

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

*Consideration of Soraa Incorporated’s Request to Approve a Time Extension for the Three
Year Initial Term of the Title Conveyance Agreement*

Tuesday, February 17, 2015

Prepared By: *James Shimp*

Applicant – Soraa Incorporated

Location – Fremont, Alameda County

Industry – Energy Efficient Light-Emitting Diode (LED) Lighting Manufacturing

Project – Expansion of Fremont Facility for New LED Production Lines

Value of Qualified Property – \$57,002,457

Estimated Sales and Use Tax Exclusion Amount¹ – \$4,617,199

Amount of Time Requested:

- 18 months (August 21, 2016) for the Term of the Title Conveyance Agreement (4.5 years from the date of initial CAEATFA Board approval)

SUMMARY

In February 2012, the CAEATFA Board approved a sales and use tax exclusion (“STE”) for Soraa Incorporated (“Soraa” or the “Applicant”) for the purchase of \$57,002,457 of Qualified Property for the expansion of its facility to include new production lines used for the manufacture of energy efficient Light-Emitting Diodes (“Project”). The Master Regulatory and Title Conveyance Agreement (“Agreement”) initial term provides the Applicant with three years from the date of Board Approval to utilize its STE award. The initial term of the Agreement can be extended by the Board upon a finding that an extension is in the public interest and advances the purposes of the Program.²

As of January 1, 2015, Soraa has conveyed \$14,865,379.39 (26%) of Qualified Property. In December 2014, CAEATFA staff sent the Applicant a courtesy reminder of the end of the three-year Agreement. Soraa responded by requesting an 18-month extension of the Agreement to August 21, 2016 to accommodate a slower than forecasted ramp-up period due to uncertainty and lack of demand in the LED market.

¹ As presented in the staff summary from February 21, 2012, equivalent to a sales tax rate of 8.1%.

² Regulation Section 10035(b)(1)(A)

The Applicant has not made any previous waiver requests. Soraa met the 25% purchase requirement where Applicants are required to purchase 25% of the approved Qualified Property within one year of Board approval.

About the Applicant

Soraa, Inc. was incorporated in 2007 in Delaware and is headquartered in Fremont, California. Soraa is a clean-tech semiconductor company that specializes in the use of gallium nitride (GaN) in the development of cost-effective, energy-efficient LEDs. In addition to LEDs, the Applicant is also commercializing a new generation of high efficiency chip-based lasers for consumer, biomedical, defense and industrial applications.

Project Description

Soraa is developing new technology in the field of LEDs, with an overarching goal to provide energy-efficient solid-state lighting. To this end, the Applicant is involved in an expansion of their existing Fremont facility to accommodate new production lines for LED manufacture.

Agreement Term Extension Request

Soraa has requested that the initial term of the Agreement be extended from February 21, 2015 to August 21, 2016 in order to allow the company to continue the expansion of its manufacturing facility. The Applicant has not made its Qualified Property purchases at the pace it initially anticipated, and has adopted a more conservative overall growth strategy. By repurposing existing equipment and buying refurbished equipment where possible, Soraa plans to continue its original project scope while reducing the \$57 million in anticipated Qualified Property to a total cost in the vicinity of \$40 million.

Although Soraa initially faced difficult market conditions, the Applicant still intends to utilize a large portion of the Qualified Property awarded in February 2012. Soraa anticipates continued operational growth at their Fremont facility, citing recent increased growth in the LED market and positive feedback from current customers regarding their products.

Staff Evaluation

Soraa has indicated that the requested time extension will allow for purchase of the majority of Qualified Property as approved on February 21, 2012. Extending the initial term of the Agreement will allow Soraa to expand its existing manufacturing facilities and increase low energy LED production going into 2015-16 and beyond. Moreover, the Applicant, while not purchasing equipment as originally scheduled, has conveyed Qualified Property exceeding 25% of the total award in its first year, and has made significant additional purchases that are pending conveyance. Based on the information presented, staff believes that extending the term of the Agreement is in the public interest and advances the purpose of the original award.

Staff Recommendation

Staff recommends that the Board approve Soraa’s request to extend the initial term of the Agreement to August 21, 2016 as it is in the public interest and advances the purpose of the original award.

