

Memorandum

To: Chair David Hochschild
Vice-Chair Janea A. Scott
Commissioner Karen Douglas
Commissioner Patty Monahan
Commissioner Andrew McAllister

Date: August 14, 2019

From: Joshua Croft

Telephone: (916) 445-5309

Subject: **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE ANALYSIS FOR PROPOSED SUBAWARDS UNDER THE CALIFORNIA SUSTAINABLE ENERGY ENTREPRENEUR DEVELOPMENT (CALSEED) INITIATIVE, AGREEMENT NO. 300-15-007**

The California Clean Energy Fund (CalCEF) is the administrator of the Energy Commission's CalSEED Initiative under Agreement No. 300-15-007. The CalSEED Initiative awards small grants and provides access to business and technical services to entrepreneurs seeking to develop a technical feasibility case for their technologies. The Center for Sustainable Energy is a subcontractor and provides policy support and partner recommendations to awardees.

CalCEF held an open application period, Solicitation 19-01, in March 2019 and received 199 applications that passed initial screening. As a result of the competitive open application, twenty five projects are being proposed for funding at the August 14, 2019 Energy Commission Business Meeting.

I am an Energy Commission Specialist 1 in the Energy Research and Development Division of the California Energy Commission. I have reviewed the CEQA compliance forms submitted by each applicant, which are attached to this memo. Below is my CEQA compliance analysis for each proposed project:

1. PROJECT TITLE: DECENTRALIZED, RURAL CO-PRODUCTION OF FILTRATION PRECURSOR CHEMICAL AND INDUSTRIAL POWER

Applicant: Takachar

Principal Investigator: Kevin Kung

Project Summary: The goal of this project is to design and demonstrate a prototype of a portable, low cost technology that processes crop and forest residues into precursors that can be used for water and air filtration media. This innovation will reduce energy consumption in rural areas and will also generate power from process heat that can be used for local agricultural and industrial applications. The project will be carried out within an existing laboratory facility at either UC Berkeley or USDA Agricultural Research Service. A bench-scale equipment measuring 4' by 4' in footprint will be set up within the laboratory.

The team will purchase biomass, such as wood chips and walnut shells, from existing commercial vendors in California. The torrefaction experiment will be conducted under good ventilation. The outputs will be primarily biochar, as well as flue gas consisting of CO₂ and steam. Over the course of 12 months, the research is expected to generate around 200 kg of biochar, as well as around 1,000 kg of CO₂ and steam. Noise or odor issues are not expected.

CEQA Exemption Status: 14 CCR 15301 “Existing Facilities”; 14 CCR 15061(b)(3) “Common Sense Exemption”

Reason Why Project is Exempt: This project is exempt under CEQA because the research and data collection activities will be conducted within an existing laboratory facility without making any alterations to the facility or its surroundings and will have no expansion of the existing use of the laboratory facility. This project will not alter any existing environmental resource in a significant way.

2. PROJECT TITLE: BI-FACIAL, LOW-PROFILE, SOLAR ROOFTOP TRACKING

Applicant: P-Kap Systems LLC

Principal Investigator: Pawan Kapur

Project Summary: The goal of this project is to design and demonstrate a low profile, lightweight, laminate photovoltaic tracking system that has the potential to increase energy output per unit-area by 25% and specific energy yield by 50% without increasing cost for a rooftop system. By using components that are easy to transport, assemble and install, the added cost of the tracker system is offset. The project will consist of the assembly of a photovoltaic system. The system can be easily assembled and disassembled. It will be performed on private, unoccupied land without causing any environmental impact, and then removed when completed.

CEQA Exemption Status: 14 CCR 15304 “Minor Alterations to Land”, 14 CCR 15061(b)(3) “Common Sense Exemption”

Reason Why Project is Exempt: This project is exempt under CEQA because the photovoltaic system will be assembled on undisturbed land, tested, and then disassembled and removed without impacting the environment. The system will rest on top of the land and will not require any construction, trenching, paving, etc. Because of the temporary nature and small scale of the project it can be seen with certainty that there is no possibility that the project will have a significant effect on the environment.

