LLC AND ITS SUBSIDIARIES MAGMA POWER COMPANY; CE GENERATION, LLC; AND BLACK ROCK GEOTHERMAL, LLC'S 15% PURCHASE REQUIREMENT TIMEFRAME AND THE INITIAL TERM UNDER THE REGULATORY AGREEMENT AND AMENDING RESOLUTION NO. 22-SM019-01 TO ADD BLACK ROCK GEOTHERMAL, LLC AS A PARTICIPATING PARTY

December 10, 2024

WHEREAS, on June 21, 2022, the California Alternative Energy and Advanced Transportation Financing Authority (the "Authority"), a public instrumentality of the State of California, approved a Sales Tax Exclusion ("STE") in the amount of \$188,422,290 of Qualified Property for **BHE Renewables, LLC and its subsidiaries Magma Power Company; CE Generation, LLC; and Black Rock Geothermal, LLC** (the "Applicant"); and

WHEREAS, within 18 months of approval by the Authority, the Applicant must purchase or execute purchase orders for at least 15% of the total amount of Qualified Property listed in the approval resolution (STE Program regulations Section 10035(b)(1)); and

WHEREAS, upon a finding of extraordinary circumstances and that it is in the public interest and advances the purposes of the Program, the Authority may waive the requirement that the Applicant must purchase or execute purchase orders for at least 15% of the total amount of Qualified Property within 18 months of Application approval (STE Program regulations Section 10035(b)(1)(A)); and

WHEREAS, the Applicant had requested a waiver of the requirement to purchase or execute purchase orders for at least 15% of the Qualified Property amount within 18 months due to unexpected delays in the Project timeline, extending the term by one (1) year and six (6) months to June 21, 2025; and

WHEREAS, the Applicant has requested a waiver of the requirement to purchase or execute purchase orders for at least 15% of the Qualified Property amount by June 21, 2025 due to unexpected delays in the Project timeline, extending the term by two (2) years and twenty-five (25) days to July 16, 2027; and

WHEREAS, the Applicant has demonstrated extraordinary circumstances as to why it cannot meet the 18-month 15% purchase requirement timeframe; and

WHEREAS, within three years of approval by the Authority, the Applicant must make all Qualified Property purchases (STE Program regulations Section 10035(b)(1)); and

WHEREAS, upon a finding that it is in the public interest and advances the purposes of the Program, the Authority may waive the requirement that all purchases of

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Qualified Property be made within three (3) years of Application approval (STE Program regulations Section 10035(b)(1)(B)); and

WHEREAS, the Applicant had requested a waiver of the requirement to purchase all of the Qualified Property within three (3) years, due to unexpected delays in the Project timeline, extending the term by one (1) year, six (6) months, and ten (10) days to December 31, 2026; and

WHEREAS, the Applicant had requested a waiver of the requirement to purchase all of the Qualified Property by December 31, 2026, due to unexpected delays in the Project timeline, extending the term by three (3) years and sixteen (16) days, until January 16, 2030; and

WHEREAS, granting the waivers will allow the Project to proceed and the state to receive the anticipated environmental and economic benefits that justified the initial approval of the Project in accordance with the law, thereby advancing both the public interest and the purposes of the Program.

WHEREAS, BHE Renewables, LLC and its subsidiaries Magma Power Company, CE Generation, LLC and Black Rock Geothermal, LLC have the authority and responsibility to complete a portion of the Project as described in the Application; and

WHEREAS, the Applicant requests the Authority amend the Regulatory Agreement by amending Resolution No. 22-SM019-01 to include Black Rock Geothermal, LLC as a participating party.

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Authority finds these are extraordinary circumstances and that it is in the public interest and advances the purposes of the Program to extend the Applicant's deadline to meet the 15% purchase requirement to July 16, 2027.

Section 2. The Authority finds that it is in the public interest and advances the purposes of the Program to extend the Applicant's initial term of the Regulatory Agreement to January 16, 2030.

Section 3. Resolution No. 22-SM019-01 dated June 22, 2022 is amended to add Black Rock Geothermal, LLC as a participating party to the Regulatory Agreement.

Section 4. This resolution shall take effect immediately upon its passage.

