

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

***Consideration of Alta Devices, Inc.'s Request to Waive a 25% Purchase Requirement under  
the SB 71 Program***

**Tuesday, December 13, 2011**

Prepared By: *Heather Williams*

**Applicant** – Alta Devices, Inc.

**Location** – Sunnyvale, Santa Clara County

**Industry** – Solar: Thin Film Solar Cell Photovoltaic

**Project** – Equipment for a Newly Leased Solar Photovoltaic Manufacturing Facility

**Value of Qualified Property** – \$40,845,000

**Estimated Sales and Use Tax Exclusion Amount<sup>1</sup>** – \$3,716,895

**Amount of Time Requested:** 9.5 Months (September 30, 2012)

**SUMMARY**

Alta Devices, Inc. (“Alta Devices” or the “Applicant”) was approved by the CAEATFA Board on December 15, 2010 for the purchase of \$40,845,000 in Qualified Property for a new solar photovoltaic (“PV”) manufacturing facility in Sunnyvale, Santa Clara County. The SB 71 Program (“Program”) requires that Alta Devices purchase 25% (\$10,211,250) of the total approved Qualified Property within the first year (Regulation Section 10035(c)(1)), the “25% Purchase Requirement.” This requirement serves as an indicator of readiness and assists in incentivizing timely economic activity. The 25% Purchase Requirement can be waived by the Board upon a finding that it is in the public interest and advances the purposes of the Program (Regulation Section 10035(c)(1)(A)).

As of December 1, 2011 Alta Devices has conveyed only \$4,643,149.45 in Qualified Property (11.4% of total amount approved). On September 21, 2011, CAEATFA staff sent the Applicant a courtesy reminder of the 25% Purchase Requirement. Alta Devices responded by requesting an extension of the 25% Purchase Requirement to September 30, 2012 to accommodate long lead times on equipment purchases (Attachment A).

**About the Applicant**

Alta Devices, Inc. is a C-corporation, founded in 2007 and located in Sunnyvale, California. Alta designs and manufactures thin film solar cell.

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<sup>1</sup> This amount is calculated based off of the average statewide sales tax rate of 9.1% at the time the Application was approved by the Board. The current anticipated STE is \$3,308,445, calculated at 8.1%.

## **Project Description**

Alta Devices' Application approved by the CAEATFA Board was for the development of a pilot line to begin small scale production of solar modules. Per its Application, Alta has leased a new facility that will allow it to start the pilot and demonstration line with a 10 megawatt (MW) capacity. Ultimately, Alta intends to expand to a 40 MW line at the Facility. The solar modules are composed of thin film solar cells which are deployable for mobile energy generation rooftops and other applications. Alta represents that the high energy density film is being developed with 20% more energy efficiency than its competitors, and can be encapsulated in either flexible or rigid formats.

## **Waiver Request**

Alta Devices has requested a waiver of the 25% Purchase Requirement due to the long lead times it is experiencing on ordering equipment. Alta Devices has broken ground at its new facility and has prepared the first phase of the manufacturing space, installing an initial round of tools and equipment. Alta Devices has purchase orders totaling \$9.5 million for Program (23.3% of the total QP), however, it does not anticipate it will be invoiced for approximately \$3 million of open purchase orders until early 2012 due to the unanticipated long lead times on equipment.

## **Staff Evaluation**

According to the Program's evaluation process at the time of initial Board approval, the Project is anticipated to produce a net benefit of an estimated \$1,870,175 with an anticipated fiscal benefit of \$5,025,666 and anticipated environmental benefit of \$561,404 over the life of the equipment (weighted average of 7.43 years). The approved Project is anticipated to support a total of 202 permanent jobs and 120 temporary construction jobs.

Alta Devices has represented that a 9.5 month time extension will allow the project to move forward. Alta Devices has further represented that the longer lead times on equipment was unanticipated and could not be reasonably avoided. The Applicant further represents that the Project remains the same as it was at the time of initial Board Approval. Based on the foregoing, staff believes that extending the 25% Purchase Requirement is consistent with the intent of the Program, is in the public interest, and advances the purposes of the Program.