3. PROJECT TITLE: ADVANCED SOLID STATE LIGHTING FOR BETTER PERFORMANCE

Applicant: RAF Electronics Corp.

Principal Investigator: Richard Flasck

Project Summary: The goal of this project is to develop an ecosystem of efficient and compact solid-state lighting fixtures that has the potential to increase safety and reduce electrical costs in theatrical and agriculture buildings. Using a combination of non-imaging optics and imaging optics, these fixtures will have superior optical and chromatic performance, higher efficiency and efficacy, longer life, and lower initial and operating cost

compared to competitors. The fabrication, assembly, and testing of the engineering prototype requires only routine machining of metal and plastic parts in existing facilities already established for such activity.

CEQA Exemption Status: 14 CCR 15301 “Existing Facilities”; 14 CCR 15061(b)(3) “Common Sense Exemption”

Reason Why Project is Exempt: This project is exempt under CEQA because the project consists of the fabrication, assembly and testing of lighting fixtures in existing facilities that are already used for such activities. No modifications to the facilities will be necessary to accommodate this project. It can be seen with certainty that there is no possibility that the project will have a significant effect on the environment because it will require only commonplace benign indoor activities in an existing facility already established for such activities.

4. PROJECT TITLE: RECHARGEABLE CFX BATTERY

Applicant: DAE Technologies Inc.

Principal Investigator: Stephen Lipka

Project Summary: The goal of this project is to research and develop a low-cost rechargeable lithium carbon fluoride (LiCFx) battery that surpasses the current state-of-the-art energy density of lithium-ion and lithium sulfur batteries. In addition, it is expected to be lower cost than today’s lithium-ion technology as it will not use metal oxides. LiCFx batteries have higher energy density but have had issues with rechargeability – DAE’s technology addresses this barrier. No foreseeable indirect physical change or adverse environmental impact resulting from the research and development operations of the proposed project is anticipated. Additionally, there will be no hazardous waste chemicals or material by-products generated during the project.

CEQA Exemption Status: 14 CCR 15301 “Existing Facilities”, 14 CCR 15306 “Information Collection”

Reason Why Project is Exempt:

This project will not cause any significant environment impact resulting from the feedstocks and synthetic materials processing methods used over the course of the project. Any byproducts which are generated from the project will be handled and disposed of in accordance with California EPA laws and regulations.

Additionally, the project will have no significant environmental impact because the materials and methods used in this work are benign and contain no hazardous or toxic elements. Waste products generated from the project will be minimal and handled in compliance with the same environmental conditions and practices followed by other research laboratories operating in California.

The project will not require any new construction or modification of an existing facility, trenching, pipeline replacement, new or modified equipment or on-road demonstration.

5. PROJECT TITLE: LITHIUM ION BATTERY FIRE SUPPRESSION SYSTEM

Applicant: RePurpose Energy, Inc.

Principal Investigator: Jae Wan Park

Project Summary: The goal of this project is to design and demonstrate a lithium-ion battery fire suppression system that combats fires and thermal runaway without internal short-circuiting of the batteries cells. The proposed innovation injects non-conductive liquid into the battery enclosure in a way that does not damage control electronics or additional battery cells. No permanent structures will be built or modified during or as a result of the project.

CEQA Exemption Status: 14 CCR 15301 “Existing Facilities”, 14 CCR 15306 “Information Collection”

Reason Why Project is Exempt: This project is exempt from CEQA because no new construction is being proposed, and no modifications to existing structures, land use, or other facilities are proposed.

Production of the battery pack will produce noise, but no more than is currently being produced at the facility. The lithium-ion batteries used as part of this project are considered hazardous materials. The project team will follow the procedures outlined in UL-1974 for handling, processing, and storage of lithium-ion batteries and cells which will result in no significant environmental impacts. Additionally, certain materials may have the potential to release toxic gases. The project activities involving the gases will be conducted in an isolated/sealed container.

The facility being utilized is already used to produce battery packs, the only additional material introduced during this project is non-toxic dielectric fluid and therefore project activities are considered a negligible expansion of an existing use of the facility.

