

MINUTES

**California Alternative Energy and Advanced
Transportation Financing Authority
801 Capitol Mall, Room 150
Sacramento, California
March 19, 2019**

1. CALL TO ORDER AND ROLL CALL

Jovan Agee, Chairperson, called the California Alternative Energy and Advanced Transportation Financing Authority (“CAEATFA” or the “Authority”) meeting to order at 10:44 a.m.

Members Present: Jovan Agee for Fiona Ma, CPA, State Treasurer
Anne Baker for Betty T. Yee, State Controller
Karen Finn for Keely Martin Bosler, Director, Department of Finance
Ken Rider for David Hochschild, 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. Agee asked if there were any questions or comments concerning the February 19, 2019, meeting minutes. There were none.

Mr. Agee asked if there was a motion.

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

The item was passed by the following vote:

Jovan Agee for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Karen Finn for the Director of Finance	Aye
Ken Rider for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

3. EXECUTIVE DIRECTOR’S REPORT

Ms. Carrillo welcomed Ken Rider, delegate for Commissioner David Hochschild, newly-appointed chair of the California Energy Commission. Given the recent appointments of new Board members and their delegates, Ms. Carrillo began her report by providing background on the Sales and Use Tax Exclusion (“STE”) Program’s history and accomplishments, as well as

context for Tesla, Inc.'s ("Tesla") involvement with the Program, as they would be giving a report on their progress toward meeting their projects' goals at this meeting.

Ms. Carrillo stated that as of the end of 2018, the STE Program has approved a total of 201 project applications, helping to purchase over \$8.5 billion in production equipment and machinery, of which 96 are active, 63 have been completed, and 42 are not moving forward. The 159 active and completed projects were approved for a total of \$6.25 billion in Qualified Property, anticipated to result in an estimated combined sales and use tax exclusion value of \$524.42 million. These projects are located across 33 counties, and are estimated to result in the retention and creation of 45,373 jobs, with 2,282 of these attributable to the involvement of the STE Program. The projects are anticipated to produce an estimated \$112.54 million in environmental benefits and \$763.68 million in fiscal benefits, resulting in approximately \$215 million in net benefits to the State. She added that over 50% of projects are located in high-unemployment areas, and the majority of awards are small, for amounts less than \$1 million. She stated that Alternative Source projects have received the greatest number of awards, while the largest value of awards have gone to Advanced Manufacturing and Advanced Transportation projects.

Ms. Carrillo explained that the STE Program was established in 2010, by legislation authored by Senator Padilla, in order to provide an incentive for manufacturers producing alternative source or advanced transportation products. The purpose of the Program was to promote the creation of California-based manufacturing jobs that will stimulate the California economy as well as to incentivize the manufacture of green technologies, which will help to reduce greenhouse gas emissions, air and water pollution, or energy consumption; thus, the STE Program merged California's economic and environmental policy goals.

Ms. Carrillo stated the STE Program statute requires that CAEATFA assess whether a project provides a net benefit to the State, that the anticipated fiscal and environmental benefits must exceed the cost of the foregone sales and use tax. At the time of the Program's inception, Treasurer Lockyer asked CAEATFA staff ("Staff") to develop a program that would assess actual impact, and not claim credit for economic activity that would have occurred regardless of the incentive. Ms. Carrillo stated that the net benefit test that the Program uses is based on research from the Federal Reserve Bank of San Francisco, which demonstrated how private capital investment decisions respond to tax rates and incentives. From that research, CAEATFA extrapolates an estimate of the additional equipment that a company will purchase as a result of the incentive, and only evaluates the marginal fiscal and environmental benefits of that equipment. The fiscal benefits are derived from the applicant's projected sales taxes, personal income taxes paid by the applicant's employees, corporation taxes on profits, property taxes, and other indirect fiscal benefits of the applicant. Ms. Carrillo stated that for Alternative Source and Advanced Transportation projects, the environmental benefits are estimates of the dollar value of greenhouse gas reductions and reduction on dependence of fossil fuels. For Recycled Feedstock projects, the environmental benefits include estimates of the dollar value of greenhouse gas reductions resulting from the increased total amount of recycled materials produced. CAEATFA relies on models from the United States Environmental Protection Agency, the California Air Resources Board, and other state agencies for quantifying the environmental benefits of recycling the various types of materials.

Ms. Carrillo stated that the STE Program awards are an early incentive, for nascent technologies, of which there is the possibility of great success, or failure, in an effort to support and bolster markets. She elaborated by stating that the Program does not provide a tax credit based upon when a company meets certain guaranteed milestones. Companies must have all the capital they would need to purchase equipment, and by excluding the payment of sales tax, they are able to keep more capital to address other business needs.