Attachment A: BHE Renewables, LLC and its Subsidiaries Magma Power Company; CE Generation, LLC; and Black Rock Geothermal, LLC’s Letter Requesting Waiver (October 15, 2024)



October 15, 2024

Jeannie Yu
Sales and Use Tax Exclusion Analyst
California Alternative Energy and Advanced Transportation Financing Authority

Re: California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) – Sales and Use Tax Exclusion (“STE”) Program Application, Extension Request, and Ownership Update

Dear Ms. Yu:

BHE Renewables, LLC (“BHE Renewables”) proposes the following updates to the Regulatory Agreement for Resolution No. 22-SM019-01 to extend the current 15% Purchase Requirement and Initial Term deadline, and update the ownership, along with their respective justifications.

Proposed Extension: Please extend the current 15% Purchase Requirement deadline from June 21, 2025, to July 16, 2027, and the Initial Term deadline from December 31, 2026, to January 16, 2030.

Justification: The California Energy Commission (CEC) permitting process is resulting in a longer than anticipated timeline to reach a decision on licensing. There have been several events that occurred in September 2024 that result in an updated anticipated timeline for a CEC decision. First, on September 17, 2024, the CEC Committee issued an order directing (1) parties to meet and confer to discuss schedule and (2) CEC Staff and Black Rock Geothermal LLC to file a joint proposed schedule for the proceeding. Second, a workshop held on September 19, 2024, resulted in several requests for information from CEC Staff to Black Rock Geothermal LLC to further CEC Staff’s environmental analysis of the project. Third, at the September 24, 2024, meet and confer between the parties, parties identified several proposals for schedule. Ultimately, CEC Staff and Black Rock Geothermal LLC have proposed a joint schedule that results in a September 2025 Final Decision by the CEC. Note that a schedule for the remainder of the CEC proceeding has not yet been adopted by the CEC Committee. The Imperial Irrigation District (“IID”) has also begun reforming their open access transmission tariff, including an overhaul of interconnection technical studies, which is expected to take until January 2026 to determine whether any IID transmission upgrades will be required for the project. Based on BHE Renewables’ current understanding, if any network transmission upgrades are identified, long-lead equipment will be ordered in approximately Q2 2027, with procurement concluding in approximately Q1 2030.

No significant changes in project scope have been made. Refinements to the project will be provided to the CEC to respond to stakeholders, provide mitigation measures and optimize the facility design.

Assurance: Both the CEC permitting process and IID restudy are anticipated to be completed in 2025. There is also a California Public Utilities Commission (CPUC) recommendation that the California Department of Water Resources procure, for Load Serving Entities (LSEs) through central procurement, 1,000 MW of geothermal power with a solicitation to begin in early 2027.

Proposed Ownership Update: BHE Renewables, LLC and its subsidiaries Magma Power Company, CE Generation, LLC and Black Rock Geothermal, LLC.

The ownership structure is: Black Rock Geothermal LLC is 100% owned by Magma Power Company, and Magma Power Company is 100% owned by CE Generation, LLC. CE Generation, LLC is 100% owned by BHE Geothermal, LLC, and BHE Geothermal LLC is 100% owned by BHE Renewables, LLC.

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Justification: The only update is the addition of Black Rock Geothermal, LLC. It is a newly created company for the operations of this project. There are no new investors in this project.

Please let me know of any questions or more information we can provide.

Sincerely,

A handwritten signature in blue ink, appearing to read "Alan Brown".

Alan Brown
Vice President

Attachment B: BHE Renewables, LLC and its Subsidiaries Magma Power Company; CE Generation, LLC; and Black Rock Geothermal, LLC’s Staff Summary at the Time of Approval

The original award staff summary can be found [on the CAEATFA website](#).

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Resolution No. 22-SM019-01

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Request to Approve Project for a Sales and Use Tax Exclusion¹

**BHE Renewables, LLC, and its subsidiaries Magma Power Company
and CE Generation, LLC
Application No. 22-SM019**

Tuesday, June 21, 2022

Prepared By: *Matthew Jumps, Program Analyst*

SUMMARY

Applicant – BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC

Location – Calipatria, Imperial County

Industry – Geothermal Steam Production

Project – New Geothermal Steam Production Facility (Alternative Source)

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$188,422,290	\$16,015,895

Estimated Net Benefit ³	Dollar Value	Points Earned ⁴
Estimated Fiscal Benefits	\$21,719,219	1,356
Estimated Environmental Benefits	\$9,631,034	601
Additional Benefits	N/A	205
Total	\$31,350,252	2,162
Estimated Quantifiable Net Benefit	\$15,334,358	

Competitive Criteria Score – 225

Staff Recommendation – Approval

¹ All capitalized terms not defined in this document are defined in the STE Program’s statutes and regulations.

