

**MINUTES**

**California Alternative Energy and Advanced  
Transportation Financing Authority  
915 Capitol Mall, Room 587  
Sacramento, California  
December 18, 2018**

**1. CALL TO ORDER AND ROLL CALL**

Steve Juarez, Chairperson, called the California Alternative Energy and Advanced Transportation Financing Authority (“CAEATFA” or the “Authority”) meeting to order at 10:33 a.m.

Members Present: Steve Juarez for John Chiang, State Treasurer  
Anne Baker for Betty T. Yee, State Controller  
Jacqueline Wong-Hernandez for Keely Martin Bosler, Director,  
Department of Finance  
Michael Murza for Robert B. Weisenmiller, Chair,  
California Energy Commission  
Rohimah Moly for Michael Picker, President, Public Utilities Commission

Staff Present: Deana J. Carrillo, Executive Director

Quorum: The Chairperson declared a quorum.

**2. MINUTES**

Mr. Juarez asked if there were any questions or comments concerning the November 13, 2018, meeting minutes. There were none.

Mr. Juarez asked if there was a motion.

Ms. Wong-Hernandez moved for approval of the minutes; upon a second from Ms. Baker, the minutes were approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

### **3. EXECUTIVE DIRECTOR'S REPORT**

Ms. Carrillo summarized recent activity under CAEATFA's programs, beginning with the Sales and Use Tax Exclusion ("STE") Program. She reported that if the Board approves all of the applications up for consideration today, CAEATFA will have awarded approximately 98.8% of the sales and use tax exclusion for the year, leaving \$1.2 million left under the 2018 \$100 million cap. She stated that this amount is the highest allocation of any calendar year without awarding very large projects. CAEATFA did not receive any requests for the remaining funds.

Pursuant to the request of the Controller's representative, Ms. Carrillo provided an update on Tesla, Inc. ("Tesla"). She reported that Tesla is currently reviewing its internal data to formulate a response to the Board's questions posed at last month's meeting. CAEATFA staff ("Staff") has reached out to the California Department of Labor and the Division of Occupational Safety and Health under the California Department of Industrial Relations to assess what additional information may be available outside of media reports, pursuant to the request of the Board.

Mr. Carrillo reported that the Legislative Analyst's Office ("LAO") released its review of the STE Program on December 11<sup>th</sup>, as required by statute. The evaluation of the Program noted that the Program was thoughtfully designed and creates incentives that allows manufacturers to purchase more equipment, increases job numbers and creates fiscal and environmental benefits to the State. In its report, the LAO compared CAEATFA's STE Program to the California Department of Tax and Fee Administration's ("CDTFA") partial sales and use tax exemption for research and development, manufacturing, and electricity generation, and noted that CAEATFA's statute requires a project-by-project evaluation compared to the simpler entitlement program administered by CDTFA. Ms. Carrillo noted that the LAO report ultimately recommends sunsetting the Program in 2021, given its perceived overlap with CDTFA's exemption. Ms. Carrillo stated she believes the evaluation was missing some important context, as it did not take into account the impacts CAEATFA's exclusion has had for manufacturers and support of broader State policy goals. She added that the continuing demand and oversubscription to the Program over the last several years shows the need for CAEATFA's exclusion. Ms. Carrillo stated the report provides additional alternatives, including the consideration to simplify the Program similar to the partial exemption administered by CDTFA. She added the LAO did spend time reviewing the STE Program's net benefits test and recognized Staff's work to prescreen applicants and suggests some alternative assumptions to continue improving the Program.

Mr. Juarez stated that LAO focuses on efficiency for many of their recommendations, and CAEATFA's STE Program provides a vital service. He stated that the STE applicants that come before the Board are evaluated thoroughly by Staff to ensure they are likely to be approved, and that any questions related to their projects are explored prior to coming to the Board, and any implied criticism from reports that the Board has approved all but one application does not recognize this work. Mr. Juarez asked that previous applicants who have benefited from the Program share their experiences so the legislature does not act without having all available information.

Ms. Carrillo stated that Staff has been approached in the last few months by manufacturing industry stakeholders who are interested in extending the Program beyond the current January 1, 2021 sunset date, and that she will inform the Board of any updates.