Ms. Carrillo stated that in 2012, Senator Padilla authored Senate Bill 1128, which expanded the program to include Advanced Manufacturers. The bill was enacted after the Obama White House issued a white paper on advanced manufacturing, recognizing that manufacturing jobs remained a key to middle class growth in the United States, and here in California. Ms. Carrillo added that with this expansion, CAEATFA's STE Program added a new eligibility pathway, and Staff was required to evaluate a process rather than a product. Under the Advanced Manufacturing eligibility pathway, CAEATFA also recognizes project contributions to regional industry clusters. To address the environmental benefits scoring threshold, CAEATFA looks for improvements in the manufacturing process. Senate Bill 1128 also placed a \$100 million cap on the amount of sales and use tax exclusions that could be awarded in any calendar year. Ms. Carrillo reported that in 2015, Assembly Bill 199 ("AB 199"), which was passed as an urgency bill and authored by Assemblymember Eggman, further expanded the STE Program to include Recyclers to assist the State in meeting its waste and recycling goals. At this time, the Board voted to suspend accepting and considering new applications until regulations to evaluate projects eligible under AB 199 became effective. The Board also initially set aside at least \$15 million in exclusions under the 2016 annual cap for projects eligible under AB 199.

Ms. Carrillo reported that at the time, Staff modified regulations, adding competitive criteria that would apply when the Program was oversubscribed, placing a per applicant cap of \$20 million per year while allowing large projects to be eligible for any exclusions remaining at the end of the calendar year, adding a requirement that 15% of the Qualified Property be purchased in the first year of the award as an indicator of readiness (this provision became established in the contracts and cannot be waived by the Board), and prioritizing recycling projects in the short term. Ms. Carrillo stated that in 2016, the Program was reopened.

Ms. Carrillo reported that on December 13, 2016, Tesla was approved for an award in an amount not to exceed the remainder of the 2016 calendar exclusion allocation after all other applications had been considered. This amounted to \$560.9 million in Qualified Property, the equivalent of approximately \$47.2 million in sales and use tax exclusion. Tesla was also given leave to submit applications under the newly revised regulations imposing the \$20 million cap in sales and use tax exclusions each calendar year. She continued by stating that on January 17, 2017, Tesla received a second award for its Model 3 project, capped at \$20 million in exclusion value, with the ability to seek more at the end of the year. On December 19, 2017, the Board approved Tesla for the sales and use tax exclusion remaining for 2017 after all other applications were considered. This amounted to a sales and use tax exclusion value of approximately \$4,192,540, but because of the changes to the project estimates since the application was initially considered, new legal disclosures, and the short time Staff had to review the application, the award was conditional, providing Staff with more time to review the necessary information.

Ms. Carrillo continued by reporting that on March 20, 2018, the CAEATFA Board approved Tesla's request for an additional sales and use tax exclusion under the 2017 allocation and its third application for \$20 million in sales and use tax exclusion under the 2018 exclusion, and, given the amounts of the cumulative award, the changing production timetable and challenges, an ongoing investigation by the National Labor Relations Board, and continued media reports on health and safety issues, the Board made the award subject to Tesla providing regular frequent reports through 2021 which would consist of: progress in meeting production goals, progress in improving the health and safety at its facilities, and provision of an updated Legal Status Questionnaire. Ms. Carrillo stated that Tesla would be providing its third report at today's meeting, and has submitted its final application of the initial \$1.2 billion investment in the Model 3, which is anticipated to be brought before the Board at the April meeting.

Ms. Carrillo stated that Tesla, Inc., as a publicly-traded company and headed by a unique visionary and the largest manufacturer in California, is making a transformative impact on the electric vehicle market, and is the recipient of the greatest amount of assistance under the STE Program. She stated that by the company's own admission, it has had challenges, made mistakes, and worked to address them. She continued that Tesla has drawn more scrutiny, both in the public and through the Board's proceedings, than any of the Program's other 200 projects. She stated that through this process, an unprecedented amount of Staff and Board time has been spent investigating the authenticity and accuracy of various media reports, and working with other state partners to better understand health and safety issues to provide the Board with more clarity and context, while Tesla has concurrently been navigating the challenges of producing the Model 3 under its stated timetable. There continues to be media coverage of the company and its efforts, including a recent health and safety report from the Division of Occupational Safety and Health under the California Department of Industrial Relations (Cal/OSHA), as well as recent layoffs at the company. Ms. Carrillo expressed her hope to be able to streamline Staff's efforts in this area in the future and to continue to support Tesla's vision and investment in creating a greener future for transportation.

