

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

***Consideration of nanoPrecision Products, Inc.’s Request to Approve a Time Extension for the
Three Year Term of the Master Regulatory Agreement¹***

**nanoPrecision Products, Inc.
Application No. 14-SM009**

Tuesday, August 15, 2017

Prepared By: *Melanie Holman, Analyst*

SUMMARY

Applicant – nanoPrecision Products, Inc.

Location – El Segundo, Los Angeles County and Camarillo, Ventura County

Industry – Optical Ferrule Manufacturing

Project – New Optical Ferrule Manufacturing Line (Advanced Manufacturing)

Value of Qualified Property – \$7,963,972

Estimated Sales and Use Tax Exclusion Amount² – \$670,566

Amount of Time Requested –

- One year and four months, until December 19, 2018, for the Term of the Master Regulatory Agreement (four years and four months from the date of initial CAEATFA Board approval)

REQUEST

In August 2014, the CAEATFA Board approved a sales and use tax exclusion (“STE”) for nanoPrecision Products (“nanoPrecision” or the “Applicant”) for the purchase of \$7,963,972 of Qualified Property for the construction of a new manufacturing line that will utilize advanced materials and high-precision tools to manufacture optical ferrules (the “Project”). The Master Regulatory Agreement (“Agreement”) initial term provided 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.³

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

² This amount is calculated based on the average statewide sales tax rate of 8.42%.

³ The provision of the regulations allowing CAEATFA to waive the requirement that all purchases of Qualified Property be made within three years of Application approval is in Regulation Section 10035(b)(1)(A).

As of January 12, 2017, nanoPrecision has used the STE to purchase \$4,789,534 of Qualified Property (60% of the total Qualified Property approved). nanoPrecision is requesting to extend the Agreement initial term by one year and four months to accommodate Project delays related to technical issues. The Applicant states that the Project experienced issues with its stamping manufacturing process, leading to delays with transitioning into the production stage.

nanoPrecision represents that in the first week of June 2017, they were able to produce qualified parts with its line. Now that these issues have been addressed, the Applicant represents that it is ready to move ahead with the addition of a new line in order to fill orders. This equipment will require a long lead time to purchase, estimated by the Applicant to be around four to five months, with installation and commissioning taking an additional five months.

nanoPrecision also represents that additional delays in production stemmed from the need to wait for orders to come in prior to purchasing equipment. nanoPrecision has stated that it was necessary to strengthen its revenue stream and product demand as well as delay the installation of new equipment to avoid disrupting current production.

About the Applicant

nanoPrecision Products, Inc. was incorporated in 2002 in the State of Delaware. nanoPrecision uses complex material forming with nanometer accuracies and tolerances to manufacture complex, nano-scale components. nanoPrecision's markets include telecommunications, data communications, military and aerospace, consumer electronics, medical devices, automobiles and supercomputers.

Project Description

nanoPrecision is in the process of developing a new manufacturing line that will utilize advanced materials and high-precision tools to manufacture optical ferrules (the "Project"). Optical ferrules are used to terminate optical fibers onto optical cables that allow for the fiber to be connected to another interface. Optical ferrules must be manufactured accurately since they align optical fibers to facilitate optimum physical contact between each mated fiber pair.

nanoPrecision's optical ferrule manufacturing process represents a breakthrough of the current industry standard, according to the Applicant. Traditionally, optical ferrules use a ceramic base that is aligned and glued together with the optical fiber using epoxy, which has to be cured with a heat treatment. The alignment and gluing are normally completed manually by optical ferrule manufacturers. nanoPrecision has eliminated these steps in its manufacturing process by using ultra-high precision metal forming and laser end face polishing.

The Applicant claims its process will result in a higher quality end product than the traditional process used to manufacture ceramic optical ferrules. With ceramic optical ferrules, a customer will only be able to use some of the ferrules since many will not meet the user's requirements. With nanoPrecision's optical ferrules, essentially all of the ferrules will meet or exceed the user's requirements.

Additionally, by using metal instead of ceramic, nanoPrecision will use less energy to manufacture its optical ferrule. Ceramic ferrules need a sintering process at 2,715° C, whereas metal ferrules are produced at a melting point of 1,650° C.

Agreement Term Extension Request

nanoPrecision has requested that the initial term of the Agreement be extended from August 19, 2017 to December 19, 2018 to accommodate technical delays in which have pushed out the Project timeline.

Staff Evaluation

nanoPrecision has indicated that though their Project experienced technical delays, these delays are no longer an issue with successful production beginning in early June 2017. The Applicant represents that with production ready to proceed, they need to move forward with the Project in order to fill customer orders, and make the remaining Qualified Property purchases within the next year. Based on this information, staff believes that extending the term of the Agreement will allow for the Project to be completed, and is therefore in the public interest and advances the purpose of the program.

Fees

In accordance with CAEATFA Regulations,⁴ the Applicant will pay an Additional Administrative Fee of \$500 because extending the initial term requires a modification to the Applicant’s Master Regulatory Agreement.