6. PROJECT TITLE: SIERRA WALL SYSTEM

Applicant: SierraCrete LLC

Principal Investigator: David McGrath

Project Summary: The goal of this project is to improve the design of the highly insulating Green Energy Brick that has the potential to achieve insulating values that allow for the construction of zero net energy homes without the additional cost burden required for traditional wall framing systems. The breakthrough technology of ceramic binders adhering to cellulose base materials provides for high tensile strength in the vertical plane, and air gap spacing in the horizontal plane.

CEQA Exemption Status: 14 CCR 15304 “Minor Alterations to Land”, 14 CCR 15303 “New Construction or Conversion of Small Structures”

Reason Why Project is Exempt:

This project is exempt under CEQA because the construction of a one-room demonstration site will cause negligible impact on the environment. All project activities including the building of the prototype and building of the demonstration site will take place in contained environments or business districts. A demonstration site will be used to construct a temporary, small scale demonstration building using the project team’s green brick product. No hazardous chemicals will be used in the project.

7. PROJECT TITLE: HEAT PUMP WATER HEATING OPTIMIZATION USING HOT WATER STORAGE MANAGEMENT

Applicant: ZYD Energy, Inc.

Principal Investigator: Yanda Zhang

Project Summary: The goal of this project is to develop an optimized electric water heating solution by integrating heat pump water heaters with a hot water storage management technology to achieve high efficiency operation, lower operational cost, and provide energy storage services. An IoT-based controller will be developed to optimize system operation according to hot water demand projection, electricity prices, demand response signals, and renewable energy availability.

CEQA Exemption Status: 14 CCR 15301 “Existing Facilities”, 14 CCR 15306 “Information Collection”

Reason Why Project is Exempt: This project involves technology development and testing activities related to hardware and software components with the goal of developing a hot water storage management technology that optimizes system operation. The installation of the optimized electric water heating systems for technology testing is similar to typical water heater installation in residential buildings.

The design and testing of this system will take place in an existing facility and will result in a negligible expansion of an existing use of the facility. This project does not include any construction activities, will not generate excessive noise or odors, and will not involve the handling or disposal of any hazardous materials.

Therefore, project activities will not cause a significant effect on the environment.

8. PROJECT TITLE: IVY ENERGY SOFTWARE – ENABLING MULTI UNIT SHARED SOLAR

Applicant: Ivy Energy

Principal Investigator: Janis Dover

Project Summary: The goal of this project is to design and demonstrate a software platform that enables multi-unit building owners to install a shared solar system that equitably rewards residents for using energy when it is cheap or provided by the solar system. The Ivy platform will have a 15-minute interval load algorithm that can identify each housing unit’s “true” solar energy and EV charging usage considering real time-of-use. This is a software development project and will not directly affect the environment.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15061(b)(3) “Common Sense Exemption”

Reason Why Project is Exempt:

This project is exempt under CEQA because the project only involves software development activities that will not involve any physical alterations to the environment. There are no construction or demonstration aspects to this project and no modifications are necessary to the existing facility where the software development will take place.

9. PROJECT TITLE: ICARUS HYBRID ENERGY STORAGE AND POWER BOOST FOR PHOTOVOLTAIC SYSTEMS

Applicant: Icarus RT, Inc.

Principal Investigator: Mark Anderson

Project Summary: The goal of this project is to design and demonstrate a low-cost hybrid solar photovoltaic/thermal system co-located with commercial and larger Solar PV arrays that has the potential to increase power availability 25%, and reduce costs by more than 50% over current systems. The system will recover heat from PV panels, store energy, and generate power from the stored energy after sunset or when needed by extracting heat and thereby cooling PV panels while charging batteries. The Icarus team will conduct design optimization, fabrication and testing of three primary components of the Icarus System: a) the solar panel heat exchanger; b) the storage tank and system; and c) the flow control system. The design work will primarily be conducted on campus at the College of Engineering at San Diego State University and the testing will primarily be conducted at the Icarus Solar Lab at the University of California, Jacobs School of Engineering, Englekirk Facility.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because it will not require use of special or hazardous materials, there will be no permanent installation, and no components of the project required during design and analysis or testing will cause a significant effect on the environment.