Ms. Carrillo then summarized recent activity under CAEATFA's programs, beginning with the STE Program. Ms. Carrillo reported that if the Board approves all of the applications up for consideration today, CAEATFA will have awarded approximately 11% of the sales and use tax exclusion for the year, leaving \$89 million left to award. CAEATFA currently has three applications under review; if they are all approved, just under \$61 million of the \$100 million in sales and use tax exclusion will remain for 2019. The application deadline for the May Board meeting is March 22. Ms. Moly asked if the amount of sales and use tax exclusions remaining is typical for this time of the year. Ms. Carrillo replied that she normally would have expected a few more applications for the Program by this time, but that every year is different.

Under the California Hub for Energy Efficiency Financing ("CHEEF"), Ms. Carrillo reported that as the launch of the Small Business Commercial Energy Efficiency Loan Assistance Pilot Program nears, Staff has been working to enroll contractors and project developers in preparation of the soft launch coming this spring. Staff is also working to finish development of the user interface. Ms. Carrillo reported that Staff has also worked toward the launch of the Affordable Multifamily Energy Efficiency Financing Pilot Program, and held a workshop on February 26, which was attended by over 40 stakeholders, including program implementers of non-rebate and

incentive programs who are ready to leverage the Program; the Investor Owned Utilities; state programs (such as the Low-Income Weatherization Program administered by California Department of Community Services and Development, and the Solar on Multifamily Affordable Housing under the California Public Utilities Commission); finance companies; property owners; and local governments. Staff is considering comments and will bring the Program's regulations to the Board for approval at the April meeting.

Under legislative updates, Ms. Carrillo reported that Staff is continuing to monitor and provide support for Senate Bill 162, authored by Senator Galgiani, also sponsored by Treasurer Ma, which would extend the STE Program to 2030; and Assembly Bill 176, authored by Assemblymember Cervantes, which would extend the STE Program to 2031. Ms. Moly asked when the STE Program would expire if no legislation is approved. Ms. Carrillo replied that without extension, the Program would end on January 1, 2021.

Ms. Carrillo reported that under her delegated authority, she approved and signed an Interagency Agreement with the California Pollution Control Financing Authority for reimbursement of CAEATFA's portion of Department of General Services charges for Rent and Security (CAEATFA06-18) on February 26, 2019, with a total cost not to exceed \$131,146.70 for the term of July 1, 2018 through June 30, 2019. No other actions were taken.

Ms. Carrillo then concluded her report.

Ms. Baker stated that the State Controller had previously asked for monthly reports in regard to Tesla. She stated that though these reports have been helpful, she would now like to withdraw the request to update the Board monthly on Tesla news.

Ms. Finn asked for clarification on STE award caps, specifically whether there is a statutory cap per applicant. Ms. Carrillo replied that the Program's regulations limit all applicants to \$20 million in sales tax exclusion per year, but that no such cap exists by statute. She added the clarification that the cap is per applicant and not per project.

4. BUSINESS ITEMS

A. DISCUSSION AND CONSIDERATION OF APPLICATION FOR SALES AND USE TAX EXCLUSION

- 1) Graham Packaging PET Technologies, Inc.
Presented by Matthew Parsons, Analyst

Staff introduced Blake Taylor, Modesto Plant Manager, Graham Packaging PET Technologies, Inc.; and Kathy Mussio, Managing Partner, Graham Packaging PET Technologies, Inc.

Mr. Parsons reported that Graham Packaging PET Technologies, Inc. ("Graham" or the "Applicant") is requesting a sales and use tax exclusion to expand its beverage packaging facility in Modesto (the "Project"). The Project will produce new 750 ml wine bottles using its proprietary polyethylene terephthalate (PET) single component resin formulation. The Applicant states that its proprietary resin formulation, which can consist of up to 15%

recycled materials, allows for all of the waste to be ground onsite and recycled into new pellets. Graham also states that their proprietary resin formulation achieves low oxygen permeation while also maintaining bottle integrity and aesthetics, and operational sustainability. According to the Applicant, it will install a new blow molding extraction line that will increase precision and quality, reduce scrap that is currently diverted to landfills, reduce the frequency at which its molds need to be changed, and will enable real-time optical quality scanning to remove defective bottles from production. Graham represents it will reduce its overall energy consumption by 20% and waste generation by 60%.

Staff recommended approval of a resolution for Graham Packaging PET Technologies, Inc.'s purchase of Qualified Property in an amount not to exceed \$8,925,143, anticipated to result in an approximate sales and use tax exclusion value of \$746,142.