² This amount is calculated based on the average statewide sales tax rate of 8.5%.

³ Applications that earn a Total Score of at least 1,000 points and an Environmental Benefits Score of over 20 points may be recommended for approval. (California Code of Regulations Title 4, Division 13, Section 10033(c)(6).)

⁴ Dollar values and point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

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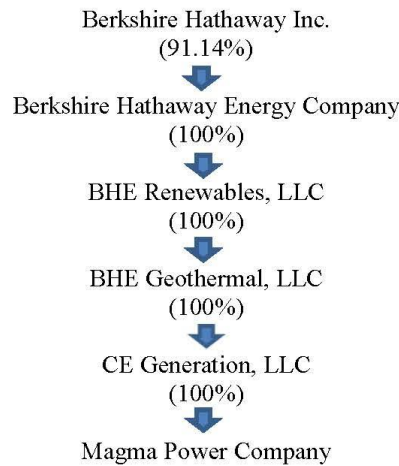
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THE APPLICANT

BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC (the “Applicant”), are Delaware and Nevada companies that formed in 2011, 1981, and 1999 respectively. The Applicant are all subsidiaries of Berkshire Hathaway Inc., a publicly traded company on the NSYE under the symbol BRK.A. The Applicant has its corporate headquarters in Urbandale, Iowa.

On August 29, 2011, the CAEATFA Board granted a subsidiary, CE Obsidian Energy, LLC, of the Applicant’s parent company, Berkshire Hathaway, Inc., an STE award for the purchase of up to \$174,453,978 in Qualified Property for an estimated STE value of \$14,130,772 to construct a geothermal power project in Imperial County. CE Obsidian Energy, LLC, did not make any Qualified Property purchases and its Regulatory Agreement with CAEATFA ended on December 31, 2019.

The ownership structure of the Applicant is:



The corporate officers of the Applicant are:

- Alicia Knapp, President, CEO and Manager
- Thomas W. Cross, VP, CFO, Treasurer, and Manager
- Thomas J. Budler, Senior VP
- Jake S. Anonson, VP
- Alan Brown, VP
- Jennifer L. Cavanagh, VP
- Jeffery B. Erb, Secretary
- Robert Bernsten, Manager and Senior VP, General Counsel and Assistant Secretary
- Jonathan D. Hale, VP of Taxation
- Matthew A. Mitchell, VP
- Eric J. Smith, VP
- Bryan Whitcomb, VP of Geothermal and Solar Ops
- Eric Bowen, VP of Wind and Gas Ops
- James C. Galt, AVP and Assistant Treasurer

THE PROJECT

BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC are requesting an STE award to build a new geothermal steam production facility located in Calipatria (the “Project”). The Applicant plans to construct a steam Resource Production Facility (“RPF”), which will use production and injection wells to produce geothermal brine from the Salton Sea Known Geothermal Resource Area (“Salton Sea”). The RPF will use a flash steam design to produce both geothermal brine and steam. Once extracted, the steam will be used as an alternative source fuel to generate electricity at a Power Generator Facility (“PGF”). The PGF will use a three-pressure geothermal steam turbine and generator to produce a gross generation of

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81.9 megawatts. The geothermal brine will be transported from the RPF via cross-country pipelines to injection wells to recharge the geothermal reservoir in the Salton Sea. According to the Applicant, CalEnergy, a subsidiary of the Applicant’s parent company, holds the appropriate minerals rights and surface rights for the RPF and PGF as well as access rights for the RPF’s planned wells and pipelines.

Consistent with CAEATFA policy, the Qualified Property in this Application will be used to manufacture geothermal steam; the Qualified Property also includes a portion of the power generation equipment used to power the facility. The Project’s equipment will consume approximately 10 percent of the total amount of available energy generated from the geothermal steam; therefore, 10 percent of the power generation equipment is eligible for a sales and use tax exclusion. However, 90 percent of the power generation equipment cost is not included in this Application, as it represents the proportion of available energy in the form of electricity.