This work and the installation of the components to be tested will be temporary and will be conducted at a remote UCSD engineering test facility designed for this type of test activity. There is no construction aspect to this project and there are no permanent modifications to the test facility necessary to accommodate the project.

10. PROJECT TITLE: HIGH EFFICIENCY DENSITY VARIABLE HP INTEGRATED MOTOR AND DRIVE

Applicant: GreenTech Motors Corp.

Principal Investigator: Burnet Brown

Project Summary: The goal of this project is to design and demonstrate a High Efficiency Density (HED) motor that has the potential to dramatically reduce end-use industrial electricity consumption through reduced efficiency losses, size, and weight of the electric motor. The HED motors will be compact enough to fit existing smaller frame sizes while achieving IE7 or higher motor efficiency by employing a slotless, ironless, coreless, wireless, and brushless design to produce extremely high energy efficiency packed in an extremely compact electric motor package.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because the project involves no construction activities, changes to land or building(s), generation of noise or odors, handling or disposal of hazardous materials or any other activity that may have a significant effect on the environment. The project's physical activities are limited to general office-based analytical and engineering developments and will result in a negligible or no expansion of an existing use of the facility.

11. PROJECT TITLE: HIGH THERMAL CONDUCTIVITY, BROADBAND EMITTING NITRIDE CERAMIC DOWNCONVERTERS FOR LIGHTING APPLICATIONS

Applicant: Luciant Inc.

Principal Investigator: Alejandro Conde Perez

Project Summary: The goal of this project is to further the development of a ceramic downconverter for LED/Laser driven lighting that eliminates the need for color mixing and has the potential to dramatically improve thermal management which will provide significant improvements in temperature variation and energy efficiency. This cerium doped aluminum nitride based downconverter is ideal for high-powered lighting applications over traditional phosphor-converted white light emitting diodes, which are fundamentally limited by intense temperature variations. All manufacturing and testing will be performed in a certified facility, widely used by research laboratories and private companies, with state-of-the-art manufacturing capabilities that meet local, state and federal guidelines for environmental impact.

CEQA Exemption Status: 14 CCR 15306 "Information Collection", 14 CCR 15301 "Existing Facilities"

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to basic manufacturing and testing at UCSD research facilities designed for such activities. There are no construction activities and no modifications to the research facilities will be necessary to accommodate the manufacturing and testing activities of this project. There are no hazardous materials involved in this project and all project activities will be performed under existing permits.

12. PROJECT TITLE: LITHIUM-CARBON BASED RECHARGEABLE BATTERIES

Applicant: EndLis Energy

Principal Investigator: Mark Griffiths

Project Summary: The goal of this project is to design and demonstrate low-cost, environmentally-sustainable, lithium carbon based rechargeable batteries for electric vehicles and grid storage applications that has the potential to double EV range capacity and decrease grid energy storage costs. The innovation is in the manufacturing of electrode nanostructures, which will enable the efficient use of lithium carbon batteries. The physical activities of the project entail the use of biotechnology coating processes that are performed in a lab with non-hazardous materials and aqueous based slurries that pose no threat as they will be properly disposed of after experiments are performed.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the design and demonstration of lithium carbon based rechargeable batteries in an existing facility designed for such activities. There are no construction activities and no modifications to the existing facility necessary to accommodate project activities. Project activities involve non-hazardous materials that will be properly disposed of after experiments are performed.

13. PROJECT TITLE: THIRD GENERATION LED WITH DIFFUSION LENS

Applicant: Optec LED, Inc.

Principal Investigator: Jennifer Ferreira

Project Summary: The goal of this project is to design and demonstrate LED street lights and parking lot lights that have the potential to reduce energy consumption by 70%-90% while also reducing maintenance costs. A unique slim-line housing with specialized heat sinks will eliminate the need for integrated cooling fans and will provide 100,000 hours of use before chips will need to be changed. Optec Led, Inc. will create a finalized working prototype of the light fixture and test it for accurate photometrics and durability.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because there is no direct or foreseeable physical change to the environment as a result of project activities. Project activities include the design, assembly and testing of a single light fixture. This project does not include any construction activities, changes to land or buildings, and will not accumulate any hazardous waste. Also, this project will not produce any noise pollution or any harmful work hazards that could impact employees or the environment.