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

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

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

The item was passed by the following vote:

Jovan Agee for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Karen Finn for the Director of Finance	Aye
Ken Rider for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

B. DISCUSSION AND CONSIDERATION OF CUMMINS ELECTRIFIED POWER NA, INC.'S REQUEST TO AMEND RESOLUTION 15-SM006 TO CHANGE THE PARTICIPATING PARTY FROM EFFICIENT DRIVETRAINS, INC. TO CUMMINS ELECTRIFIED POWER NA, INC. AND TO APPROVE A TIME EXTENSION FOR THE INITIAL TERM OF THE MASTER REGULATORY AGREEMENT

Presented by Matthew Parsons, Analyst

Staff introduced Jean-Baptiste Gallo, Product Marketing Manager, Cummins Electrified Power NA, Inc.; Alyssa Colombet, Finance Assistant & Government Programs Administrator, Cummins Electrified Power NA, Inc., who joined by phone; and Jordan Winkler, Financial Analysis Manager, Cummins Electrified Power NA, Inc., who joined by phone.

Mr. Parsons reported that on June 16, 2015, the CAEATFA Board approved a sales and use tax exclusion for Efficient Drivetrains, Inc. ("EDI") for the purchase of up to \$5,008,800 in Qualified Property to expand its electric drivetrain manufacturing operations by opening a new 30,000 square foot facility in Milpitas to manufacture drive and powertrain components

for light, medium, and heavy-duty alternative fuel vehicles. The initial term of the Master Regulatory Agreement (“Agreement”) provided EDI with three years from the date of Board approval to utilize the STE award. On May 15, 2018, the CAEATFA Board approved EDI for a nine-month and fifteen-day extension of the initial term of the Agreement from its original expiration date of June 16, 2018, to accommodate Project delays related to funding issues. EDI represented that in 2017 it worked to find replacement investors and was able to do so in August of 2018 when an acquisition took place merging CEPNA Holdco, Inc. and EDI as Cummins Electrified Power NA, Inc. (“Cummins” or the “Applicant”).

As of February 2019, the Applicant has reported purchases of \$1,169,308 of Qualified Property (23% of the total Qualified Property approved), and according to Cummins, the remainder of the Qualified Property will be ordered by the end of March 2019; however, due to long lead times, some equipment will not be received until June 30, 2019.

Staff recommended approval of a resolution to change the participating party from Efficient Drivetrains, Inc. to Cummins Electrified Power NA, Inc. and to extend the initial term of the Master Regulatory Agreement to purchase \$5,008,800 in Qualified Property, anticipated to result in a sales and use tax exclusion of \$421,741, by six months to September 30, 2019.

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

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

Mr. Gallo expressed his thanks to the Board for their approval of Efficient Drivetrains, Inc.’s Project, and stated that the award helped the company do work toward goals that led to EDI’s acquisition by Cummins.

There were no further comments and Mr. Agee called for a vote.

The item was passed by the following vote:

Jovan Agee for the State Treasurer	Aye
Anne Baker for the State Controller	Aye
Karen Finn for the Director of Finance	Aye
Ken Rider for the California Energy Commission	Aye
Rohimah Moly for the Public Utilities Commission	Aye

C. REPORT FROM TESLA, INC. ON STATUS OF PROJECT PURSUANT TO RESOLUTIONS NUMBER 17-SM003 AND NUMBER 18-SM004 (INFORMATIONAL ITEM)

Staff introduced Erin Bradley, Associate General Counsel, Tax Incentives, Tesla, Inc.; Laurie Shelby, Vice President of Environmental Health and Safety, Tesla, Inc.; Richard Fairfax, Former Deputy Assistant Secretary of Labor for OSHA; and Dr. Jim Craner, Medical Director for Environmental Health and Safety, Tesla, Inc., who joined by phone.

On March 20, 2018, the CAEATFA Board approved resolutions 17-SM003 and 18-SM004 approving two sales and use tax exclusion awards for Tesla, Inc.’s (“Tesla”) expansion of its

manufacturing facility to accommodate production of its Model 3 vehicle. Both resolutions require that Tesla update the CAEATFA Board in writing and in person every four months for three years with regard to the following:

1. Progress in meeting its production goals;
2. Progress in improving the health and safety standards at its facilities; and
3. Providing an updated Legal Status Questionnaire.

Ms. Bradley gave a summary of Tesla's production history, current production achievements, and economic impacts. She stated that Tesla has been working with CAEATFA since 2010, when the company first considered locating its vehicle production facility in Fremont at the site of the vacant NUMMI automotive plant. She stated that since that time, Tesla has become the world's first vertically integrated, sustainable energy company, and is now the largest manufacturing employer in California, with over 20,000 California employees, including 10,000 in Fremont. Ms. Bradley stated that Tesla has built its business largely in California, from the production of its first mass-market vehicle, the Model S, in 2012, to the newly released, standard-range Model 3, which is now available for \$35,000 before applying tax credits and incentives. She added that Tesla is the only auto manufacturer of its scale in California.