**Staff Recommendation:** Staff recommends that the Board find it is in the public interest and advances the purposes of the Program to extend the 25% Purchase Requirement to September 30, 2012 pursuant to Regulations Section 10035(c)(1)(A).

## **Attachments**

Attachment A: Alta Devices' Letter Requesting Waiver

Attachment B: Staff Summary/Project Description approved by the CAEATFA Board on  
December 15, 2010

**A RESOLUTION OF  
CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION  
FINANCING AUTHORITY APPROVING A TIME EXTENSION OF THE 25%  
PURCHASE REQUIREMENT**

**December 13, 2011**

WHEREAS, on December 15, 2010 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 \$40,845,000 of Qualified Property for **Alta Devices, Inc.** (the "Applicant"); and

WHEREAS, within one year of approval by the Authority, the Applicant must make purchases of Qualified Property totaling not less than twenty-five percent (25.0%) of the total amount listed in the approval resolution (Regulations Section 10035(c)(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 the Applicant purchase at least twenty five percent (25.0%) of Qualified Property within one year of Board Approval (Regulations Section 10035(c)(1)(A)); and

WHEREAS, the Applicant has requested a waiver for the requirement to purchase 25% of Qualified Property within one year to address unanticipated and unavoidable delays in the Project's environmental permitting process, and extend the term from December 15, 2011 to September 30, 2012; 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, 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 Program to waive the requirement that the first year purchases of Qualified Property are at least twenty-five percent (25.0%) of the total amount listed in the approval resolution, and extend the term to September 30, 2012.

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

**Attachment A: Alta Devices' Letter Requesting Waiver**



November 30, 2011

Ms. Christine Solich  
California Alternative Energy & Advanced Transportation Financing Authority  
915 Capitol Mall, Room 457  
Sacramento, CA 95814

Dear Ms. Solich,

Alta Devices would like to thank you once again for the assistance provided by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA). The \$4 million in savings we will realize through the SB71 program allows Alta Devices to invest in California and build out our \$50 million pilot manufacturing line in Sunnyvale.

Since we first received announcement on December 15, 2010 that our company was approved for financial assistance under this program, Alta Devices has been focused on the design and buildout of its facility, and the purchase and installation of its building systems and manufacturing equipment.

We broke ground on our new facility at 545 Oakmead Parkway in Sunnyvale, CA and have prepared the first phase of our manufacturing space which has allowed us to install our first tools and equipment. We continue to build out the rest of the manufacturing space which will allow us to install additional tools and equipment later in the year and in 2012.

In the eleven months that have elapsed, our company headcount has grown from 63 employees to 102 employees. Our current headcount projections show that we will continue to add new members to our team and we expect to reach 140 employees within the next year. Additionally, we have employed multiple outside construction and consulting firms in support of the build out. These numbers total an estimated 200 people.

As of November 30, 2011, we have purchase orders totaling \$9.5 million which qualify under the SB71 Program, with \$5.5 million conveyed to CAEATFA. We anticipate that we will not get invoiced on approximately \$3 million of the open purchase orders until early 2012 due to the long lead times on the equipment. Between now and early 2012, an additional \$8 million in purchase orders are projected to be initiated with expected delivery dates in 2012. Attached is a schedule of the tools that are anticipated for arrival by 2012.

We are requesting an extension beyond the December 15, 2011 deadline for conveying at least twenty-five percent (25%) of the Company's total Qualify Property amount approved. This extension is necessary as the expected arrival times of our tools have

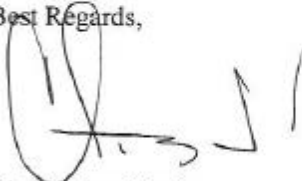
2326 Scott Blvd., Santa Clara, CA 95054, Ph 408.988.8600, Fax:408.988.8799

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**Application No. 10-SM027**

been longer than anticipated, and our qualification of suppliers is an extensive process. We anticipate that we will have conveyed 25% of the Company's total Qualified Property amount by September 30, 2012.

The SB71 program has played a critical role in Alta's growth in California, helping to create jobs both at Alta and at many local businesses. We look forward to your favorable response.