This project only includes the assembly of a working light and the testing of it through a light meter, which is done indoors with a simple hand-held device. No hazardous material is used during this assembly.

14. PROJECT TITLE THERMAL ENERGY STORAGE USING ULTRA-HIGH OSMOTIC PRESSURE POLYMERS

Applicant: T2M Global, LLC

Principal Investigator: Niraj Patel

Project Summary: The goal of this project is to develop Thermal Energy Storage in Osmotic Polymers (TESOP), which stores low-temperature (less than 200 degrees Celsius) thermal energy indirectly through thermo-chemical reactions. The solar thermal energy will be utilized to re-form concentrated osmotic polymers – with the reverse reaction re-creating the energy. This innovation can enhance the value proposition of renewable energy technologies such as solar, geothermal, and industrial waste heat to provide high performance microgrids. The physical set-up of TESOP will include a skid mounted module consisting of a membrane

chamber, sub-scale hydro turbine (~0.6 kW), pumps, and separation unit to regenerate functionalized polymers.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”, 14 CCR 15303 “New Construction or Conversion of Small Structures”

Reason Why Project is Exempt:

This project is exempt under CEQA because the work will be done primarily in a laboratory facility that has all the necessary authorizations in place for the TESOP polymer development, synthesis scale-up, and sub-scale demonstration activities of this project.

This project may involve temporary installation of a few small structures (i.e. trailer sized units) at an existing industrial facility, where the project operations will be consistent with former uses of the site and will not require any permanent modifications to the site. The project team will comply with all laws in the handling and disposal of non-hazardous polymeric materials and chemicals. None of the polymeric materials or chemicals used in the project are flammable or volatile.

15. PROJECT TITLE: LOW-COST, SAFER, COBALT-FREE, NANOSTRUCTURED LITHIUM ION BATTERY CATHODE

Applicant: NanoDian, Inc.

Principal Investigator: Michael Boehm

Project Summary: The goal of this project is to develop prototype Li-ion battery packs that replace the cobalt in the cathode portion of the battery with nanostructured lithium manganese oxide - a safer, cheaper, and non-toxic chemistry. The nano-fabrication technology has a low internal resistance that will provide very high power and fast charging capabilities without considerable heat generation and similar functional energy density. The team will establish a scaled laboratory for pilot production of the nanoLMO material leveraging existing lab space.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities include development and testing of a prototype battery pack in a laboratory set up for this type of work. The project will not require any modification to the building and will not involve any construction activities. No hazardous materials are involved in this project.

16. PROJECT TITLE: ENERGY STORAGE WITH NAFE FLOW BATTERIES

Applicant: Nrgtek Inc.

Principal Investigator: Subramanian Iyer

Project Summary: The goal of this project is to develop a small scale prototype sodium-iron flow battery with significantly better power density while maintaining excellent cycle life and low cost. If successful, this flow battery will provide cost-effective energy storage for both residential and grid-level renewable energy balancing. The CalSEED award will be used to

design, engineer, fabricate and test a prototype 100-500 Watt NaFe flow battery and perform techno-economic analysis.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15061(b)(3) “Common Sense Exemption”, 14 CCR 15301 “Existing Facilities”, 14 CCR 15304 “Minor Alterations to Land”, 14 CCR 15303 “New Construction or Conversion of Small Structures”

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the design, engineering, fabrication and testing of a prototype battery in an existing facility designed for such activities. The physical activities of the proposed development of the Na-Fe flow battery project consist of fabricating single cells and full battery cells for electrochemical testing, using commonly available materials, and do not involve any hazardous chemical wastes, gas emissions or any other environmentally dangerous issues.