Ms. Bradley reported that Tesla's Model 3 was the best-selling vehicle in the United States in 2018, before the standard-range Model 3 was even offered. She stated that this was the first time in decades that an American car maker held the top spot. Ms. Bradley continued by reporting that Model 3 production was ramped up considerably during 2018, and that Tesla produced over 152,000 Model 3 vehicles, as well as over 101,000 Model S and X vehicles last year. This represented an increase in production of Model 3 vehicles of over 8,000% compared to 2017. Ms. Bradley stated that over 51,000 Model 3 vehicles were registered in California in 2018.

Ms. Bradley stated that based on a third-party report, Tesla has had a significant economic impact in California. The report showed that in 2017, Tesla's operations supported over 51,000 jobs either directly or indirectly. She continued that for every Tesla employee, over 1.5 other jobs were supported in California. Ms. Bradley stated that Tesla paid employees over \$2.1 billion in wages and equity, and that every employee is given equity in the company upon hire. She added that Tesla's employees also receive health, vision, life, disability, and dental insurance, and access to a 401k retirement savings plan, an Employee Stock Purchase Plan, student loan refinancing, commuter benefits, parental leave, and independent care assistance. She added that the Fremont factory has created a manufacturing hub in the Bay Area, such that Alameda County had the second largest increase in manufacturing employment between 2016 and 2018, according to the United States Bureau of Labor Statistics. Ms. Bradley continued by stating that in 2018, Tesla infused some \$2 billion into the California economy through transactions with over 2,600 California tier one suppliers. She stated that in addition, Tesla's employees spend around \$1.9 billion in California annually.

Ms. Bradley continued her report, stating that Tesla is committed to having a diverse and inclusive workforce, and has contracts with hundreds of certified minority-, woman-, or veteran-owned businesses, some of which participate in the California Public Utility

Commission's Utility Supplier Diversity Program, and that Access Omnicare, Tesla's health clinic provider, is a diversity supplier. She continued by stating Tesla's workforce development team partners with high schools, colleges, and workforce development programs to provide career pathways in manufacturing, technology, and engineering. Ms. Bradley stated that so far in 2019, Tesla has worked with students from San Mateo Community College District, Chabot College, Skyline College, Monterey Peninsula College, the Manufacturers' Council of the Inland Empire, and the Pomona Unified School District's Pathways to Success Career Fair to connect them with future opportunities with Tesla. She continued that Tesla partners with community colleges to offer Tesla Start, a 12-week automotive technician training program, which provides students with the skills necessary for job placement as a service technician at Tesla's service centers, and that students are given a pathway to full-time employment with from this program. She added that in the spring of 2019, the next class of students will graduate from the Tesla Start programs at Rio Hondo College in Whittier and Evergreen College in San Jose, after which they will be placed in Tesla's service centers.

Ms. Shelby next gave an overview of Environmental Health and Safety ("EHS") at Tesla. She stated that 2018 was a historic year for Tesla production, with the company producing more cars in 2018 than in all previous years combined, and that by doing so, they have reduced carbon dioxide and other tailpipe emissions by approximately 3.9 million metric tons. She stated that even with this ramp-up of production, Tesla has made gains in health and safety at its facilities.

Ms. Shelby stated that she joined Tesla in October of 2017 as the Vice President of EHS, a newly-created position. Since then, she has worked to develop EHS policy at Tesla by creating a culture of proactive reporting of potential hazards, and is focused on understanding and minimizing human errors and improving processes. She stated that this is in stark contrast to the traditional industry view, which focuses on lagging indicators, such as employee restricted or lost days or recordable injuries. She added that by traditional automaker injury reporting, a worker fatality only counts as one lost workday, and does not impact a company's total recordable rate. Ms. Shelby continued by stating that Tesla encourages the reporting of incidents, as well as near incidents, which would not be recorded by traditional industry practice. She added that Tesla invested over \$4 million in ergonomic improvements in 2018, and the company has EHS specialists imbedded in every department, implementing risk-reduction plans, and safety committees which include production associates. Ms. Shelby reported that in 2019, Tesla has begun a pilot for the use of exoskeleton and other wearable technologies to reduce ergonomic stressors when working overhead or lifting heavy materials. She added that for the first time Tesla's health center is staffed with full-time, onsite physicians, with direct access to orthopedic surgeons, and a Tesla satisfaction survey showed 90% of associates feel they have been treated with respect and provided with appropriate treatment.