Best Regards,

A handwritten signature in black ink, appearing to read "Christopher Norris". The signature is stylized with a large initial "C" and "N" and a horizontal line extending to the right.

Christopher Norris

Chief Executive Officer

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**Alta Tool Schedule**  
As of November 30, 2011

<u>Tool</u>	Order Date	Receipt Date	Estimated Spend
ELO	3/4/11	12/23/11	\$2,263,400
Matrix	6/13/11	4/30/12	\$860,000
Post-ELO cleaner	7/12/11	10/22/11	\$492,000
Laminator	5/13/11	10/7/11	\$396,433
Back Cell ECP	10/3/11	3/31/12	\$700,000
Back cell masking	12/28/11	4/18/12	\$400,000
Cell test	1/18/12	6/6/12	\$500,000
Matrix test	1/15/12	4/15/12	\$250,000
UV laser tool	2/1/12	6/20/12	\$1,000,000
Conversion tool	2/15/12	4/25/12	\$300,000
Edge insulation	2/22/12	6/13/12	\$400,000
Front cell plating	3/7/12	7/25/12	\$850,000
Pre-Epi Clean	2/8/12	7/25/12	\$750,000
Mesa etch	2/8/12	7/25/12	\$300,000
GigaMat + demount	12/14/11	5/2/12	\$469,692
Sputter	2/15/12	6/6/12	\$900,000
Exposure	3/7/12	7/25/12	\$550,000
Dry film laminator	2/8/12	6/27/12	\$400,000
Back Cell e-less	3/14/12	7/4/12	\$200,000
Developer	1/25/12	7/11/12	\$350,000
FC Etch	1/25/12	7/11/12	\$600,000
Metrology	various	various	\$350,000
MOCVD - Kit, Gas Panel	various	various	\$3,965,000
MOCVD - Expansion	various	various	\$1,050,000
ELO E4 Carriers	various	various	\$595,000

Alta Devices Confidential

**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)<sup>2</sup>***

**ALTA DEVICES, INC.  
Application No. 10-SM027**

**December 15, 2010**

Prepared By: *Cheryl Ide*

**SUMMARY**

**Applicant** – Alta Devices, Inc.

**Location** – Sunnyvale, Santa Clara County

**Industry** – Solar: Thin Film Solar Cell Photovoltaic

**Project** – Equipment for a Newly Leased Solar Photovoltaic Manufacturing Facility

**Value of Qualified Property** – \$40,845,000

**Estimated Sales and Use Tax Exclusion Amount<sup>3</sup>** – \$3,716,895

**Estimated Net Benefits** - \$1,870,175

**Application Score** –

Fiscal Benefits Points:	1,352
<u>Environmental Benefits Points:</u>	<u>151</u>
<b>Net Benefits Score:</b>	<b>1,503</b>
<u>Additional Benefits Points:</u>	<u>25</u>
<b>Total Score:</b>	<b>1,528</b>

**Staff Recommendation** – Approval

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<sup>2</sup> All capitalized terms not defined in this document are defined in the Program's statute and regulations.

<sup>3</sup> This amount is calculated based on the average statewide sales tax rate of 9.1%.

**THE APPLICANT**

Alta Devices, Inc. (“Alta”) is a C-corporation, founded in 2007 and located in Sunnyvale, California. Alta designs and manufactures thin solar cell film.

The major shareholders (10.0% or greater) of Alta Devices, Inc. are:

Kleiner Perkins Caufield Byers  
August Capital  
Cross Link Capital

The corporate officers of Alta Devices, Inc. are:

Chris Norris, CEO  
Joe Foster, VP Business Development  
Ray Milano, VP Technology  
Nasreen Chopra, VP Capital Equipment

**THE PROJECT**

Alta is developing a pilot line to begin small scale production of solar modules. Alta has leased a new facility that will allow it to start the pilot and demonstration line with a 10 megawatt (MW) capability. Ultimately, Alta intends to expand into a 40 MW line at the Facility.

The Alta solar modules are composed of thin film solar cells which are deployable for mobile energy generation rooftops and other applications. Alta represents that the high energy density film is being developed with 30% more energy efficiency than its competitors, and can be encapsulated in either flexible or rigid formats.