There will be no construction activities, or changes to land or a building, no generation of excessive noise or odors, no handling or disposal of hazardous materials during the performance of the project since the system is a closed-loop system for the various solutions used with no emissions, contamination, irradiation or any other environmental impacts.

17. PROJECT TITLE: HIGH EFFICIENCY, SCALABLE POWER GENERATING WINDOWS FOR URBAN CENTERS

Applicant: Luminescent Energy

Principal Investigator: David Needell

Project Summary: The goal of this project is to create a small prototype power-generating window that uses microscale PV cells and quantum dot technology to produce electricity. The windows can be tuned to specific colors or remain up to 70% transparent and can be seamlessly integrated into current building designs. Luminescent Energy will first optimize and complete the design and performance modeling of such a power-window concept in realistic testing conditions and develop material down-selection for risk-mitigation; concurrently, Luminescent Energy will acquire device materials from original equipment manufacturers in order to reach the target prototype size (100 cm²). Once assembled through partnerships at the California Institute of Technology (Caltech), DWP Energy Solutions LLC, University of Illinois at Urbana Champaign, and the University of California Berkeley, Luminescent Energy will perform laboratory and outdoor prototype performance testing. The project team does not anticipate direct or indirect physical changes to the environment as a result of this project in any way. Any project technical task requiring facilities, materials, or equipment will be performed through Caltech with an appropriate facilities use agreement in place.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15061(b)(3) “Common Sense Exemption”, 14 CCR 15301 “Existing Facilities”, 14 CCR 15303 “New Construction or Conversion of Small Structures”

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the design, fabrication and testing of a prototype power-generating window. The prototype is small (100 cm²) and is not composed of any hazardous materials. There

will be no construction activities as part of this project and there will no modifications necessary to the project sites in order to accommodate the project other than the installation of the prototype window in order to test its performance. There will also be no radiological materials, no air emissions, and no release of pollutants into water.

18. PROJECT TITLE: RAPIDLY DEPLOYABLE GROUND-MOUNTED PHOTOVOLTAIC SOLAR ARRAY

Applicant: SolarFlexes LLC

Principal Investigator: David Lutian

Project Summary: The goal of this project is to engineer a low cost, easy-to-assemble ground mounted photovoltaic system that can be stowed flat to withstand winds up to 150 mph. This photovoltaic technology is composed of ground-mounted photovoltaic solar array that is pre-fabricated in a factory, shipped to a PV project site in standard shipping containers, and rapidly deployed using common hand tools. This innovation minimizes complexity in the design of the technology and enables large projects to be quickly deployed. The SolarFlexes team will complete the detailed design, analysis, and manufacturing process design in preparation for a full-scale prototype demonstration. The majority of this work will be completed at the SolarFlexes office in Brea, CA and at the LA Cleantech Incubator's Advanced Prototyping Center in Los Angeles. There are no foreseeable direct or indirect physical changes to the environment as a result of this project. Any physical work will be completed in the LACI Advanced Prototyping Center under the supervision of LACI staff.

CEQA Exemption Status: 14 CCR 15306 "Information Collection", 14 CCR 15301 "Existing Facilities"; 14 CCR 15061(b)(3) "Common Sense Exemption"

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the engineering, manufacturing process design, and business case analysis for an innovative ground-mounted solar photovoltaic system. There are no construction or demonstration aspects to this project, and all project activities will be performed in existing facilities designed for such activities.

19. PROJECT TITLE: IMPEDANCE-BASED BATTERY HEALTH MANAGEMENT FOR LARGE FORMAT LITHIUM-ION BATTERY PACKS

Applicant: ReJoule Incorporated

Principal Investigator: Zora Chung

Project Summary: The goal of this project is to develop a portable battery diagnostic system that can be embedded in an EV battery pack management system to continuously monitor battery health while detecting and preventing thermal runaway. This battery diagnostic technology is more accurate and faster than competitors and will be able to self-calibrate based on the individual battery pack characteristics which vary depending on the EV model and year. The physical setup will include ReJoule's custom circuit design connected to various electric vehicle battery modules. The cabling and circuit design will be subject to environmental testing to understand the effects of thermal and mechanical cycling on sensitive impedance measurements. The setup involves ReJoule's circuit board in a thermal environmental chamber, and on a vibration table, where an off-the-shelf impedance analyzer

would be used to characterize environmental effects. The team will also develop software that enables the hardware to compensate for environmental effects on cabling.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because the proposed project will be performed in a contained lab setting and any byproducts/emissions of battery cycling and testing will be extremely limited and confined to the lab and will not contribute to air/water/gas/noise pollution.

