

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

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

**Space Exploration Technologies Corporation
Application No. 18-SM015**

Tuesday, June 19, 2018

Prepared By: *Xee Moua, Program Analyst*

SUMMARY

Applicant – Space Exploration Technologies Corporation

Location – Hawthorne, Los Angeles County; Los Angeles, Los Angeles County; Irvine, Orange County

Industry – Aerospace Engineering

Project – Expansion of Existing Spaceship, Advanced Rockets and Satellites Manufacturing Facility (Advanced Manufacturing)

Value of Qualified Property – \$142,708,000

Estimated Sales and Use Tax Exclusion Amount² – \$11,930,389

Application Score –

Fiscal Benefits Points:	1,269
<u>Environmental Benefits Points:</u>	<u>65</u>
Net Benefits Score:	1,334
<u>Additional Benefits Points:</u>	<u>105</u>
Total Score:	1,439

Staff Recommendation – Approval

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 8.36%.

THE APPLICANT

Space Exploration Technologies Corporation (“SpaceX” or the “Applicant”), a Delaware corporation, was founded in 2002 by Elon Musk with the goal of revolutionizing space transportation. Although SpaceX has facilities all over the United States, it is headquartered in Hawthorne and has designated several California facilities for designing, manufacturing and assembling its rockets, spacecraft, satellites and other technological advancements. The Applicant is contracted by the United States Government, private entities, and foreign agencies to provide space launch services transporting cargo and, in the future, human crew.

On October 20, 2015, SpaceX was approved for a sales and use tax award for the purchase of up to \$360,169,639 in Qualified Property for an estimated STE value of \$30,326,284 to upgrade and expand its existing facility in order to develop the Falcon 9 and Falcon Heavy rockets and Dragon Cargo and Dragon Crew spacecraft. As of December 31, 2017, the Applicant has purchased \$84,484,209 of the Qualified Property and expects to purchase \$72 million in Qualified Property by the close of 2018. According to SpaceX, the project experienced a delay due to a fire accident that occurred in Florida, and had to divert its funding to restore the damage. SpaceX has submitted a request to extend the initial term of this first award, which is the subject of Agenda Item 4.B.1.

The major shareholders (10.0% or greater) of Space Exploration Technologies Corporation are:

Elon Musk Revocable Trust

The corporate officers of Space Exploration Technologies Corporation are:

Elon Musk, Chairman and Chief Executive Officer
Gwynne Shotwell, President
Bret Johnsen, Chief Financial Officer
Tim Hughes, Assistant Secretary

THE PROJECT

SpaceX is requesting a sales and use tax exclusion to upgrade and expand its infrastructure and equipment at its facilities used to design, manufacture, and assemble spacecraft, advanced rockets, and satellites in Hawthorne, Los Angeles, and Irvine (the “Project”). As part of the expansion, the Applicant represents that it will be developing and manufacturing two new space products in addition to its Falcon 9 and Falcon Heavy rockets, and Dragon Cargo and Dragon crew spacecraft, which were the subjects of the 2015 STE award. One new product is the BFR, a larger rocket with greater payload than any other rocket SpaceX has made to date, according to the Applicant. The Applicant represents that the Project will also manufacture satellites that will be launched into space to create a constellation of low-Earth orbit satellites capable of providing affordable high-speed internet services to most parts of the world.

SpaceX represents that more than 50% of its rocket parts are designed to be reusable, whereas industry standard rockets consume all components in one flight. According to the Applicant, it

was able to design and test the re-flight of a commercial spacecraft in March 2017 and believes this advancement will reduce production costs, increase customer base and market share, and enable space transportation to be more affordable in the future. For example, instead of using aluminum to create certain rocket parts, composites with high tensile strength and increased flexibility combined with low density will be used. According to the Applicant, the composites are made of carbon fiber, a material that is lighter than aluminum, and will result in less fuel usage and material costs. Furthermore, SpaceX represents its facility will be able to perform optimally by acquiring numerous utility equipment and advanced machineries such as automated tools, computers and data servers to assist with engineering, x-ray machines, electromagnets, additive machines and cranes.

