CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION FINANCING AUTHORITY

Consideration of Efficient Drivetrains, Inc.'s Request to Approve a Time Extension for the Three Year Term of the Master Regulatory Agreement¹

Efficient Drivetrains Application No. 15-SM006

Tuesday, May 15, 2018

Prepared By: Melanie Holman, Program Analyst

SUMMARY

Applicant – Efficient Drivetrains, Inc.

Location – Milpitas, Santa Clara County and Dixon, Solano County

Industry – Electric Vehicle Drivetrain Manufacturing

Project – Expansion of Electric Vehicle Drivetrain Manufacturing Facility

Value of Qualified Property – \$5,008,800

Estimated Sales and Use Tax Exclusion Amount² – \$421,741

Amount of Time Requested –

• Nine months and fifteen days, until March 31, 2019, for the Term of the Master Regulatory Agreement (three years, nine months, and fifteen days from the date of initial CAEATFA Board approval)

REQUEST

In June 2015, the CAEATFA Board approved a sales and use tax exclusion ("STE") for Efficient Drivetrains, Inc. ("EDI" or the "Applicant") for the purchase of \$5,008,800 of Qualified Property to expand its electric drivetrain manufacturing operations by opening a new 30,000 square foot facility in Milpitas that will manufacture drive and powertrain components for light, medium and heavy-duty alternative fuel vehicles (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

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 at the time of award which was 8.42%.

Board upon a finding that an extension is in the public interest and advances the purposes of the program.³

As of January 26, 2018, EDI has used the STE to purchase \$416,610 of Qualified Property (8%⁴ of the total Qualified Property approved). EDI is requesting to extend the Agreement initial term by nine months and fifteen days to accommodate Project delays related to funding issues. The Applicant states that the Project lost a large investor and the decrease in funding slowed progress significantly. EDI represents that in 2017 it worked to find replacement investors and has estimated that it will close on large equity funding by June 30, 2018. With funding issues addressed, the Applicant represents that it is ready to move ahead with the remaining purchases with a timeline to obtain all remaining Qualified Property by Q1 of 2019.

Additionally, EDI represents that activity has been ramping up faster than expected, prompting changes and delays for the Project. Specifically, EDI represents that it has needed to update the equipment needed at its facility in order to meet new requirements and keep pace with a rapidly evolving market.

According to the EDI, the Applicant has received a grant from the California Energy Commission to develop, set up, commission, and operate a manufacturing facility capable of reaching a production rate of up to 2,000 advanced electric drivetrains per year by 2019. This grant runs through March 31, 2019, making it critical for EDI to complete its Project within this timeframe. EDI also represents it has received a 200-electric drivetrain order from a major school bus manufacturer, and it expects to close several other major orders.

About the Applicant

Efficient Drivetrains, Inc. was founded in April 2006 as a Research and Development Partnership with the University of California, Davis Hybrid Electric Vehicle Center. EDI develops, manufactures, and markets a range of proprietary drivetrain products and technologies for direct application in zero emission vehicles (ZEVs), including battery electric vehicles (BEVs), zero emission electric vehicles with range extension capabilities, and plug in hybrid electric vehicles (PHEVs).

Project Description

EDI plans to expand its electric drivetrain manufacturing operations by opening a new 30,000 square foot facility in Milpitas that will manufacture drive and powertrain components for light, medium and heavy-duty alternative fuel vehicles (the "Project"). EDI's range of products includes prototype and production drivetrains, demonstration/proof of concept vehicles, master software, clutching systems and controls, continuously variable transmission technology, battery modules, electric motors, and charging systems.

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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).

⁴ Initial award was made in 2015, prior to the requirement that Program Participants spend 15% of the Qualified Property amount within the first year after award.

The expansion will allow the Applicant to meet demand among existing US customers, including PG&E, Siemens, Moore Fans, Duke Energy, VanDyne, Toyota, Ford, GreenKraft, Ankai, Shaanxi Automotive, and others. The facility will also allow the Applicant to accelerate manufacturing for export to committed, strategic global partners in China, Canada, India and Taiwan. According to the Applicant, the facility will be one of the largest of its type in the United States. EDI also operates its "North American Hybrid and Electric Vehicle Support Center" in Dixon, California. Both facilities are engaged in the manufacture, testing, and demonstration of electric drivetrain technology. The Qualified Property is anticipated to be located at the Milpitas facility, though some transfer between the two facilities may be possible, as they are engaged in producing the same qualified products.

