

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

Request to Approve Project for a Sales and Use Tax Exclusion¹

**5E Boron Americas LLC
Application No. 24-SM034**

Tuesday, September 17, 2024

Prepared By: *Katrina Walters-White, Program Analyst*

SUMMARY

Applicant – 5E Boron Americas LLC

Location – Newberry Springs, San Bernadino County

Industry – Lithium Recovery and Processing

Project – New Lithium Chloride and Lithium Carbonate Facility (Advanced Manufacturing)

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$11,473,423	\$968,357

Estimated Net Benefit ³	Dollar Value	Points Earned ⁴
Estimated Fiscal Benefits	\$766,533	792
Estimated Environmental Benefits	N/A	61
Additional Benefits	N/A	150
Total	\$766,533	1,003
Estimated Quantifiable Net Benefit	\$201,823	

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 8.44%.

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.

THE APPLICANT

5E Boron Americas LLC (the “Applicant”), formally known as Fort Cady (California) Corporation, is a Delaware limited liability company that formed in 2022. The Applicant is headquartered in Hesperia, California, and specializes in manufacturing boric acid, lithium carbonate, gypsum or calcium chloride, sodium chloride, and magnesium hydroxide. The Applicant owns six parcels of real property in California where mineral rights are conveyed.

The major shareholders (10.0% or greater) of the Applicant are:

5E Advanced Materials, Inc. (100%)

The company officers of the Applicant are:
Paul Weibel, Manager

Corporate officers of 5E Advanced Materials, Inc.

Paul Weibel, President & CEO

Joshua Malm, Interim Chief Financial Officer

THE PROJECT

The Applicant is requesting a sales and use tax exclusion (“STE”) award to build a new lithium recovery and processing facility located in Newberry Springs (the “Project”). The Applicant states that the plant will be on property where the mineral, colemanite, and lithium clays, are deposited. Colemanite consists of boron and calcium and is surrounded by lithium rich clays and magnesium. According to the Applicant, a permitted process of in-situ leaching (solution mining) pumps solution underground and creates a reaction whereby the solution dissolves the colemanite and lithium rich minerals. The solution is then recovered to the surface for processing. Post extraction, the lithium is in chloride form and is further processed into lithium carbonate with the addition of soda ash. The Applicant anticipates the ultimate product will be utilized for battery manufacturing or sold as an additive in glass manufacturing, but it can be used for various applications.

According to the Applicant, its process is a closed loop sequence where minerals are processed above ground and then the remaining solution is recycled back to the deposit. In contrast to open pit mining, solution mining utilizes advanced technology that has minimal environmental impact on the ground surface. Additionally, the Applicant states that because the production process is highly precise with multiple chemical reactions occurring, specialized tools such as a high-end filtration system and advanced materials such as ion exchange resin are critical.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Extraction Column	\$6,884,055
Impurity Reactor	\$1,721,013
Concentrator	\$573,671
Lithium Carbonate Reactor	\$573,671
Lithium Carbonate Purification and Gaggling	\$1,721,013
Total	<u>\$11,473,423</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff's report are estimated costs. In accordance with 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, a small plant is currently in commissioning and start up, with some manufacturing activities taking place as of June 2024. The timeline for commercializing the Project is as follows:

- Concept engineering complete – Q1 2025
- Detailed engineering complete – Q2 2026
- Equipment purchasing starts – Q1 2026
- Construction starts – Q2 2026
- Construction complete – 4Q 2027
- Commissioning & start up complete – Q1 2028
- Plant online & full production – Q2 2028

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

The Applicant has already secured all major environmental permits and is working on obtaining building permits for the larger commercial facility.

PROJECT EVALUATION

PROJECT BENEFITS

The Project received a Total Score of 1,003 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 61 points, which exceeds the 20-point threshold.