There are no construction or demonstration aspects to this project, and all project activities will be an extension of the lab research and development activities already being performed at the same facility by the same researchers meaning there is no expansion of the existing use of the facility.

20. PROJECT TITLE: RECHARGEABLE CARBON-OXYGEN BATTERY

Applicant: Noon Energy, Inc.

Principal Investigator: Christopher Graves

Project Summary: The goal of this project is to develop and test a closed system, passive-flow prototype battery that uses carbon and oxygen. This technology is expected to provide long duration storage for less than \$50/kWh at double the energy density of lithium-ion batteries. The Noon Energy team expects the battery will add less than 3 cents per kWh to fully balance solar and wind on the grid. The project team will develop and test the first prototype of the technology at Lawrence Berkeley National Laboratory and will design the full system, which will be built and tested as part of a future project. There are no direct or indirect physical changes to the environment expected as a result of the project.

CEQA Exemption Status: 14 CCR 15306 “Information Collection, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the development and testing of a prototype passive-flow type battery in existing lab facilities at Lawrence Berkeley National Laboratory. There will be no alterations to the facilities in order to accommodate the project. Some of the parts used to build the small-scale prototype are already at the lab and the remaining are mainly small stainless-steel parts. The project will therefore not have a significant effect on the environment.

21. PROJECT TITLE: THIN-FILM BATTERY ELECTRODE COATING TECHNOLOGY

Applicant: Coreshell Technologies, Inc.

Principal Investigator: Jonathan Tan

Project Summary: The goal of this project is to collect demonstration data on a battery electrode coating technology expected to lower the cost of lithium ion batteries by 35% while doubling the battery’s life. This electrode coating can be applied using roll-to-roll deposition

instead of the standard vacuum application processes and can be easily and economically integrated into existing battery manufacturing processes in a non-disruptive fashion which further decreases the cost of the battery. The project will be performed in two main locations: Coreshell's own laboratory in Richmond, CA and Lawrence Berkeley National Laboratory . Coreshell's lab and LBNL are both compliant with all federal, California, county and local environmental laws and regulations.

CEQA Exemption Status: 14 CCR 15306 "Information Collection", 14 CCR 15301 "Existing Facilities"

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the fabrication and subsequent data collection on a battery electrode coating technology at two laboratories. The laboratories will not need to be modified to accommodate the project and the project will result in negligible or no expansion of use of the laboratory sites. In both locations, small amounts of hazardous waste will be generated. This will be the only physical change to the environment that may result from this project. Both facilities are already equipped and certified for the handling and disposing of this waste and all waste will be handled and disposed of in accordance with all applicable laws. As a result, no significant changes in existing hazardous waste management procedures or certifications are necessary, and there will no significant impact on the environment as a result of this project.

22. PROJECT TITLE: SOLID STATE THERMAL BATTERY

Applicant: Antora Energy

Principal Investigator: Justin Briggs

Project Summary: The goal of this project is to prototype an inexpensive thermal energy storage system. By storing energy as heat in inexpensive raw materials and converting that heat back to electricity with high efficiency PV modules exposed to light radiating from the hot storage medium, the technology delivers energy storage for less than \$10/kWh – over an order of magnitude cheaper than Li-ion batteries. During the CalSEED project, the project team will design high-efficiency thermophotovoltaic cells, fabricate the cells (contracted to commercial foundries and photovoltaics manufacturers), and characterize the cells (using our existing thermophotovoltaics testbed to measure conversion efficiency as well as standard optical and electrical measurements). Work performed by Antora Energy will occur at Lawrence Berkeley National Laboratory and will conform to all safety and environmental regulations in place at the lab. The project team does not anticipate any direct or reasonably foreseeable indirect physical change as a result of this project.