Ms. Shelby continued her report by stating that though Tesla has received scrutiny over its injury reporting, based on two investigations by Cal/OSHA, the company has been 99% accurate on injury recordkeeping. She stated that environmental health and safety is a core value at Tesla. Ms. Shelby reported in 2018, Tesla was slightly better than the industry average for total recordable injuries, and 51% better than the NUMMI plant's rates between

2003 and 2009. She stated that in 2017, Tesla's data showed a 29% improvement over 2016, and through the ramp-up in Model 3 production in 2018, injury rates remained flat. She continued by stating that an often-cited indicator of injury rates is Days Away and Restricted Time ("DART"). Tesla's DART rates were 12% higher than its peers in 2018, but 52% better than NUMMI, and that rate was 6% improved over 2017. The 2017 DART rates for Tesla showed a 29% improvement over 2016. Ms. Shelby stated that for just Days Away, Tesla's rate was 14% higher than its peers in 2018. The company's 2017 data shows a 27% improvement over 2016, but was 14% higher in 2018. Ms. Shelby stated that around two thirds of lost work days are due to sprains and strains, and the company errs on the side of caution to allow employees to get appropriate rest. She stated that since the company's implementation of its industrial trainer program and putting EHS staff in all major departments, it has seen an 11% reduction in sprain and strain injuries throughout the factory.

Ms. Shelby reported that though Tesla's higher vehicle production led to more worker's compensation claims in 2018, by identifying injuries at their onset and guiding workers toward the medical specialists earlier, employees were able to advance their treatment plans, thus reducing injury severity, which has resulted in a 36% reduction in the average number of days a claim is open. She continued that Tesla has been in discussions with Cal/OSHA to meet the requirements of its Voluntary Protection Program ("VPP"). Ms. Shelby stated that the program promotes effective worksite-based safety and health by establishing cooperative relationships between management, employees, and Cal/OSHA.

Mr. Fairfax gave an overview of his experience in the health and safety professions, stating that after working a long career with the Occupational Safety and Health Administration ("OSHA") under the United States Department of Labor, including 13 years as the head of OSHA's enforcement program and three years as its Deputy Assistant Secretary, he retired and began work as a consultant. As such, he worked with the British Standards Institute, as well as the Organizational Resource Counsellors Health Safety and Environment ("ORC") Strategies, LLC, a health and safety consulting firm that has been in operating since 1972.

Mr. Fairfax stated that Tesla requested that ORC conduct assessments and training to EHS staff in risk assessment and mitigation, and to instruct them in how Cal/OSHA and similar organizations operate and handle their responsibilities. Mr. Fairfax reported that he had been given unfettered access to speak with Tesla's staff and to inspect the grounds and equipment both with and without Tesla management being present. He stated that the transparency he experienced when working with Tesla was nearly unprecedented in his history working in the health and safety field.

Mr. Fairfax stated that since Laurie Shelby was appointed as the Vice President of EHS at Tesla in 2017, the company has both expanded its EHS team to include over 50 staff, including professional athletic trainers on the production lines, and implemented better, more proactive safety programs, like the Find It, Fix It program and the Early Intervention program, which shows how committed the company is to the health and safety of its employees. Mr. Fairfax reported that during his time consulting for Tesla, he observed that Tesla's employees showed no fear of retribution, and were actively encouraged to participate in

helping to monitor and improve safety practices at the company and to identify potential hazards.

Ms. Rider asked whether Alameda's employment being the second-fastest growing was for California or the United States. Ms. Bradley replied that the figure was for the United States.

Ms. Finn asked how many of Tesla's current employees were previously employed at the NUMMI plant. Ms. Bradley replied that she will find out and let the Board know.

Ms. Moly asked if Tesla's onsite clinic was available for all of Tesla's staff that works at the Fremont site. Ms. Shelby responded by stating the Tesla clinic is for occupational ailments, and if a worker ends up with an illness which is not work-related that they are encouraged to use their own health provider. She added that Tesla is working to institute a non-occupational health clinic in the future.

Ms. Moly asked about Tesla's injury rates compared to other automakers. Mr. Fairfax stated that Tesla's injury and illness rates are comparable to their competitors, and that nothing stood out as being egregiously wrong, but they can certainly improve.

Ms. Carrillo asked what some of the differences in policy are between Cal/OSHA and OSHA. Mr. Fairfax stated that there are many differences in how the organizations operate, but that generally they have a similar job to do. He gave an example of the operational differences between the two agencies by stating OSHA uses a more formal complaint process, usually requiring a signed employee complaint, whereas Cal/OSHA will go out to a worksite to investigate even if a non-formal complaint is made.

Ms. Finn asked if other states have their own programs similar to Cal/OSHA. Mr. Fairfax stated that there are around 23 states that have their own programs, including Michigan, Oregon, Washington, and Alaska, and that the requirement for a state to use their own program is that it must be at least as effective as federal OSHA.

Mr. Agee stated the change in Tesla's culture in the realm of health and safety is encouraging, and the Treasurer's Office looks forward to hearing about more progress on that front. He added that though the reports by Tesla are somewhat outside the normal scope of CAEATFA's STE Program, it is helpful to gain insight into how the company is advancing.

Mr. Agee asked if there were any questions or comments from the public.