Under the California Hub for Energy Efficiency Financing (“CHEEF”), Ms. Carrillo reported that the Small Business Commercial Energy Efficiency Financing Program regulations, approved by the Board in November, were approved by the Office of Administrative Law on December 17, 2018, and that a few lenders have already requested applications to participate in the Program. Ms. Carrillo also stated Staff is working on a Request for Proposals for a universal contractor manager across all of the CHEEF’s pilots. Ms. Carrillo continued that the Affordable Multifamily Pilot Program regulations will be brought before the Board for consideration in the second quarter of 2019.

Under the PACE Loss Reserve Program, Ms. Carrillo reported that Crowe, LLP has begun PACE program audits, and that this process will continue into early 2019.

Ms. Carrillo reported that under her delegated authority, on November 28, 2018, she executed a contract with the California Department of Human Resources for Training Services (CAEATFA02-18). The cost of the contract is not to exceed \$5,000 with a term of November 1, 2018 through June 30, 2021.

Ms. Carrillo then concluded her report.

#### **4. BUSINESS ITEMS**

##### **A. DISCUSSION AND CONSIDERATION OF APPLICATIONS FOR SALES AND USE TAX EXCLUSION**

###### **1) UTCRAS, LLC**

Presented by Xee Moua, Analyst

Staff Introduced Kelly Rawley, Manager of California Operations, UTCRAS, LLC.

Ms. Moua reported that UTCRAS, LLC (“UTCRAS” or the “Applicant”) is requesting a sales and use tax exclusion to build a new facility in Bakersfield for the production of electric light rail vehicle components and units (the “Project”). The Project will produce and refurbish complete truck assemblies, wheel assemblies with a gearbox option, and traction motors. UTCRAS represents its process starts with forged blank components such as wheels, axles, and gearboxes. UTCRAS will then design and manufacture the various parts to extend their service and maintenance cycles prior to unit assembly. The Applicant’s advanced manufacturing process is unique in that it will install modern dust, paint particle, and fume collectors to prevent contaminants from entering the environment, thereby reducing air pollutants by 30% compared to its previous practice. In addition, UTCRAS will incorporate Computer Numerical Control machines that will help reduce energy consumption and work cycles, and additive manufacturing to help manage time and costs related to product prototyping.

Staff recommended approval of a resolution for UTCRAS, LLC’s purchase of no more than \$3,174,400 in Qualified Property, anticipated to result in an approximate sales and use tax exclusion value of \$265,380.

Ms. Baker moved for approval and there was a second by Ms. Wong-Hernandez.

Mr. Juarez stated there was a motion and a second and asked if there were any other questions or comments from the Board or public.

Ms. Wong-Hernandez asked if UTCRAS is taking advantage of any other State programs or local subsidies as the company expands into Bakersfield. Mr. Rawley stated UTCRAS works with the Employment Training Panel to help train its new hires, as well as the local division of the Employment Development Department. Mr. Juarez added that Staff encourages applicants to work with other agencies when possible, such as the California Competes Tax Credit administered by the Governor’s Office of Business and Economic Development, to give companies as much of a leg up as possible, and stated that Staff’s work to reach out to areas other than the mega-centers of industry in California, like this Project in Kern County, which is a high-unemployment area, is commendable.

There were no further comments, and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

2) Aemetis Advanced Products Keyes, Inc.  
Presented by Xee Moua, Analyst

Staff introduced Eric McAfee, Chief Executive Officer, Aemetis Advanced Products Keyes, Inc.; Todd Waltz, Executive Vice President and Chief Financial Officer, Aemetis Advanced Products, Inc.; Jeff Welch, Vice President of Strategic Projects, Aemetis Advanced Products, Inc.; and James Dumont, Consultant, The Grant Farm.

Ms. Moua reported Aemetis Advanced Products Keyes, Inc. (“Aemetis” or the “Applicant”) is requesting a sales and use tax exclusion to build a new biomass processing and fuel production facility located in Riverbank that will convert woody mass into cellulosic ethanol (the “Project”). The Project will utilize locally-sourced agricultural waste such as almond shells, almond wood, walnut shells, walnut wood, and pistachio shells to produce syngas that will be converted to approximately 12 million gallons of cellulosic ethanol per year to be used as transportation fuel. By using a feedstock that would otherwise decompose, be incinerated, or produce emissions known to accelerate climate change, Aemetis is able to create a product that contributes beneficially to the air quality in the Central Valley.