RECOMMENDATION

Staff recommends that the Board approve nanoPrecision Products, Inc’s request to extend the initial term of the Agreement by one year and four months to December 19, 2018 as it is in the public interest and advances the purpose of the program.

Attachments

- Attachment A: nanoPrecision Products Inc.’s letter requesting waiver (July 27, 2017)
- Attachment B: nanoPrecision Products Inc.’s staff summary at the time of approval

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

**RESOLUTION APPROVING A TIME EXTENSION FOR
NANOPRECISION PRODUCTS, INC.’S INITIAL TERM FOR
THE MASTER REGULATORY AGREEMENT**

August 15, 2017

WHEREAS, on August 19, 2014 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 \$7,963,972 of Qualified Property for **nanoPrecision Products, Inc.** (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)); 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 years of Application approval (Regulations Section 10035(b)(1)(A)); and

WHEREAS, the Applicant has requested a waiver of the requirement to purchase all of the Qualified Property within three years, due to unexpected delays in the Project timeline, extending the term by one year and four months to October 18, 2019; 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 October 18, 2019.

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

Attachment A: nanoPrecision Products, Inc.'s Letter Requesting Waiver (July 27, 2017)



Liz Lee
Director, Finance & Accounting
Phone: 310-597-4991, ext 149
llee@nanoprecision.com

July 27, 2017

Attn: Deana J. Carrillo
915 Capital Mall
Sacramento, CA 95814
caeatfa@treasurer.ca.gov

Re: Sales and Use Tax Exclusion Program – Request Waiver for a Time Extension of Purchase Requirement

Dear Ms. Carrillo,

I am writing to request a time extension for the purchase requirements of nanoPrecision Products' California Alternative Energy and Advanced Transportation Financing Authority Sales and Use Tax Exclusion program for the facility located at 411 Coral Circle, El Segundo, CA.

nanoPrecision would like to request a time extension of 16 months, expiring December 19, 2018, to allow time to purchase the remaining qualified property. This extension is necessary because we still need to purchase the equipment for our second component production line and our multiple cable assembly lines. Due to some technical issues with our stamping manufacturing process, we have experience some delays with transitioning into the production stage and producing qualified parts. In the first week of June 2017, nPP was able to produce production qualified parts with the current line.

Over the past couple of weeks, our VP of Sales has been focused on getting customer orders. As these sales orders come in, the demand will be initially met with our current setup however, we will need to start building the additional line well in advance to meet future forecast. Our timeline estimates include a 6 month ramp up of sales. Once we have a certain level of sales, we will begin procuring the additional equipment. These specialized equipment have a long lead time, so we expect the procurement period to be anywhere from 4-5 months. After procurement, the installation and commissioning period will be approximately 5 months. We anticipate that the remaining 40% balance will be utilized in purchasing the stamping presses, milling equipment, metrology and anodization equipment which are the bulk of our qualified property costs.

411 Coral Circle, El Segundo, CA 90245-4622 • Phone: (310) 597-4991 • www.nanoprecision.com

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I would like to explain why nanoPrecision is planning on waiting for a short period prior to purchasing additional equipment. There are several reasons, but the primary two are; 1) Without the sales, we would not have working capital needed for the additional purchases. 2) The additional equipment will have a major impact to our operations that can be disruptive in the current stage.

To further elaborate, nPP receives a majority of our funding from private investors and a small portion from Government grants and contracts. To purchase the additional equipment would cost nPP an estimated \$4-5M. Without a steady stream of sales orders and revenue from the sales, it would be difficult to convince our Investors to invest the additional funds. The purchase of the additional equipment would also present logistical issues to our operations as we would have to secure another facility to house the equipment. As a result, the focus of our engineers would be split between two operations and two locations. Presently, we do not have the human resources to adequately staff each location and would need time to hire and train the employees.

When nPP was applying for the STE program, we had planned on purchasing the equipment for the second production line as soon as the first one was up and running. However, due to the technical difficulties, our timeline to purchase equipment was significantly delayed and thus affected our funding levels. At the time, we had a healthy balance of funds to purchase new equipment but with the delays, the funds were used to keep up with daily business operations. Now, to raise additional funds from investors, we will need to show some sales on the books.

I thank the Board for their consideration of nPP's request for a time extension. Please contact me if you have any questions at 424-277-2506 or llee@nanoprecision.com.

Kind Regards,



Liz Lee

Director, Finance & Accounting

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Attachment B: nanoPrecision Products, Inc.’s staff summary at the time of approval

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

Request to Approve Project for Sales and Use Tax Exclusion (STE)¹

**nanoPrecision Products, Inc.
Application No. 14-SM009**

Tuesday, August 19, 2014

Prepared By: *Alejandro Ruiz*

SUMMARY

Applicant – nanoPrecision Products, Inc.

