

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

Request to Approve Project for a Sales and Use Tax Exclusion¹

**Antora Energy, Inc.
Application No. 24-SM024**

Tuesday, July 16, 2024

Prepared By: *Matthew Newman, Technical Consultant, Blue Sky Consulting Group,*

SUMMARY

Applicant – Antora Energy, Inc.

Location – San Jose, Santa Clara County

Industry – Thermal Battery Module Manufacturing

Project – Expansion of a Thermal Battery Module Production Facility (Alternative Source)

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$2,721,775	\$229,718

Estimated Net Benefit ³	Dollar Value	Points Earned ⁴
Estimated Fiscal Benefits	\$1,257,979	5,476
Estimated Environmental Benefits	\$19,887,222	86,572
Additional Benefits	N/A	190
Total	\$21,145,201	92,239
Estimated Quantifiable Net Benefit	\$20,915,483	

Competitive Criteria Score – 175

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

Antora Energy, Inc. (the “Applicant”) is a Delaware corporation that formed in 2018 and is headquartered in San Jose. The Applicant focuses on creating fully renewable energy products for industrial processes.

This Applicant is also (separately) applying for a sales and use tax exclusion (“STE”) award at this board meeting for another project in Sunnyvale that will output electricity by incorporating thermophotovoltaic (TPV) technology.

The Applicant has received \$2,000,000 in funding related to thermal battery manufacturing from the U.S Department of Energy’s Advanced Manufacturing Office in 2021.

The Applicant has received \$7,000,000 in funding related to thermophotovoltaic research & production (Sunnyvale) and thermal battery manufacturing (San Jose) from the U.S. Department of Energy’s Advanced Research Projects Agency-Energy (ARPA-E) from 2019 to 2023.

The major shareholders (10.0% or greater) of the Applicant are: Breakthrough Energy Ventures, LLC (10.1%) Lowercarbon Capital (13.74%) Trust Ventures (11.4%)	The corporate officers of the Applicant are: Andrew Ponec, CEO Justin Briggs, COO David Bierman, CCO
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THE PROJECT

The Applicant is requesting an STE award to expand its existing thermal battery module manufacturing facility located in San Jose (the “Project”). According to the Applicant, the modules charge at off-peak times when renewable energy is abundant and convert that electricity into heat, which can be stored and continuously output. By using surplus renewable energy, such as electricity from wind that would otherwise be curtailed, the Applicant’s product can provide a heat source for industrial facilities without fossil fuels. Each module contains blocks of solid carbon, surrounded by carbon-based insulation and a steel shell, with accompanying charging and discharging systems. The modules are about the size of a small shipping container and are road-shippable, enabling deployment to industrial facilities across the country.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

40t Indoor Crane, 3 Bridge, 6 20t Trolley	\$1,100,000
Phase 2 New Roll Up Door	\$81,000
4.5k/lbs. Standup Reach lift	\$40,500
Vacuum Lift (3-Cup)	\$40,500

**Agenda Item – 4.A.8
Resolution No. 24-SM024-01**

Boom Lift	\$6,075
HexChec Ventilation System (4 Welders)	\$81,000
Welder -Mig X3	\$156,000
Tracks (Four)	\$275,000
Skid Track Trolley (10)	\$158,000
Embedded Rail Construction (4 Tracks)	\$270,000
Electrical Upgrades and Power Equipment	\$135,000
Tooling & Equipment- Additional Crane Straps, Lift Lugs, Power Tools	\$235,000
Ind. Lockers - Ventilated, Six Tier	\$6,750
Safety Equipment	\$40,500
Production Terminals (7 stations)/Support Computers	\$26,200
ERP Scanners (6 Scanners)	\$13,500
Material for 5-S Lines and Signs	\$6,750
5S Walk/Fork Lift Lane Markings	\$50,000
Total	<u>\$2,721,775</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

The Applicant's manufacturing facility is an existing building that is ready to begin manufacturing after installation of the Qualified Property. The Applicant intends to start manufacturing its thermal battery modules at this facility starting in the 3rd quarter of 2024.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

The Applicant anticipates that it will need the following permits before it can ramp up to full manufacturing capacity:

- Permit for power runs to rear of building (obtained as of May 2024)
- Permit for adding overhead cranes (in process and anticipated by July 2024)