Staff recommended approval of a resolution for Aemetis Advanced Products Keyes, Inc.’s purchase of no more than \$153,076,838 in Qualified Property, anticipated to result in an approximate sales and use tax exclusion value of \$12,797,224.

Ms. Baker moved for approval and there was a second by Ms. Wong Hernandez.

Mr. Juarez stated there was a motion and a second and asked if there were any other questions or comments from the Board or public.

Mr. Murza asked if Aemetis anticipates selling its fuel locally. Mr. McAfee replied that they will sell in the Sacramento region as well as in Fresno, and that it is mandated in California that at least ten percent of fuel produced be ethanol. He added that the anticipated market in California is for approximately 1.5 billion gallons of fuel. Mr. Juarez stated that projects like this highlight progress toward meeting the State’s environmental goals, and that the Project is located in a high-unemployment area, which shows how the Program helps the State economically.

There were no further comments and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

3) Drink, Inc.  
Presented by Matthew Parsons, Analyst

Staff introduced Aaron Gravelle, Co-Founder and Chief Executive Officer, Drink, Inc.; and Alexandra Benet, Co-Founder and Chief Design Officer, Drink, Inc.

Mr. Parsons reported Drink, Inc. (“Drink” or the “Applicant”) is requesting a sales and use tax exclusion to build a new water bottling facility located in Richmond (the “Project”). Drink will manufacture glass bottles that will be filled with water and sold to business customers that will then return the bottles for washing and refilling at Drink’s facility. Each bottle will have a unique 2D code embedded in the glass to enable the tracking of each bottle throughout its lifecycle, including the number of times the bottle has been used and returned. Drink represents that it will utilize each bottle at least 50 times, and packaging bins at least 100 times, thereby reducing the total number of bottles needed by 95% to fulfill the same amount of product consumption when compared to single-use plastic bottles. Drink also represents the Project will utilize advanced manufacturing equipment to help increase efficiency and the environmental impact of the facility, such as water-efficient purification equipment with a proprietary design to clean water to the

highest level possible while eliminating waste water, and a 360-degree camera system that monitors each bottle throughout the manufacturing process.

Staff recommended approval of a resolution for Drink, Inc.'s purchase of no more than \$3,636,029 in Qualified Property, anticipated to result in an approximate sales and use tax exclusion value of \$303,972.

Ms. Baker moved for approval and there was a second by Ms. Wong-Hernandez.

Mr. Juarez stated there was a motion and a second and asked if there were any other questions or comments from the Board or public.

Ms. Moly asked about the logistics of bottle returns and what incentive customers have to return bottles. Mr. Gravelle replied that Drink will start its distribution first to company campuses, where employees will get their water for free so long as they return the bottles, and the bottles can be more easily accounted for. Later, when the company expands operations to the private sector, the company would charge a per-bottle deposit in order to incentivize the bottles' return. He added that a system designed to make returning the bottles convenient is key, and Drink plans to implement a direct-delivery model, whereby used bottles would be retrieved from the customers when a new delivery takes place.

Mr. Juarez asked why Drink decided the best route would be using glass bottles. Mr. Gravelle stated that plastic bottles have a number of negative impacts on both the environment and potentially on human health, whereas glass bottles, able to be washed and reused, mitigate most, if not all, of these issues. He added a large percentage of plastic bottles never end up getting recycled. Mr. Gravelle continued by stating that in order to be more sustainable, Drink's methods will focus on collection, reuse, and recycling of glass bottles. Ms. Benet stated that Drink's bottles are designed to be 100% recyclable, and consist of only two pieces, made from glass and aluminum, so if the company does not receive all of its bottles back, they will not have a negative impact, as these materials are the most commonly recycled.

Mr. Murza asked if the bottles are made from recycled glass. Mr. Gravelle stated the Drink's bottles will start at 30-40% recycled content, and the company has a short-term goal of 50% recycled content. He explained that lots of investment is being made in the glass sorting industry, because if even one bottle of the wrong color is added to a batch, it will have an effect on the final product's appearance. He stated Drink would like to get close to 100% recycled content bottles in the future. He added that Drink will recycle all of its bottles at the end of their useful life cycle. Ms. Benet stated the company's delivery crates will also be recycled by its crate manufacturer to make new crates.