Location – El Segundo, Los Angeles County and Camarillo, Ventura County

Industry – Optical Ferrule Manufacturing

Project – New Manufacturing Line (Advanced Manufacturing)

Value of Qualified Property – \$7,963,972

Estimated Sales and Use Tax Exclusion Amount² – \$670,566

Application Score –

Fiscal Benefits Points:	1,253
<u>Environmental Benefits Points:</u>	<u>40</u>
Net Benefits Score:	1,293

<u>Additional Benefits Points:</u>	<u>96</u>
Total Score:	1,389

Staff Recommendation – Approval

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THE APPLICANT

nanoPrecision Products, Inc. (“nanoPrecision” or the “Applicant”) was incorporated in 2002 in the State of Delaware. nanoPrecision uses complex material forming with nanometer accuracies and tolerances to manufacture complex, nano-scale components. nanoPrecision’s markets include telecommunications, data communications, military and aerospace, consumer electronics, medical devices, automobiles and supercomputers.

The major shareholders (10.0% or greater) of nanoPrecision Products, Inc. are:
Easton Invest AG

The corporate officers of nanoPrecision Products, Inc. are:
Wilford Dean Baker, Chairman
Michael K. Barnoski, President & CEO
Joshua Mendelsohn, Treasurer

THE PROJECT

nanoPrecision is in the process of developing a new manufacturing line that will utilize advanced materials and high-precision tools to manufacture optical ferrules (the “Project”). Optical ferrules are used to terminate optical fibers onto optical cables that allow for the fiber to be connected to another interface. Optical ferrules must be manufactured accurately since they align optical fibers to facilitate optimum physical contact between each mated fiber pair.

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Figure 1. From left to right, single fiber metallic ferrule connector, “Ferroller,” 12 fiber metallic ferrule connector and hermetic fiber optic subassembly.



ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Vision Inspection System	\$	34,658
Motorized Stock		175,012
Press		2,097,070
Ultrasonic Cleaner		129,146
Rectifier		420,000
Reflectometer		20,000
Anodization Line		740,396
Manufacturing Line – Servo, Press, Automated Robotic Arms, and Control Systems		1,043,008
Cleanroom		144,998
Precision Tooling and Measuring		2,254,794
Tooling and Support Parts		904,890
Total		<u>\$7,963,972</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 master regulatory agreement a finalized project equipment list will be prepared detailing the value of the Project equipment acquired and detailing the actual 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, 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

The Applicant began acquisition of Qualified Property in October 2013 and plans to begin production in September or October 2014.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$7,963,972 and the total net benefits are valued at \$169,514 for the Project. The Project received a Total Score of 1,389 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 40 points, which exceeds the 20 point threshold.

- A. **Fiscal Benefits (1,253 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 \$840,081 resulting in a Fiscal Benefits score of 1,253 points for the Project.

- B. **Environmental Benefits (40 points)**. The Project will result in an Environmental Benefits Score of 40. The Applicant received points in the following categories:
 - 1. **Environmental Sustainability Plan (20 of 20 points)**. The Applicant will implement an environmental sustainability plan for its Project that will track energy use and solid and hazardous waste generated. The Applicant will set initiatives to reduce resource use.
 - 2. **Energy Consumption (10 of 30 points)**. The Applicant’s manufacturing process will result in a 10% reduction in energy consumption relative to the industry standard manufacturing process.
 - 3. **Solid Waste (10 of 30 points)**. The Applicant’s manufacturing process will result in a 10% reduction in solid waste produced relative to the industry standard manufacturing process.

- C. **Additional Benefits (96 points)**. Applicants may earn additional points for their Total Score. The applicant submitted information and received 96 additional points.
 - 1. **Permanent Jobs (40 of 75 points)**. The Applicant’s Project will support a total of 40 permanent jobs at its Facility. CAEATFA estimates that approximately three of these jobs will be attributable to a marginal increase in

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jobs created due to the approved STE resulting in a Permanent Jobs Score of 40 points for the Project.

2. **Construction Jobs (20 of 75 points)**. The Applicant’s Project will support a total of ten construction jobs at its Facility. CAEATFA estimates that approximately one of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Construction Jobs Score of 20 points for the Project.
3. **Unemployment (11 of 50 points)**. The Applicant’s Project is located in Los Angeles County which has an average annual unemployment rate of 10%. This is above 110% of the average annual statewide unemployment rate which is currently 8.8% resulting in an Unemployment Score of 11 points for this Project.
4. **Research and Development Facilities (25 points)**. The Applicant has verified that it has a facility located in California that performs research and development functions related to metal forming and stamping.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

The Applicant has all required permits.

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,³ the Applicant has paid CAEATFA an Application Fee of \$3,981.99 and will pay CAEATFA an Administrative Fee of up to \$31,855.88.

RECOMMENDATION

Staff recommends approval of Resolution No. 14-SM009 for nanoPrecision Products, Inc.’s purchase of Qualified Property in an amount not to exceed \$7,963,972 anticipated to result in an approximate sales and use tax exclusion value of \$670,566.

³ California Code of Regulations Title 4, Division 13, Section 10036

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RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER REGULATORY AGREEMENT WITH THE NANOPRECISION PRODUCTS, INC.

August 19, 2014

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **nanoPrecision Products, Inc.** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized in an Advanced Manufacturing process or 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 to acquire Project equipment with an estimated cost not to exceed \$7,963,972 over a period of three years; 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(a)(8)(B).

Section 2. The requested master 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, 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.

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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 listed in the semi-annual reports 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.