**ANTICIPATED COSTS OF QUALIFIED PROPERTY**

The anticipated Qualified Property purchases are listed below:

MOCVD	\$ 6,265,000
ELO	760,000
Water Reuse	1,545,000
Back Cell	6,500,000
Front Cell	7,905,000
Encapsulation	1,825,000
Wafer Reuse	1,590,000
Laminator	175,000
Black Via	400,000
Isolation	900,000
Separation, Test and Sort	1,000,000
(410tank+175lam+50oven+150install)	635,000
EL/VOC, parts	350,000
Matrix C&F	400,000
R2R Sputter	450,000
Laser Tool	350,000
Qualified Property Purchases Continued:	



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Re-use Hardware	650,000
Metrology Tools	350,000
Reliability Tools	250,000
R2R Tester, Laminator, Wet Benches	750,000
PC/Laptop	80,000
ELO	1,500,000
Black Via	400,000
Separation, Test and Sort	500,000
Matrix Formation	1,000,000
EL/LLVOC Test	150,000
ARC Deposition	2,100,000
350 Ton Chiller	400,000
20,000 cfm Scrubbers (2)	120,000
20,000 cfm Air Handler Units (4)	320,000
500 cfm Clean Dry Air Units (2)	400,000
10,000 cfm Heat Exhaust Fan	40,000
15,000 cfm general Exhaust Fan	45,000
Process Cooling Water System	260,000
De-ionized Water System	120,000
Specialty Gas Cabinets (4)	120,000
Chemical Self Contained Bunkers (3)	90,000
AWN System	150,000
<b>Total</b>	<b><u>\$40,845,000</u></b>

*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.*

## **TIMELINE**

Alta plans to start construction of its pilot line in January 2011 and complete equipment installation by December 2013.

## **PROJECT EVALUATION**

### **NET BENEFITS**

The total cost of the Qualified Property purchases is anticipated at \$40,845,000 and the total net benefits are valued at \$1,870,175 for the Project. The Project received a Total Score of 1,528 which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 151 which exceeds the 100 point threshold.

- A. Fiscal Benefits (1,352 points).** The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the company's sales taxes, personal income taxes, firm taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to \$5,025,666 resulting in a Fiscal Benefits score of 1,352 points for the Project.
- B. Environmental Benefits (151 points).** The Project results in \$561,404 of total pollution benefits over the life of the Facility resulting in an Environmental Benefits Score of 151 points for the Project. These benefits derive from the capacity of solar PV modules to generate electricity from alternative sources, thereby reducing the need for traditionally generated electricity.
- C. Additional Benefits (25 of 200 points).** Applicants may earn up to 200 additional points for their Total Score. The applicant submitted information and received 25 additional points.

  - a. Permanent Jobs (10 of 40 points).** The Applicant's Project will support a total of 202 jobs at the Facility. CAEATFA estimates that approximately 23 of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Permanent Jobs Score of 10 points for the Project.
  - b. Construction Jobs (0 of 20 points).** The Applicant's Project will support a total of 120 construction jobs at the Facility. CAEATFA estimates that approximately 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 created does not meet the required threshold.

- c. **Non-CA Environmental Benefits (15 of 40 points)**. The Applicant's total value of out-of-state non-greenhouse gas pollution benefits are valued at \$113,919 resulting in a Non-CA Environmental Benefits Score of 15 points for the Project.

### **STATUS OF PERMIT/OTHER REQUIRED APPROVALS**

Alta is currently in the process of obtaining necessary permits pending the submittal of permit drawings. Alta anticipates permits will be issued by January 31, 2011.

### **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,<sup>4</sup> the Applicant has paid CAEATFA an Application Fee of \$5,000 and will pay CAEATFA an Administrative Fee of up to \$163,380.

### **RECOMMENDATION**

Staff recommends approval of Resolution No. 10-SM027 for Alta Devices, Inc.'s purchase of Qualified Property in an amount not to exceed \$40,845,000 anticipated to result in an approximate sales and use tax exclusion value of \$3,716,895.

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<sup>4</sup> California Code of Regulations Title 4, Division 13, Section 10036

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

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **Alta Devices, 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 \$40,845,000 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).

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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.