Attachments

Attachment A: Soraa’s Letter Requesting Waiver (January 23, 2015)

Attachment B: Staff Summary on February 21, 2012

**A RESOLUTION OF THE
CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION
FINANCING AUTHORITY APPROVING A TIME EXTENSION FOR
SORAA INCORPORATED’S INITIAL TERM FOR THE MASTER REGULATORY
AND TITLE CONVEYANCE AGREEMENT**

February 17, 2015

WHEREAS, on February 21, 2012 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 \$57,002,457 of Qualified Property for **Soraa Incorporated** (the “Applicant”); and

WHEREAS, within three years of the approval by the Authority, the Applicant must make all purchases of the total amount of Qualified Property listed in the approval resolution (Regulations Section 10035(b)(1));

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 years of Application approval (Regulations Section 10035(b)(1)(A));

WHEREAS, the Applicant has requested a waiver of the requirement to purchase all of the Qualified Property within three years, due to slower than anticipated market conditions, and requests extension of the term from February 21, 2015 to August 21, 2016; and

WHEREAS, granting the waiver 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.

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

Section 1. The Authority finds that it is in the public interest and advances the purposes of the Authority to extend the initial term of the Agreement to August 21, 2016.

Section 2. This resolution shall take effect immediately upon its passage.

Attachment A: Soraa's Letter Requesting Waiver



January 23, 2015

Ms. Deana Carillo
Executive Director
CAEATFA
915 Capitol Mall, Room 457
Sacramento, CA 95814

Dear Ms. Carillo,

We would like to request a time extension of one-and-a-half years for conveying the remainder of qualified property under the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) Sales and Use Tax Exclusion Program.

We have utilized the exclusion to purchase approximately \$22.3 million in equipment and request an extension to purchase the remainder of the qualified equipment by August of 2016. There are several reasons for the delay in purchasing all equipment during the 3 year period. Even though the LED market has been growing very quickly, our initial ramp expectations were slightly delayed due to end market demand (relative to our target markets). Since then, our products have been very well received in the market and ramping, all be it a little later than expected. In addition, we have recently expanded our addressable market by tooling a broader product portfolio which is driving revenue growth at a higher pace in 2015 and 2016. Along with addressing the professional replacement lamp market, we have recently been driving new solutions to further expand our sales into new, tangential markets such as fixtures and light engines. These new products and markets will enable us to continue investing and scaling our manufacturing facilities in Fremont to meet demand.

Our original estimate of equipment needed for this project was approximately \$50 million and although the scope of the original project has not changed we believe the actual amount required will be approximately \$40 million. There were several reasons for the change in estimated equipment purchases. The main reason was it was very early generations of our product did not have the demand we anticipated so less dollars were spent early on in production. In addition, the quantity of specific equipment was less than expected and we were able to purchase some refurbished equipment which reduced some of the costs as well.

Our additional equipment purchases will be to increase output in the fab and produce our Gen 4 products. These tools will primarily consist of an epi reactor, etching and polishing machines, adhesive application equipment, and grinder and tooling equipment.

We believe we have built a state-of-the-art facility in Fremont, CA, for the fabrication, test and assembly of award winning, industry leading lighting products and began selling those products in 2012. We expect to continue to invest in our Fremont facility in order to meet customer demand through 2015 and beyond.



Soraa is currently producing one of the world's most efficient, highest quality light-emitting diodes ("LEDs") based on the technology invented by Shuji Nakamura, our founder and recent Nobel Prize winner. Our lighting solutions are 5-10 times more energy efficient than lighting solutions which are prominent in the market today.

Our contribution to energy efficiency and environmental benefit for California, the United States and the rest of the world will be significant. We appreciate your consideration of this extension. Should you have any questions or need additional information, please let us know.

Thank you,

A handwritten signature in blue ink, appearing to read "Linda Keenan".

Linda Keenan
VP, Corporate Controller
Soraa Inc.
6550 Kaiser Drive
Fremont, CA 94555

Attachment B: Staff Summary at Board Approval

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

Request to Approve Project for SB 71 Sales and Use Tax Exclusion (STE)³

**SORAA, INC
Application No. 12-SM001**

Tuesday, February 21, 2012

Prepared By: *Heather Williams*

SUMMARY

Applicant – Soraa, Inc

Location – Fremont (Alameda County)

Industry – Energy Efficient LED (Light-Emitting Diode) Lighting Manufacturing

Project – Expansion of Fremont Facility for New LED Production Lines

Value of Qualified Property – \$57,002,457

Estimated Sales and Use Tax Exclusion Amount⁴ – \$4,617,199

Estimated Net Benefits - \$28,527,434

Application Score⁵ -

Fiscal Benefits Points:	513
<u>Environmental Benefits Points:</u>	<u>6,666</u>
Net Benefits Score:	7,179
<u>Additional Benefits Points:</u>	<u>40</u>
Total Score:	7,219

Staff Recommendation – Approval

³ All capitalized terms not defined in this document are defined in the Program’s statute and regulations.