The Project will also provide geothermal brine to a lithium recovery facility, which is also before the Board for consideration for an STE award at the June board meeting. That project will use geothermal brine produced from the Applicant’s existing geothermal facilities and this new facility in the Salton Sea to recover battery-grade lithium carbonate monohydrate to be used in lithium-ion batteries for zero-emissions vehicles.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Turbine Generator, Electrical, Instrumentation, Cooling Tower, and Condenser	\$23,343,440
Vessels, Tanks, Pumps, and Valves	\$64,822,675
Piping and Well Equipment	\$100,256,175
Total	\$188,422,290

Note: The Qualified Property purchases reported in the Application and shown here in staff’s report are estimated costs. At the termination of the Regulatory Agreement, a finalized Project equipment list will be prepared detailing the value of the Project equipment actually acquired, and the estimated tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance from the costs shown in the Application and in this report may occur prior to the closing due to increased costs of certain components of the Project over original estimates, and other reasons. In addition, those costs may vary after closing due to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in statute or regulation, or for other reasons.

TIMELINE

According to the Applicant, the site for the Project is currently undergoing biological and archeological field studies. The Applicant states that power purchase agreement meetings are currently taking place. The Applicant has submitted an interconnection request to the Imperial

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Irrigation District and a transmission service request was submitted on January 10, 2022. The Applicant states that Qualified Property purchases, specifically equipment with long-lead times, will begin in July of 2023 and continue through March 2025. The Applicant plans to commence construction in 2024, with a target date of December 31, 2026, for the facility to come on-line.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

According to the Applicant, the Project will require multiple certifications and permits, including an Application for Certification from the California Energy Commission, a permit from the Imperial County Air Pollution Control District, an Imperial County Conditional Use Permit, and a Water Quality Control Board Waste Discharge Permit. The Applicant expects to have all permits by first quarter of 2024.

COMPETITIVE CRITERIA SCORE

The Applicant received 225 Competitive Criteria points as follows:

1. **Environmental Benefits (100 of 100 points)**. The Application has a Project that produces an Alternative Source product, component, or system, and, therefore, 100 points are awarded.
2. **Unemployment (50 of 50 points)**. The Applicant's Project's Facility is located in Imperial County, which has an average annual unemployment rate of 17.3%.⁵ When compared to the statewide average annual unemployment rate of 7.89%, the Project location earned the Applicant 50 points.
3. **Job Creation (0 of 75 points)**. The Applicant anticipates the Project will support a total of 37 production-related jobs at its Facility. CAEATFA estimates that approximately 4.71 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned zero points.
4. **California Headquarters (0 of 15 points)**. The Applicant does not have a California Corporate Headquarters, and, therefore, zero points are awarded.
5. **Natural Disaster Relief (0 of 50 points)**. The Project is not to rebuild or relocate the Applicant's Facility due to a fire, flood, storm, or earthquake identified in a state of emergency proclaimed by the Governor within two years of the time of application, and, therefore, zero points are awarded.
6. **Eligibility for Manufacturing and Research and Development Equipment Exemption (0 of 50 points)**. The Applicant is eligible to use one or more of the

⁵ Unemployment rates are based on data available in December 2021.

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exemptions established pursuant to Section 6377.1 of the Revenue and Taxation Code, and, therefore, zero points are awarded.

7. **Emerging Strategic Industry (75 of 75 points)**. The Project's industry, geothermal steam production, is in an Emerging Strategic Industry, and, therefore, 75 points are awarded.

PROJECT EVALUATION

PROJECT BENEFITS

The Project received a Total Score of 2,162 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 601 points, which exceeds the 20-point threshold.

- A. **Fiscal Benefits (1,356 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales and use taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes, and other indirect fiscal benefits of the Applicant. The total fiscal benefits amount to \$21,719,219, resulting in a Fiscal Benefits score of 1,356.
- B. **Environmental Benefits (601 points)**. The Project is anticipated to result in \$9,631,034 of total pollution benefits over the life of the Project, resulting in an Environmental Benefits Score of 601 points. These benefits derive from the extraction of geothermal brine, which offsets the need for fossil fuel derived sources of energy.
- C. **Additional Benefits (205 points)**. Applicants may earn additional points for their Total Score. The Applicant received 205 additional points.
 1. **Production Jobs (0 of 75 points)**. The Applicant anticipates the Project will support a total of 37 production-related jobs at its Facility. CAEATFA estimates that approximately 4.71 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned zero points.
 2. **Construction Jobs (40 of 75 points)**. The Applicant anticipates the Project will support a total of 565 construction jobs at its Facility. CAEATFA estimates that approximately 71.95 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 40 points.
 3. **Unemployment (50 of 50 points)**. The Applicant's Project is located in Imperial County, which has an average annual unemployment rate of 17.3%.