Agreement Term Extension Request

EDI has requested that the initial term of the Agreement be extended from June 16, 2018 to March 31, 2019 to accommodate funding delays which have pushed out the Project timeline.

Staff Evaluation

EDI has indicated that though its Project experienced delays once financing fell through, these delays are no longer an issue and anticipate necessary funding to be in place by June 30, 2018. The Applicant represents that with purchases ready to proceed and a plan in place to complete its purchases and necessary facility upgrades, it needs to move forward with the Project in order to meet deadlines. The most critical goals will be completing a grant from the California Energy Commission that runs through March 31, 2019 and completing a major order from a school bus manufacturer. 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,⁵ the Applicant has paid 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 Efficient Drivetrains, Inc's request to extend the initial term of the Agreement by nine months and fifteen days to March 31, 2019 as it is in the public interest and advances the purpose of the program.

Attachments

Attachment A: Efficient Drivetrains, Inc.'s letter requesting waiver (March 15, 2018) Attachment B: Efficient Drivetrains, Inc.'s staff summary at the time of approval

⁵ California Code of Regulations Title 4, Division 13, Section 10036

RESOLUTION APPROVING A TIME EXTENSION FOR EFFICIENT DRIVETRAINS, INC.'S INITIAL TERM FOR THE MASTER REGULATORY AGREEMENT

May 15, 2018

WHEREAS, on June 16, 2015, 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 \$5,008,800 of Qualified Property for **Efficient Drivetrains, 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 nine months and fifteen days to March 31, 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 March 31, 2019.

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

Attachment A: Efficient Drivetrains, Inc.'s Letter Requesting Waiver (March 15, 2018)



March 15, 2018

Deana J. Carrillo
Executive Director
California Alternative Energy and Advanced Transportation Financing Authority
915 Capitol Mall
Sacramento, CA 95814

Re: Request for a Time Extension of Efficient Drivetrains, Inc. CAEATFA Project

Dear Ms. Carrillo

Efficient Drivetrains, Inc. (EDI) would like to respectfully request a time extension of its CAEATFA project to expand its advanced vehicle manufacturing facilities in California from June 16, 2018 to March 31, 2019.

Below, please find the anticipated schedule for purchasing the remainder of qualified property.

Qualified Property Categories	Total QP Purchases Q2 2018	Total QP Purchases Q3 2018	Total QP Purchases Q4 2018	Total QP Purchases Q1 2019	Total QP Purchases
Drivetrain Assembly Tools	\$167,070	\$220,400	\$152,200	\$122,100	\$661,770
Parts Fabrication Equipment	\$0	\$134,939	\$118,446	\$0	\$253,385
Facility Upgrades and Improvements	\$29,000	\$162,971	\$163,800	\$241,000	\$596,771
Material Handling Equipment	\$0	\$92,500	\$0	\$0	\$92,500
Testing and Validation Equipment	\$16,000	\$518,752	\$912,352	\$846,652	\$2,293,757
Total	\$212,070	\$1,129,562	\$1,346,798	\$1,209,752	\$3,898,183

The extension is necessary to accommodate several changes and delays that EDI experienced over the past 14 months. First, a large investor couldn't execute on its commitment and decreased funding significantly slowed down progress on this project. In 2017, EDI has been working diligently to find replacement investors and will close on another round of funding within the next few weeks. In addition, the electric truck and bus market is rapidly evolving, and this demands changes to the type of advanced manufacturing facility that EDI needs to

1181 Cadillac Ct., Milpitas, CA 94035 Tel: +1-408-624-1231 www.efficientdrivetrains.com build to adequately serve this market. Lastly, EDI's activity is ramping up faster than expected and we need to scale up our drivetrain production line accordingly to meet growing demand.