Mara Ortenburger, a public health advocate with Worksafe, a California occupational health and safety advocacy nonprofit organization based in Oakland, stated that it is important that Tesla continues to give reports on the health and safety of the workers at its facilities, and commended the Board on their efforts to make health and safety a key part of their discussions on the company. She stated that though Tesla has presented a positive outlook on their safety record, Worksafe's analysis of Tesla's safety logs show that the company needs to make improvements. She gave an example, stating that in 2018, Tesla reported 947 instances

at the Fremont plant when an injury occurred that would require more than just first aid treatment.

Ms. Ortenburger continued by stating the Fremont facility garnered more investigations into workplace safety and incurred more violations than other US auto manufacturers despite producing fewer vehicles. She added that Tesla incurred six Cal/OSHA violations involving its open air production, tent-like structure the company built outside the Fremont plant in June of 2018. These violations included failing to obtain a permit, the failure to inspect the structure for potential safety hazards, failure to properly train workers evacuation procedures, and the failure to properly inform workers of heat-related dangers. She stated that the fact that such obvious oversights show that Tesla was willing to put production ahead of worker safety.

Ms. Ortenburger gave another example, stating that in August of 2018, a worker on Tesla's production lines ended up with a fingertip being amputated. She stated that this resulted in Tesla being cited for violations totaling \$82,000, including the failure to immediately report the serious injury to Cal/OSHA, and failing to update and maintain its injury and illness prevention plan by identifying the entanglement hazard that led to the amputation. She added that the fines were higher than they would have been otherwise because these were both repeat violations, which she stated is very concerning, given the company's stated goal of improving the safety of its facility. Ms. Ortenburger then concluded her statements.

Mr. Agee asked for Ms. Ortenburger's opinion of what additional Tesla could do given it already is working toward a cultural shift in EHS. Ms. Ortenburger replied that she agrees that Tesla is moving in the right direction by focusing on its new view of health and safety, but it is important to remember that there will always be a paradigm within the workplace that the power differential between the workers and different levels of management and the pressure that comes from trying to meet production goals can overpower the focus on injury prevention, and it is easy for safety to come second.

Mr. Agee stated that it is important to foster an environment to work collaboratively on issues related to worker safety. He stated that Tesla is important to California for both the jobs it provides and its effects on the economy, and it is in everyone's interests to make Tesla as safe a company as possible. He added that other issues for workers are sometimes overlooked when looking at injury rates and similar data, such as worker housing and commute times, and collaborating to solve these issues would be beneficial as well.

Dr. Mike Wilson, Ph.D, MPH, National Director for Occupational and Environmental Health at the BlueGreen Alliance, a national coalition of 14 labor unions and environmental organizations, stated that the changes at Tesla's Fremont facility show it is on the right path to reducing the rates of worker injuries, and commended Laurie Shelby and her staff for working to reduce safety risks, but that the health of Tesla's employees has been overlooked and is at risk.

Dr. Wilson stated that every year, the Centers for Disease Control and Prevention reports that about ten times more workers, 53,000, die prematurely in the United States from occupational diseases, compared to the around 5,000 who die from job-related injuries. He stated that most

of these deaths from disease are due to cancers and lung diseases, and around two thirds of these are unreported, that is, not recorded as due to occupational exposure. Dr. Wilson stated that occupational diseases are primarily caused by exposure to chemicals in products such as solvents, surface coatings, cleaners, stripping agents, and adhesives, among others. They can also result from exposures to silica, asbestos, and heavy metals such as lead.

Dr. Wilson reported that last year he worked one-on-one with Tesla production associates who used a range of highly toxic chemicals at the Fremont plant. He stated he had been asked by the United Automobile Workers (“UAW”) to interview workers in order to help interpret and characterize their complaints about chemical exposures. He stated that the workers he interviewed described working in uncontrolled conditions with chemicals that, unknown to them, were classified by OSHA as “Presumed Human Reproductive Toxicants,” including cyclohexane, ethyl benzene, and xylene, which in addition to affecting reproductive function, can contribute to the development of various cancers. Dr. Wilson gave an example of an interviewee, a worker at Tesla, whom he stated wrote “flammable” with a permanent marker on a squeeze-bottle container, and used up its entire contents each shift without the benefit of any engineering controls to remove chemical vapors from the work environment.

Dr. Wilson continued by reporting that Tesla staff he interviewed complained of nosebleeds and migraine headaches, which are dangerous symptoms of exposure to harmful chemicals. He stated that most of these workers were not aware of the potential of life-long health effects of exposure to chemicals used at the Fremont plant. He added that without being informed of various chemical hazards, Tesla’s workers assumed products were safe to use. Dr. Wilson continued by stating that Cal/OSHA has cited Tesla as not properly communicating the hazardous nature of chemicals at its plant to its workers, and that even those reports do not reveal the scale of what he understands occurs daily in terms of worker health risks at the facility. He added it was reported to him many of the chemicals used at the Fremont plant are labeled with generic terms, such as “cleaning product,” instead of actual chemical names and abstract service numbers, as required.