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When compared to the statewide average annual unemployment rate of 7.89%, the Project location earned the Applicant 50 points.

4. **Workforce Partnerships (25 of 25 points)**. The Applicant has a partnership with Imperial Valley College for the purpose of workforce development for geothermal power operations at the Salton Sea Known Geothermal Resource Area.
5. **Industry Cluster (25 of 25 points)**. The industry associated with this Application has been identified by Lithium Valley Commission as a strategic cluster of the region of the Project's location.
6. **Benefits and Fringe Benefits (25 of 25 points)**. The Applicant states it provides medical, health, dental, vision, bonuses, retirement contributions, profit sharing, education reimbursement, employee discounts, and paid leave benefits to its employees, earning the Applicant 25 points.
7. **Emerging Strategic Industry (40 of 40 points)**. The Project's industry, geothermal steam production, is in an Emerging Strategic Industry, earning the Applicant 40 points.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

FINDINGS OF EXTRAORDINARY CIRCUMSTANCES AND OF PUBLIC INTEREST

As mentioned above, the Project is in conjunction with a new lithium recovery facility. This Project will provide geothermal brine to the lithium recovery facility for the extraction of lithium from the geothermal brine. Due to the long-term nature of the Applicant's geothermal and lithium recovery projects in the Lithium Valley, the Applicant is requesting to extend the 15% purchase requirement timeframe by 18 months and is requesting to extend the initial term of the Regulatory Agreement ("Agreement") by 18 months and six days.

The CAEATFA Board can extend the 15% purchase requirement timeframe upon a finding of extraordinary circumstances and that an extension is in the public interest and advances the purposes of the STE Program.⁶ The CAEATFA Board can extend the initial term of the Agreement upon a finding that an extension is in the public interest and advances the purposes of the STE Program.⁷

⁶ California Code of Regulations Title 4, Division 13, Section 10035(b)(1)(A)

⁷ California Code of Regulations Title 4, Division 13, Section 10035(b)(1)(B)

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Unlike other geothermal resources, the Project consists of hot, mineral rich brine, the harsh characteristics of which involve unique regulatory and engineering challenges. Additionally, the Applicant anticipates the instability of the current equipment supply-chain will extend purchasing timelines. As a result, the timeframe for developing the geothermal resources and completing the Project will be longer than the Program's standard requirements. However, because of the Project's interconnection with the new lithium recovery facility that is before the Board for consideration under Agenda Item 4.A.4, the Applicant is seeking an STE award at this time.

Based on the information presented, and in light of the anticipated benefits of the Project, Staff believes these are extraordinary circumstances and that granting the extensions is in the public interest and advances the purposes of the STE Program

CAEATFA FEES

In accordance with CAEATFA regulations,⁸ the Applicant has paid CAEATFA an Application Fee of \$10,000 and will pay CAEATFA an Administrative Fee of up to \$350,000.

RECOMMENDATION

Staff recommends the approval of Resolution No. 22-SM019-01 for BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC's purchase of qualifying tangible personal property in an amount not to exceed \$188,422,290 anticipated to result in an approximate STE value of \$16,015,895.

Staff recommends that the Board approve the Applicant's request to extend the 15% purchase requirement timeframe by 18 months, until June 21, 2025, as the Applicant has demonstrated extraordinary circumstances and it is in the public interest and advances the purposes of the STE Program.

Staff recommends that the Board approve the Applicant's request to extend the initial term of the Agreement by 18 months and six days, until December 31, 2026, as it is in the public interest and advances the purposes of the STE Program.

⁸ California Code of Regulations Title 4, Division 13, Section 10036.