- A. Fiscal Benefits (792 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 \$766,533, resulting in a Fiscal Benefits score of 792.
- B. Environmental Benefits (61 points).** The Project earned an Environmental Benefits Score of 61. The Applicant received points in the following categories:

 - 1. Water Use (25 of 30 points).** The Applicant anticipates the Project will result in a 25% reduction in water use relative to the industry standard manufacturing process as its process recycles water and doesn’t require tailings ponds.
 - 2. Solid Waste (6 of 30 points).** The Applicant anticipates the Project will result in a 6% reduction in solid waste produced relative to the industry standard manufacturing process by reducing non-hazardous waste such as iron and aluminum.
 - 3. Hazardous Waste (30 of 30 points).** The Applicant anticipates the Project will result in a 50% reduction in the hazardous waste produced relative to the industry standard manufacturing process as it is not required to remove and dispose of hazardous waste such as arsenic.
- C. Additional Benefits (150 points).** Applicants may earn additional points for their Total Score. The Applicant received 150 additional points.

 - 1. Production Jobs (20 of 75 points).** The Applicant anticipates the Project will support a total of 15 production-related jobs at its Facility. CAEATFA estimates that approximately .97 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 20 points.
 - 2. Construction Jobs (40 of 75 points).** The Applicant anticipates the Project will support a total of 55 construction jobs at its Facility. CAEATFA estimates that approximately 3.57 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 (0 of 50 points).** The Applicant’s Project is located in San Bernardino County, which has an average annual unemployment rate of 4.5%. When compared to the statewide average annual unemployment rate of 4.6%, the Project location earned the Applicant zero points.
4. **Research and Development Facilities (25 of 25 points).** The Applicant has verified that it has a facility located in California that performs research and development functions related to lithium production.
5. **Benefits and Fringe Benefits (25 of 25 points).** The Applicant states it provides medical, health, dental, and vision benefits, bonuses, retirement contribution and paid leave to its employees, earning the Applicant 25 points.
6. **Emerging Strategic Industry (40 of 40 points).** The Project’s industry, lithium compounds, 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

Due to the challenging climate of the lithium industry, the Applicant is requesting to extend the 15% purchase requirement timeframe by 18 months and the initial term of the Regulatory Agreement (“Agreement”) by three years.

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.⁵ Additionally, 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.⁶

The Applicant states that there are a number of challenges to overcome. The first challenge is that while the Applicant has been successful in raising a substantial amount of capital, raising additional capital continues to be a challenge for pre-revenue companies. The current interest rate environment to combat inflation has driven investors to allocate available capital to entities who are close to near term cash flow generating activities. According to the Applicant, the

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

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

second challenge is the ability to properly forecast lithium pricing to sustain a successful business. That is, the future pricing of lithium looks optimistic due to high demands, but the current market is facing headwinds and projects like the Applicant's can only come online if economics justify the investment. Furthermore, the Project, which includes removing lithium chemicals from solution and mineralization to a saleable product is technically challenging and the extensions would provide time for the Applicant to optimize lithium extraction.

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 are in the public interest and advances the purposes of the STE Program.

CAEATFA FEES

In accordance with STE Program regulations,⁷ the Applicant has paid CAEATFA an Application Fee of \$5,736.71 and will pay CAEATFA an Administrative Fee of up to \$45,893.69.

RECOMMENDATION

Staff recommends the approval of Resolution No. 24-SM034-01 for 5E Boron Americas LLC's purchase of qualifying tangible personal property in an amount not to exceed \$11,473,423 anticipated to result in an approximate STE value of \$968,357.

Staff recommends that the Board approve the Applicant's request to extend the 15% purchase requirement timeframe by 18 months, for a period of three years, until September 17, 2027, 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 three years, for a period of six years, until September 17, 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 eight years, until September 17, 2032, for providing annual compliance reports.⁸

⁷ California Code of Regulations Title 4, Division 13, Section 10036

⁸ California Code of Regulations Title 4, Division 13, Section 10035(a)(2)

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A
REGULATORY AGREEMENT WITH 5E BORON AMERICAS LLC**

September 17, 2024

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **5E Boron Americas 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 September 17, 2027; and

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

WHEREAS, the Applicant has stated the Project has an estimated cost not to exceed \$11,473,423 over a period of six (6) years; 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

Agenda Item – 4.A.1
Resolution No. 24-SM034-01

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.

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.

Agenda Item – 4.A.1
Resolution No. 24-SM034-01

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. 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 September 17, 2027.

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 September 17, 2030.

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.