With growing revenues and the prospect of a large investor bringing in additional cash, funding is now available to EDI to purchase the remainder of qualified property and accelerate its growth. In addition, EDI is the recipient of a California Energy Commission grant (Grant Number: ARV-14-047) to develop, set-up, commission, and operate a manufacturing facility capable of ramping up to a reach production rate of up to 2,000 advanced electric drivetrains per year in 2019. The period of performance for this grant runs through March 31, 2019 and it is critical for EDI to complete this grant within the remaining timeframe. Lastly, EDI has received a 200-electric drivetrain order from a major school bus manufacturer and is expected to close in on several other major orders from strategic partners. EDI requires all of the remaining qualified property to successfully fulfill these large orders in time and with the quality required by our customers.

With this time extension, EDI will be able to purchase all the remaining qualified property within the new timeline and will be on track to meet its goals of having manufacturing capabilities of up to 2,000 advanced electric drivetrains per year in 2019.

On behalf of EDI, I would like to thank you for your consideration in approving this time extension. If you have any questions regarding this request, please contact me at (408) 439-3865 or dkelley@efficientdrivetrains.com

Respectfully submitted,

Dana Morton, SHRM-CP

Dave Morton

Director of Human Resources and Executive Office Manager M: 408-439-3865 <u>dkelley@efficientdrivetrains.com</u>

> 1181 Cadillac Ct., Milpitas, CA 94035 Tel: +1-408-624-1231 www.efficientdrivetrains.com

Attachment B: Efficient Drivetrains, Inc.'s Staff Summary at the Time of Approval

Agenda Item – 4.A.3 Resolution No. 15-SM006 Application No. 15-SM006

CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION FINANCING AUTHORITY

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

Efficient Drivetrains, Inc. Application No. 15-SM006

June 16, 2015

Prepared By: James Shimp

SUMMARY

Applicant - Efficient Drivetrains, Inc.

Location - Milpitas, Santa Clara County and Dixon, Solano County

Industry - Electric Vehicle Drivetrain Manufacturing

Project - Expansion of Electric Vehicle Drivetrain Manufacturing Facility

Value of Qualified Property - \$5,008,800

Estimated Sales and Use Tax Exclusion Amount² – \$421,741

Estimated Net Benefits - \$1,983,797

Application Score³ –

Fiscal Benefits Points: 2,302
Environmental Benefits Points: 3,401
Net Benefits Score: 5,704

Additional Benefits Points: 90

Total Score: 5,794

Staff Recommendation - Approval

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

THE APPLICANT

Efficient Drivetrains, Inc. ("EDI" or the "Applicant") was founded in April 2006 as a Research and Development Partnership with the University of California, Davis Hybrid Electric Vehicle Center. EDI develops, manufactures, and markets a range of proprietary drivetrain products and technologies for direct application in zero emission vehicles (ZEVs), including battery electric vehicles (BEVs), zero emission electric vehicles with range extension capabilities, and plug in hybrid electric vehicles (PHEVs).

The major shareholders (10.0% or greater) of Efficient Drivetrains, Inc. are:

Joerg Ferchau, 17% Andy Frank, 18% Stuart Kaler, 11.4% The corporate officers of Efficient Drivetrains, Inc. are:

Joerg Ferchau, Chief Executive Officer Andrew A Frank, Treasurer and Chief Financial Officer Laurie A Miller, Vice President and Secretary

THE PROJECT

EDI plans to expand its electric drivetrain manufacturing operations by opening a new 30,000 square foot facility in Milpitas that will manufacture drive and powertrain components for light, medium and heavy-duty alternative fuel vehicles (the "Project"). EDI's range of products includes prototype and production drivetrains, demonstration/proof of concept vehicles, master software, clutching systems and controls, continuously variable transmission technology, battery modules, electric motors, and charging systems.