Dr. Wilson noted that companies in California are required under the California Environmental Reporting System to submit information to county agencies that identify the identity and volumes of chemicals used on site, and Tesla’s 2018 report shows that on a given day, an average of around three million gallons of chemical products are present on site, much of which is presumably being handled by workers, and most of which Tesla reports is hazardous, such as being corrosive to skin, damaging to the respiratory system, or carcinogenic. He added that Tesla’s reports to the California Department of Toxic Substances Control showed chemical usage that resulted in the production of 11 million pounds of hazardous waste in 2017, the equivalent of 105 pounds of hazardous waste per car produced that year. In contrast, the NUMMI plant consistently generated less than 20 pounds of hazardous waste per vehicle between 1993 and 2010. Dr. Wilson continued by stating that this waste is generally trucked to hazardous waste sites around California, but that containment at many of these sites has been breached and are leaking into groundwater.

Dr. Wilson continued his report by stating that though Tesla is making progress toward a lower injury rate, Tesla’s workers often do not know the dangers of the chemicals they work

with. He stated that he believes most of the workers do not have knowledge of toxicology or low-dose effects, routes of exposure, and that Tesla's lack of compliance in this field is likely to result in life-long health issues for its production associates. He stated that in order to mitigate some of the risks, Tesla needs to implement engineering controls to protect workers from exposures and invest in alternative, safer chemicals and products, and allow Tesla workers to unionize, as unionized workers are more likely to speak up when something is wrong, and to receive proper education on hazards through the union.

Ms. Finn asked if Dr. Wilson had taken a tour of the Tesla facility. Dr. Wilson replied that he had not. Rather, he gained insight into what was happening at the plant through interviews with Tesla's employees, many of whom had come to talk to the UAW for issues other than their nosebleeds and migraine headaches, but that when interviewed, described working conditions that raised concern, such as poor ventilation and very strong odors. He stated the UAW reached out in order to better understand and characterize the hazards to Tesla staff. Dr. Wilson then concluded his statements.

Deana Zornow, lead athletic trainer for Tesla with WorkRight NW, described how working alongside Tesla staff has helped to prevent injury due to repetitive strain through coaching on body mechanics, posture, encouraging micro-breaks, and otherwise educate production staff on ways to mitigate their risk of injury. Ms. Zornow then concluded her statements.

Jason Allen, Tesla lead production associate, stated that though the Tesla workplace is not perfect, the conditions have been consistently improving. He stated that he worked in the outdoor tent structure last year, and that air quality was monitored, the athletic trainers checked in on employees regularly, and that overall, Tesla is attempting to make the workplace safer for its associates. Mr. Allen added that Tesla did give flyers and instructions to employees regarding the dangers related to working in the heat, such as heat exhaustion and dehydration, and how they should respond. Mr. Agee asked how far Mr. Wilson lives from the Fremont facility. Mr. Wilson stated he lives in Livermore, so it takes around 35 minutes to commute to work, but around one hour and 15 minutes to return home. Mr. Wilson then concluded his statements.

Clarence Johnson, EHS technician with Tesla, stated that he started with Tesla driving a forklift, and at the time, believed the company did not care about worker safety. He stated he was encouraged by coworkers to work for the EHS teams so he could contribute to creating a safer workplace. Mr. Johnson stated that when he brought up specific safety concerns with Ms. Shelby, she responded by making sure the issues were dealt with promptly, and became personally involved with resolving the problem. Mr. Johnson then concluded his statements.

Vanessa Jones, production training supervisor with Tesla, stated she worked at NUMMI for 16 years, and has worked for Tesla for seven years. She stated that after the NUMMI plant closed, she went back to school to work toward becoming an ultrasound technician, and was in an internship program when the school closed. She stated she has thrived at the company ever since. Ms. Jones then concluded her statements.

Christopher Lucchesi, production supervisor with Tesla, spoke in favor of Tesla, and shared his story of upward mobility with the company.

Jarrell Cook, Policy Director with the California Manufacturers and Technology Association, spoke in favor of Tesla, and stated that the company is important to California's economy and the education of the future of the manufacturing workforce through its partnerships, as well as working toward a greener future. Mr. Cook then concluded his statements.

Mr. Agee asked if there were any further questions or comments from the Board or the public. There were none.

5. PUBLIC COMMENT

Mr. Agee 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 12:38 p.m.

Respectfully submitted,

Deana J. Carrillo
Executive Director