⁴ This amount is calculated based upon the average statewide sales tax rate of 8.1%.

⁵ Point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

THE APPLICANT

Soraa, Inc. (“Soraa” or “Applicant”) was incorporated in 2007 in Delaware and is headquartered in Fremont, California. Soraa is a clean-tech semiconductor company that specializes in the use of gallium nitride (GaN) in the development of cost-effective, energy-efficient light-emitting diodes (“LEDs”). In addition to LEDs, Soraa is also commercializing a new generation of high efficiency chip-based lasers for consumer, biomedical, defense and industrial applications.

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

Khosla Ventures

The corporate officers of Soraa are:

Eric Kim, Chief Executive Officer
Udi Var Sela, Vice President of Finance
Michael Krames, Chief Technology Officer

THE PROJECT

Soraa is developing LEDs to provide energy-efficient solid-state lighting for general illumination. Soraa uses a GaN on GaN technology. All white LEDs are made from GaN crystals grown onto a substrate. Sapphire and silicon carbide have been used as the substrate for almost all LEDs made. Soraa however uses GaN as the substrate. Sorra claims they are the only ones to use this technology, producing more light than any other LED on the market.

Additionally, the Applicant represents the light will be five to ten times more efficient than standard halogen incandescent bulbs currently on the market and would therefore consume a fraction of energy compared to current bulbs which are typically used today. Compared to CFL (compact fluorescent light) technology, LEDs contain no mercury and save significant energy with the same production energy. Soraa will first focus on releasing a LED based MR16 lamp for which, according to Soraa, there is currently no energy efficient alternative due to its compact form factor. MR 16 lamps can be used in place of standard incandescent light bulbs in applications including residential and retail lighting.



**Soraa 12 Watt LED based MR16 Lamp
(equivalent to a 50 Watt halogen MR16 lamp)**

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Deposition/Evaporation Equipment 2011 ⁶	\$ 4,003,232
Deposition/Evaporation Equipment 2012	3,863,831
Deposition/Evaporation Equipment 2013	3,912,006
Epitaxial Equipment 2011	7,222,289
Epitaxial Equipment 2012	4,741,975
Epitaxial Equipment 2013	3,725,720
Etching Equipment 2011	1,765,750
Etching Equipment 2012	1,053,772
Etching Equipment 2013	1,862,860
Packaging Equipment 2011	
Die Attachment Equipment	657,931
Wire Bonding Equipment	164,483
Packaging Equipment 2012	
Die Attachment Equipment	843,018
Wire Bonding Equipment	210,754
Packaging Equipment 2013	
Die Attachment Equipment	1,043,202
Wire Bonding Equipment	260,800
Photolithography Equipment 2011	2,067,718
Photolithography Equipment 2012	1,931,916
Photolithography Equipment 2013	2,608,004
Testing/Parametric/Analysis Equipment 2011	3,406,341
Testing/Parametric/Analysis Equipment 2012	3,161,317
Testing/Parametric/Analysis Equipment 2013	2,980,576
Wafer Dicing/Singulation Equipment 2011	1,523,243
Wafer Dicing/Singulation Equipment 2012	1,756,287
Wafer Dicing/Singulation Equipment 2013	2,235,432
Total	<u>\$57,002,457</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff's report are estimated costs. At the termination of the conveyance/reconveyance agreement a finalized Project equipment list will be prepared detailing the value of the Project equipment conveyed and reconveyed and detailing the actual tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variations 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 from original estimates, and other reasons. In addition, such costs may vary after closing due also to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in law or regulation, or for other reasons.

⁶ Property purchased prior to the approval of the Application and subsequent conveyance and reconveyance of title of the property between the Applicant and CAEATFA is eligible under the Program if the property has not yet been put to functional use.

TIMELINE

Construction for the Facility began in April 2010 with Phase 1, consisting of offices and laboratories, being completed in August 2010. Phase 2, or the manufacturing space, was completed in December 2010 and Soraa anticipates the production phase will begin in the first half of 2012.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$57,002,457 and the total net benefits are valued at an estimated \$28,527,434 for the Project. The Project received a Total Score of 7,219 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 6,666 points, which exceeds the 100 point threshold.