The expansion will allow the Applicant to meet demand among existing US customers, including PG&E, Siemens, Moore Fans, Duke Energy, VanDyne, Toyota, Ford, GreenKraft, Ankai, Shaanxi Automotive, and others. The facility will also allow the Applicant to accelerate manufacturing for export to committed, strategic global partners in China, Canada, India and Taiwan. According to the Applicant, the facility will be one of the largest of its type in the United States. EDI also operates its "North American Hybrid and Electric Vehicle Support Center" in Dixon, California. Both facilities are engaged in the manufacture, testing, and demonstration of electric drivetrain technology. The Qualified Property is anticipated to be located at the Milpitas facility, though some transfer between the two facilities may be possible, as they are engaged in producing the same qualified products.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

	\$	5,008,800
Building Way-Finding Equipment		100,000
Building Controls		7,000
ERP (Enterprise Resource Planning) Software (Software)		185,000
Simulation Equipment and Tools		100,000
Engineering Analysis Equipment and Tools		255,000
CAD (Computer Aided Design) Software		150,000
Compressed Air Supply Equipment		57,000
Movable Cranes		3,000
Drivetrain Installation Equipment		16,000
Battery Test Equipment		800,000
Transmission Dynomometer		390,000
Equipment Transport (TRUCK)		342,000
Fork Lift		60,000
Emission Test Equipment		208,000
Overhead Crane		80,000
Vehicle Lift-Post Heavy Duty		180,000
Vehicle Lift-Light Duty		60,000
Drivetrain Dynamometer		800,000
4 Wheel Drive Chassis Dyno 1000 kw		604,800
Redundant Server Infrastructure		30,000
Office Equipment		40,000
Hazard Material Storage		20,000
Battery Storage		40,000
Equipment Shelve		40,000
Dyno (Dynonometer) Cell		50,000
Safety Equipment		10,000
Machine Foundations		20,000
Power Infrastructure Equipment		20,000
High Voltage Equipment		30,000
Automotive Tool Sets and Equipment		196,000
CMM (Coordinate Measuring Machine) Measuring Tool		15,000
Lathe		20,000
CNC(Computer Numerical Control) Mill for machining	φ	60,000
MIG (Metal Inert Gas) Welder	\$	20,000

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

EDI plans to complete installation and commissioning of all equipment at the new facility by November 2016.

PROJECT EVALUATION

NET BENEFITS

The total cost of the Qualified Property purchases is anticipated to be \$5,008,800 and the total net benefits are valued at \$1,983,797 for the Project. The Project received a Total Score of 5,884 points, which exceeds the required 1,000 point threshold and a total Environmental Benefits Score of 3,401 points, which exceeds the 100 point threshold.

- A. Fiscal Benefits (2,302 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 \$970,990 resulting in a Fiscal Benefits score of 2,302 points for the Project.
- B. Environmental Benefits (3,401 points). The Project will result in \$1,434,548 of total pollution benefits over the life of the Facility resulting in an Environmental Benefits Score of 3,401 points for the Project. These benefits derive from the manufacturing of electric vehicles since these vehicles deliver a net reduction in energy consumption and CO2 emissions relative to a comparable gasoline powered vehicle.
- C. <u>Additional Benefits (90 points)</u>. Applicants may earn additional points for their Total Score. The applicant submitted information and received 180 additional points.
 - 1. Permanent Jobs (55 of 75 points). The Applicant's Project will support a total of 49 permanent jobs at its Facility. CAEATFA estimates that approximately three 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 55 points for the Project.
 - 2. Construction Jobs (20 of 75 points). The Applicant's Project will support a total of eight 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. 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 \$12,851 resulting in a Non-CA Environmental Benefits Score of 15 points for the Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

EDI has all required permits for the project.

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, the Applicant has paid CAEATFA an Application Fee of \$2,504.40 and will pay CAEATFA an Administrative Fee up to \$20,035.20. 4

RECOMMENDATION

Staff recommends approval of Resolution No. 15-SM006 for Efficient Drivetrains, Inc.'s purchase of Qualified Property in an amount not to exceed \$5,008,800 anticipated to result in an approximate sales and use tax exclusion value of \$421,741.

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

RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER REGULATORY AGREEMENT WITH EFFICIENT DRIVETRAINS, INC.

June 16, 2015

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the "Authority" or "CAEATFA") has received the Application of **Efficient Drivetrains, 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 \$5,008,800 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).

<u>Section 2</u>. 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).

<u>Section 4.</u> 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.

<u>Section 7</u>. 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.

<u>Section 8</u>. 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.