There were no further comments and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

- 4) FirstElement Fuel Inc.  
Presented by Xee Moua, Analyst

Staff introduced Dr. Shane Stephens, Chief Development Officer and Principal, FirstElement Fuel Inc.

Ms. Moua reported that FirstElement Fuel Inc. (“FEF” or the “Applicant”) is requesting a sales and use tax exclusion to build a new hydrogen fueling station located in Oakland that will produce fuel-grade hydrogen for fuel cell electric vehicles using second-generation technology that stores, produces, and delivers hydrogen fuel more efficiently compared to currently operating hydrogen stations (the “Project”). The Applicant states that standard hydrogen stations employ first-generation technology that begins with raw hydrogen in gaseous form that is pressurized using traditional compressors and cooled using refrigeration, whereas the Project will use 33% renewable liquid hydrogen that must be pressurized, converted into gas, heated and cooled, and filtered to fueling protocols before being used. As the fuel is being distributed, the Applicant represents that the gaseous hydrogen is cooled to -40°F, enabling the fuel to safely enter the vehicle tank.

Additionally, FEF states the Project will use a liquid cryopump that is more energy efficient, consuming only one kilowatt hour (kWh) of electricity to transform raw material compared to the industry standard of four kWh of electricity.

Staff recommended approval of a resolution for FirstElement Fuel Inc.’s purchase of no more than \$2,050,000 in Qualified Property, anticipated to result in an approximate sales and use tax exclusion of \$171,380.

Ms. Baker moved for approval and there was a second by Ms. Moly.

Mr. Juarez stated there was a motion and a second and asked if there were any other questions or comments from the Board or public.

Ms. Moly stated the California Public Utilities Commission (“PUC”) recently approved utility companies to deploy electric vehicle (“EV”) charging stations, and asked if FEF has received any funding from the PUC. She also asked how FEF’s hydrogen stations will fit into the EV charging infrastructure. Dr. Stephens stated the hydrogen stations complement California’s environmental goals, because hydrogen fuel cell cars, like battery-powered cars, are zero-emission producing vehicles. He stated FEF does not receive funding from the PUC, but has received support from the California Energy Commission.

Ms. Moly asked if the hydrogen fueling stations are located alongside EV charging stations. Dr. Stephens stated the FEF's fueling stations are co-located with gasoline fueling stations, because the experience and timing of fueling the two types of vehicles is very similar. He added that in some cases, EV charging stations are located at gas stations, and in those cases, the hydrogen fueling stations are co-located with the EV charging stations.

Mr. Juarez asked about the number and locations of FEF's stations. Dr. Stephens replied that FEF currently has 19 stations operating, and is expanding to 12 additional locations. The current locations range from San Diego through Los Angeles and Orange County, up to the Bay Area. They also have a station at Harris Ranch on Interstate 5, and a location in Truckee, California.

Mr. Juarez asked about the viability of the hydrogen-powered car market. Dr. Stephens stated hydrogen-powered cars are now being produced by some of the largest vehicle manufacturers in the world, including Toyota and Honda, and Hyundai, Mercedes Benz, and General Motors all have plans to release hydrogen-powered models in the next couple of years.

Mr. Juarez asked about the efficiency of hydrogen-powered vehicles. Dr. Stephens stated the gasoline gallon equivalent of the average hydrogen fuel cell car today is around 65 miles to the gallon, which is more efficient than internal combustion engines as well as most hybrid gas-electric vehicles.

Mr. Juarez asked if hydrogen fuel cell cars qualify for Clean Air Vehicle decals to be able to use the High Occupancy Vehicle lane on freeways. Dr. Stephens stated they do qualify.

Ms. Baker stated that in the Schwarzenegger administration, there were plans to build a "hydrogen highway," and that she is pleased to see this goal is starting to be realized.

There were no further comments and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye



**B. DISCUSSION AND CONSIDERATION OF APPLICANT’S REQUEST TO EXTEND THE TERM OF THE MASTER REGULATORY AGREEMENT OF STE AWARD**

- 1) nanoPrecision Products, Inc.  
Presented by Xee Moua, Analyst

Staff introduced Elizabeth Lee, Director of Finance and Accounting, nanoPrecision Products, Inc., who joined by phone.