Figure 1. Starlink Satellite



Figure 2. Falcon Rockets and BFR



ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Machinery and Equipment to Manufacture Specialized Tooling	\$ 28,000,000
Production Machinery and Equipment	37,023,000
Facility Upgrades	13,940,000
Composite Machinery and Equipment	5,000,000
Advanced Fiber Placement System (AFP)	5,000,000
Welding Equipment	7,700,000
Transportation Related Equipment	14,000,000
Propulsion Machinery and Equipment	15,000,000
3D Printers	2,500,000
Multi-Use Machinery and Equipment	5,700,000
Computers and Software	7,010,000
Specialized Tools	735,000
Avionics Machinery and Equipment	1,100,000
Total	<u>\$142,708,000</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 represents that it will begin building at its new facility located at the Port of Los Angeles from Q3 2018 through 2019. According to the Applicant, construction and facility upgrades for the Port of Los Angeles and Hawthorne locations should be completed in 2020. SpaceX represents that production of a prototype BFR is expected to begin in 2018 with testing in 2019, and satellite testing has already begun with production anticipated to begin in 2019. The expected commercial launch dates of the BFR and satellites are to take place in 2020. SpaceX reported that 75% of the Qualified Property will be purchased through 2020 and the remaining 25% will be made in 2021.

PROJECT EVALUATION

NET BENEFITS

The Project received a Total Score of 1,439 points, which exceeds the required 1,000 point threshold, and a total Environmental Benefits Score of 65 points, which exceeds the 20 point threshold.

- A. **Fiscal Benefits (1,269 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 \$15,139,753 resulting in a Fiscal Benefits score of 1,269 points for the Project.

- B. **Environmental Benefits (65 points)**. The Project will result in an Environmental Benefits Score of 65. The Applicant received points in the following categories:
 - 1. **Environmental Sustainability Plan (20 of 20 points)**. The Applicant will implement an environmental sustainability for its Project that it represents will result in minimizing greenhouse gas emissions, maximizing energy efficiency, and recycling and reusing of materials and systems.

 - 2. **Energy Consumption (10 of 30 points)**. The Applicant represents that its manufacturing process will result in a 10 percent reduction in energy consumption relative to the industry standard manufacturing process.

 - 3. **Solid Waste (30 of 30 points)**. The Applicant represents that its manufacturing process will result in a 50 percent reduction in solid waste produced relative to the industry standard manufacturing process.

 - 4. **Air Pollutants (5 of 30 points)**. The Applicant represents that its manufacturing process will result in a 5 percent reduction in air pollutants produced relative to the industry standard manufacturing process.

- C. **Additional Benefits (105 points)**. Applicants may earn additional points for their Total Score. The Applicant submitted information and received 105 additional points.
 - 1. **Permanent Jobs (55 of 75 points)**. The Applicant represents that the Project will support a total of 6,948 permanent jobs at its Facility. CAEATFA estimates that approximately 117 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 (0 of 75 points)**. The Applicant represents that the Project will support a total of 75 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. Zero points were awarded because the marginal increase in jobs does not meet the required threshold.
3. **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 the design and testing of new or improved advanced rockets, spacecraft, and satellites.
4. **Industry Cluster (25 points)**. The industry associated with this Application has been identified by the Los Angeles County Economic Development Corporation as an industry cluster of the region of the Project's location.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

According to SpaceX, a use of land permit has been secured and building, demolition, public works, mechanical and fire permits will be secured by the end of June 2018.

LEGAL QUESTIONNAIRE

Staff has reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The Executive Director, in consultation with legal counsel, has determined that the legal issues disclosed do not affect the financial viability or legal integrity of the Applicant.

CAEATFA FEES

In accordance with CAEATFA Regulations,³ the Applicant has paid CAEATFA an Application Fee of \$10,000 and will pay CAEATFA an Administrative Fee of up to \$350,000.

RECOMMENDATION

Staff recommends approval of Resolution No. 18-SM015 for Space Exploration Technologies Corporation's purchase of Qualified Property in an amount not to exceed \$142,708,000 anticipated to result in an approximate sales and use tax exclusion value of \$11,930,389.

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

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER
REGULATORY AGREEMENT WITH SPACE EXPLORATION TECHNOLOGIES
CORPORATION**

June 19, 2018

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Space Exploration Technologies Corporation** (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 \$142,708,000 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.