The Applicant is also pursuing permits to enable expanded production and testing capabilities, but these will not be necessary for initial production:

- Permit for adding facility compressed air (anticipated by October 2024)
- Permit for adding facility gasses/fluids (anticipated by January 2025)
- Permit for adding roll-up doors & shipping docks (anticipated by February 2025)

COMPETITIVE CRITERIA SCORE

The Applicant received 175 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 (0 of 50 points)**. The Applicant’s Facility is located in Santa Clara County, which has an average annual unemployment rate of 3.3%.⁵ When compared to the statewide average annual unemployment rate of 4.6%, the Project location earned the Applicant zero points.
3. **Job Creation (60 of 75 points)**. The Applicant anticipates the Project will support a total of 84 production-related jobs at its Facility. CAEATFA estimates that approximately 4.42 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 60 points.
4. **California Headquarters (15 of 15 points)**. The Applicant has a California Corporate Headquarters, and, therefore, 15 points are awarded.
5. **Natural Disaster Relief (0 of 50 points)**. The Project is not to rebuild or relocate the Applicant’s Facility/Facilities 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 exemptions established pursuant to Section 6377.1 of the Revenue and Taxation Code, and, therefore, zero points are awarded.
7. **Emerging Strategic Industry (0 of 75 points)**. The Project’s industry is not in an Emerging Strategic Industry, and, therefore, zero points are awarded.

PROJECT EVALUATION

PROJECT BENEFITS

The Project received a Total Score of 92,239 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 86,572 points, which exceeds the 20-point threshold.

⁵ Unemployment rates are based on data available in December 2023.

Agenda Item – 4.A.8
Resolution No. 24-SM024-01

- A. **Fiscal Benefits (5,476 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 \$1,257,979, resulting in a Fiscal Benefits score of 5,476.
- B. **Environmental Benefits (86,572 points)**. The Project is anticipated to result in \$19,887,222 of total pollution benefits over the life of the Project, resulting in an Environmental Benefits Score of 86,572 points. These benefits derive from utilizing surplus renewable energy (e.g., wind power) to charge its thermal batteries which can displace use of fossil fuels to generate industrial heat.
- C. **Additional Benefits (190 points)**. Applicants may earn additional points for their Total Score. The Applicant received 190 additional points.
1. **Production Jobs (60 of 75 points)**. The Applicant anticipates the Project will support a total of 84 production-related jobs at its Facility. CAEATFA estimates that approximately 4.42 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 60 points.
 2. **Construction Jobs (40 of 75 points)**. The Applicant anticipates the Project will support a total of 20 construction jobs at its Facility. CAEATFA estimates that approximately 1.05 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.
 3. **Unemployment (0 of 50 points)**. The Applicant’s Project is located in Santa Clara County, which has an average annual unemployment rate of 3.3%.⁶ When compared to the statewide average annual unemployment rate of 4.6%, the Project location earned the Applicant zero points.
 4. **Non-CA Environmental Benefits (40 of 40 points)**. The Applicant’s total value of out-of-state non-greenhouse gas emissions pollution benefits are valued at \$748,633 resulting in a Non-CA Environmental Benefits Score of 40 points for the Project.
 5. **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 thermal battery manufacturing.
 6. **Benefits and Fringe Benefits (25 of 25 points)**. The Applicant states it provides health, dental, vision, bonuses, retirement contributions, dependent

⁶ Unemployment rates are based on data available in December 2023.

care reimbursement, transportation subsidies, education reimbursement, gym subsidies, and paid leave to its employees, earning the Applicant 25 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.

CAEATFA FEES

In accordance with STE Program regulations,⁷ the Applicant has paid CAEATFA an Application Fee of \$1,360.89 and will pay CAEATFA an Administrative Fee of \$15,000.

RECOMMENDATION

Staff recommends the approval of Resolution No. 24-SM024-01 for Antora Energy, Inc.’s purchase of qualifying tangible personal property in an amount not to exceed \$2,721,775, anticipated to result in an approximate STE value of \$229,718.

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

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A
REGULATORY AGREEMENT WITH ANTORA ENERGY, INC.**

July 16, 2024

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **Antora Energy, Inc.** (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, the Applicant has stated the Project has an estimated cost not to exceed \$2,721,775 over a period of three (3) 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

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

Agenda Item – 4.A.8
Resolution No. 24-SM024-01

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.

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. 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.