- A. Fiscal Benefits (513 points).** The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to an estimated \$2,368,664 resulting in a Fiscal Benefits Score of 513 points for the Project.
- B. Environmental Benefits (6,666 points).** The Project will result in an estimated \$30,775,968 of total pollution benefits over the lifetime of the Qualified Property resulting in an Environmental Benefits Score of 6,666 points for the Project. These benefits derive from the manufacturing of energy efficient LED lighting, which offsets the need for fossil fuel derived sources of energy. The significant environmental benefits from this project stem from the fact that LED light bulbs are substantially more efficient than standard incandescent bulbs and last much longer. As a result, each bulb produced has the potential to produce a significant savings in energy consumption.
- C. Additional Benefits (40 of 200 points).** Applicants may earn up to 200 additional points for their Total Score. The Applicant submitted information and received 40 additional points.

 - a. Permanent Jobs (0 of 40 points).** The Applicant's Project will support a total of 180 permanent jobs at its Facility. CAEATFA estimates that 14 of these jobs will be attributable to a marginal increase in jobs created due to the approved STE. Zero points were awarded because the marginal increase in jobs does not meet the required threshold.

- b. **Construction Jobs (0 of 20 points)**. The Applicant’s Project will support a total of zero construction jobs at its Facility. CAEATFA estimates that approximately zero jobs will be attributable to a marginal increase in jobs created due to the approved STE. Zero points were awarded because the marginal increase in jobs does not meet the required threshold. Installation was completed by third party contractors, so there are no estimates for construction jobs.

- c. **Non-CA Environmental Benefits (40 of 40 points)**: The Applicant’s total value of out-of state non-greenhouse gas pollution benefits are valued at \$9,431,522 resulting in a Non-CA Environmental Benefits Score of 40 points for the project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

Soraa has already acquired all permits needed for the current Fremont facility.

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 CAEATFA Regulations,⁷ the Applicant has paid CAEATFA an Application Fee of \$5,000 and will pay CAEATFA an Administrative Fee up to \$228,009.

RECOMMENDATION

Staff recommends approval of Resolution No. 12-SM001 for Soraa, Inc.’s purchase of Qualified Property in an amount not to exceed \$57,002,457 anticipated to result in an approximate sales and use tax exclusion value of \$4,617,199.

⁷ California Code of Regulations Title 4, Division 13, Article 2, Section 10036

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A TITLE
CONVEYANCE AGREEMENT WITH SORAA, INC.**

February 21, 2012

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Soraa, Inc.** (the “Applicant”), for financial assistance in the form of a conveyance/reconveyance of title agreement (the “Agreement”) regarding tangible personal property for the design, manufacture, production, or assembly of Advanced Transportation Technologies or Alternative Source products, components, or systems (“Qualified Property”) as more particularly described in the staff summary and in the Applicant’s Application to the Authority (collectively, the “Project”); and

WHEREAS, the Applicant has requested the Authority to enter into the Agreement transferring title of Project equipment with an estimated cost not to exceed \$57,002,457 over a period of three years; and

WHEREAS, the Agreement will provide that the Applicant will, prior to any use of the Qualified Property, transfer title at no cost to the Authority from time to time as purchases of Qualified Property are made and the Authority will then transfer title back to the Applicant without having taken possession of the Qualified Property; and

WHEREAS, the Applicant believes 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 Qualified Property pursuant to California Revenue and Taxation Code Section 6010.8; and

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

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

Section 1. The Project constitutes a “project” within the meaning of Public Resources Code Section 26003(g)(2).

Section 2. The requested conveyance agreement constitutes “financial assistance” within the meaning of Public Resources Code Section 26003(e)(2).

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

Agenda Item – 4.B.1
Application No. 12-SM001

Section 4. The Executive Director, Deputy 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 Executive Director shall deem appropriate, provided that the amount of the Qualified Property to be purchased may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Agreement between the Applicant and the Authority, as filed with the Authority prior to this meeting, is hereby approved. The Authorized Signatories are hereby authorized and directed, for and on behalf and in the name of the Authority, to execute, acknowledge and deliver to the Applicant the Agreement in substantially the form filed with or approved by the Authority, with such insertions, deletions or changes therein as the Authorized Signatory executing the same may require or approve, and with particular information inserted therein in substantial conformance with the staff summary and in the Applicant’s Application to the Authority, such approval to be conclusively evidenced by the execution and delivery thereof. The Authority understands and agrees that pursuant to the terms of the Agreement, the obligations of the Applicant may, under some circumstances, 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 in order to consummate the Agreement and otherwise effectuate the purposes of this resolution.

Section 7. The Applicant shall assure CAEATFA that all Qualified Property conveyance pursuant to the Agreement shall be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Agreement shall only apply to Qualified Property that the Applicant certifies will be installed, maintained and operated at facilities within the State of California.

Section 9. The adoption by the Authority of this Resolution for the Applicant shall not be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project or 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, as defined in CAEATFA Regulations Section 10035(A), is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty days if necessary.