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**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A
REGULATORY AGREEMENT WITH BHE RENEWABLES, LLC, AND ITS
SUBSIDIARIES MAGMA POWER COMPANY AND CE GENERATION, LLC**

June 21, 2022

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **BHE Renewables, LLC, and its subsidiaries Magma Power Company and CE Generation, LLC** (the “Applicant”) for financial assistance under the Sales and Use Tax Exclusion Program, as established in Public Resources Code Section 26011.8; and

WHEREAS, the Applicant qualifies as a Participating Party under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8; and

WHEREAS, the Applicant’s qualifying tangible personal property meets the requirements of a Project under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8 (the “Project”); and

WHEREAS, after the Authority approves an Application, the Authority enters into a Regulatory Agreement, as described in Authority Regulations Section 10035(a), with the Applicant for the Project; and

WHEREAS, within 18 months of approval by the Authority, the Applicant must purchase or execute purchase orders for at least 15% of the total amount of Qualified Property listed in the approval resolution (STE Program regulations Section 10035(b)(1)); and

WHEREAS, upon a finding of extraordinary circumstances and that it is in the public interest and advances the purposes of the Program, the Authority may waive the requirement that the Applicant must purchase or execute purchase orders for at least 15% of the total amount of Qualified Property within 18 months of Application approval (STE Program regulations Section 10035(b)(1)(A)); and

WHEREAS, the Applicant has requested a waiver of the requirement to purchase or execute purchase orders for at least 15% of the Qualified Property amount within 18 months, extending the term by 18 months to June 21, 2025; and

WHEREAS, the Applicant has demonstrated extraordinary circumstances as to why it cannot meet the 18-month 15% purchase requirement timeframe; and

WHEREAS, within three (3) years of approval by the Authority, the Applicant must make all Qualified Property purchases (STE Program regulations Section 10035(b)(1)); and

WHEREAS, upon a finding that it is in the public interest and advances the purposes of the Program, the Authority may waive the requirement that all purchases of Qualified Property be made within three (3) years of Application approval (STE Program regulations Section 10035(b)(1)(B)); and

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WHEREAS, the granting the waiver will allow the Project to proceed and the state to receive the anticipated environmental and economic benefits of the Project, thereby advancing both the public interest and the purposes of the STE Program; and

WHEREAS, the Applicant has requested the Authority enter into the Agreement to acquire Project equipment with an estimated cost not to exceed \$188,422,290 over a period of four (4) years, six (6) months, and six (6) days; and

WHEREAS, the Applicant asserts that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Project pursuant to Revenue and Taxation Code Section 6010.8; and

WHEREAS, the approval of the terms of the Regulatory Agreement and authority for the Executive Director or Chair of the Authority to execute the necessary documents to effectuate the Regulatory Agreement is now sought;

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Regulatory Agreement includes a Project within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The Regulatory Agreement constitutes financial assistance within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a participating party within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The Executive Director or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Authorized Signatories deem appropriate, provided that the amount of the qualifying tangible personal property to be purchased for the Project may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Regulatory Agreement between the Applicant and the Authority, as filed with the Authority prior to this public meeting, is hereby approved. For, on behalf and in the name of the Authority, the Authorized Signatories are hereby authorized and directed to execute, acknowledge, and deliver to the Applicant the Regulatory Agreement in substantially the form filed with or approved by the Authority.

The Regulatory Agreement may contain insertions, deletions or changes as the Authorized Signatories executing the Regulatory Agreement may require or approve, including particular information inserted in substantial conformance with the staff summary and in the Application to the Authority. The approval of the Regulatory Agreement will be conclusively evidenced by the execution and delivery of the final Regulatory Agreement.

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The Authority understands and agrees that, pursuant to the terms of the Regulatory Agreement, the obligations of the Applicant, under some circumstances, may be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including, without limitation, the execution and delivery of any and all documents and certificates they may deem necessary or advisable to consummate the Regulatory Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall ensure that all of the qualifying tangible personal property acquired as part of the Project that is listed in the semi-annual reports provided to the Authority pursuant to the Regulatory Agreement will be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Regulatory Agreement shall only apply to qualifying tangible personal property acquired as part of the Project that the Applicant certifies will be installed, maintained and operated at facilities physically located within the State of California.

Section 9. Neither the adoption by the Authority of this Resolution for the Applicant nor the Regulatory Agreement may be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project and may not be referred to in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. Authority finds these are extraordinary circumstances and that it is in the public interest and advances the purposes of the Program to extend the Applicant's deadline to meet the 15% purchase requirement to June 21, 2025.

Section 11. The Authority finds that it is in the public interest and advances the purposes of the Program to extend the Applicant's initial term of the Regulatory Agreement to December 31, 2026.

Section 12. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty (30) days if necessary.