Ms. Moua reported that on August 19, 2014, the CAEATFA Board approved a sales and use tax exclusion for nanoPrecision Products, Inc. (“nanoPrecision” or the “Applicant”) for the purchase of up to \$7,963,972 in Qualified Property to construct a new optical ferrule manufacturing facility in El Segundo. The Master Regulatory Agreement’s (“Agreement”) initial term provides the Applicant with four years from the date of Board approval to utilize its STE award. Considering Staff is not able to recoup any unused awards, the Board can extend the initial term of the Agreement upon finding that it is in the public interest and advanced the purposes of the Program. nanoPrecision has requested that the initial term of the Agreement be extended from December 19, 2018 to December 19, 2019 to accommodate the restructuring of its business plan. According to nanoPrecision, it faced various technical issues in its attempt to establish the pilot production line for two of its four products, causing the Applicant to shift focus exclusively to its two other products at this time. According to nanoPrecision, it has conducted a successful product study for its private business investor to convey that its business shift is feasible. The Applicant states a one-year extension will help scale up its current production line, and provide sufficient time to fine tune its products and make equipment purchases.

Staff recommended approval of nanoPrecision Products, Inc.’s request to extend the initial term of the Agreement by one year, until December 19, 2019, as it is in the public interest and advances the purpose of the Program.

Ms. Baker moved for approval and there was a second by Ms. Wong-Hernandez.

Mr. Juarez stated there was a motion and a second and asked if there were any questions or comments from the Board or public.

There were no further comments and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

2) California Safe Soil, LLC  
Presented by Matthew Parsons, Analyst

Staff introduced Daniel M. Morash, Founder, California Safe Soil, LLC.

Mr. Parsons reported that California Safe Soil, LLC (“California Safe Soil” or the “Applicant”) converts unsold organics from supermarkets into a liquid soil amendment called Harvest to Harvest. California Safe Soil was approved for a sales and use tax exclusion award on January 19, 2016 to build a new commercial-scale organics recycling and soil amendment manufacturing facility in an 80,000 square foot warehouse in McClellan (the “Project”). The initial term of the Master Regulatory Agreement (“Agreement”) provided the Applicant with three years from the date of Board approval to utilize the STE award. California Safe Soil represents that as of November 2018, the company has purchased approximately 49% of the total Qualified Property amount approved. California Safe Soil is requesting to extend the initial term of the Agreement by three years to accommodate project timeline delays.

According to the Applicant, it has completed initial construction and began production on July 1, 2017, but is not yet at full capacity. California Safe Soil represents that this is due, in part, to the time required to gain market acceptance of its product. However, California Safe Soil states it is currently converting 5,000 tons of food waste per year into its Harvest to Harvest fertilizer that is sold to conventional and organic growers in California, and it also plans to sell its animal feed to accelerate sales growth. California Safe Soil also states that improved technology and efficiency has resulted in reprioritization of the equipment that was envisioned when it first entered into the Agreement. As a result, the Applicant represents that fewer production lines will be needed to achieve its design capacity. The Applicant anticipates that, based on its historical rate of growth, a three-year extension will be adequate time to complete the Project.

Based on this information, Staff recommended that the Board approve California Safe Soil, LLC’s request to extend the initial term of the Agreement to purchase \$3,750,000 in Qualified Property, anticipated to result in an approximate sales and use tax exclusion value of \$315,750, by three years to January 19, 2022.

Ms. Baker moved for approval and there was a second by Ms. Wong-Hernandez.

Mr. Juarez stated there was a motion and a second and asked if there were any other questions or comments from the Board or public.

Mr. Juarez asked what will allow California Safe Soil to be able to make use of the remaining 51% of its award. Mr. Morash replied that farmers have been slow to this point to adopt a new fertilizer product, but sales have been increasing. He stated the company’s sales last year were around \$1 million, but this year sales were up to around \$6 million, and since the fertilizer is organic and helps rejuvenate the soil, some farmers are already seeing the value in the product. California Safe Soil anticipates further market expansion in the near future.

There were no further comments and Mr. Juarez called for a vote. The item was unanimously approved.

The item was passed by the following vote:

Steve Juarez for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Jacqueline Wong-Hernandez for the Director of Finance	Aye
Michael Murza for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

## **5. PUBLIC COMMENT**

Mr. Juarez asked if there were any comments from the public and there were none.

## **6. ADJOURNMENT**

There being no further business, public comments, or concerns, the meeting adjourned at 11:14 a.m.

**Respectfully submitted,**

Deana J. Carrillo  
Executive Director