CEQA Exemption Status: 14 CCR 15306 "Information Collection", 14 CCR 15301 "Existing Facilities"

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the design, fabrication and testing of a prototype thermal energy system at Lawrence Berkeley National Lab. There are no construction or on-road demonstration aspects to this project and project work will take place in existing facilities with existing equipment. Project activities are confined to laboratory-scale research and

development of small-area devices and does not involve any hazardous materials and will not generate noise or odors in excess of permitted levels.

23. PROJECT TITLE: POWERING NEXT-GENERATION IoT VIA ADVANCED PIEZOELECTRIC MEMS

Applicant: ActiveMEMS LLC

Principal Investigator: Erkan Aktakka

Project Summary: The goal of this project is to develop high-performance piezoelectric energy harvesters that use tiny machinery vibrations to generate electricity. This technology will enable new IoT sensors to be powered without wiring or batteries resulting in sensors that are an order of magnitude cheaper and have a higher power density and smaller form factor compared to commercial energy harvesters. During the CalSEED agreement, the project team will work on further development of an advanced piezoelectric microfabrication process technology, design and fabricate prototypes of vibration energy harvesters, and conduct electromechanical performance testing under various environmental operation conditions.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because the analytical device design will be performed via computer simulations, the assembly of the millimeter scale device will be performed in a standard cleanroom environment operated by a university or a national laboratory, and the electromechanical device testing will be performed with standard electrical equipment (oscilloscopes, multi-meters, voltage supplies, etc.) without any generation of hazardous waste, noise, or odors.

The project does not involve any construction activity, changes to land or buildings, generation of excessive noise or odors, handling or disposal of hazardous materials, or modified operation of a facility or equipment.

24. PROJECT TITLE: SAFE, HIGH PERFORMANCE RECHARGEABLE ZINC BATTERY

Applicant: EnZinc Inc.

Principal Investigator: Michael Burz

Project Summary: The goal of this project is to validate and prototype an innovative battery chemistry that combines a proprietary zinc sponge anode with nickel, silver, or carbon cathodes for different applications. This battery technology is anticipated to match the performance of Lithium-ion while achieving the much lower price point of lead-acid batteries and will be safer than both chemistries. The EnZinc team will conduct a market and customer need study, write test requirement documents, fabricate zinc sponge anodes, assemble these anodes with standard nickel cathodes into coin cells, test the cell’s performance, and evaluate the cell’s performance and cost against competing chemistries. The project will take place in a lab containing the sponge fabrication equipment and battery cycling test equipment. The fabrication of the zinc sponge anodes will be done using less than 500 grams of non-toxic material in a laboratory like environment and their testing is benign using a computer-controlled battery cycler.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15301 “Existing Facilities”

Reason Why Project is Exempt:

This project is exempt under CEQA because project activities are limited to the design, fabrication and testing of a battery chemistry prototype in an existing laboratory that already contains the fabrication technology and testing equipment. This project therefore will result in negligible or no expansion of existing use of the laboratory.

As a small-scale laboratory development project there are no construction activities, changes to land or buildings, no generation of excessive noise or odors or handling or disposal of hazardous materials.

25. PROJECT TITLE: PRE-FABRICATED AFFORDABLE RENEWABLE ENERGY HOUSING

Applicant: Arvind Simhadri (individual)

Principal Investigator: Arvind Simhadri

Project Summary: The goal of this project is to explore and validate the concept for prefabricated housing that includes solar, storage, and community energy management. The homes will provide an affordable, quickly deployed renewable energy solution for those that need transitional housing due to disasters such as wildfires and earthquakes. During the CalSEED agreement, the project team will conduct customer need validation, financial and market analysis, and a high level system design. The project team will deploy any infrastructure as part of this project.

CEQA Exemption Status: 14 CCR 15306 “Information Collection”, 14 CCR 15061(b)(3) “Common Sense Exemption”

Reason Why Project is Exempt:

This project is exempt under CEQA because the project is a “paper study” limited to customer need validation, financial and market analysis and high level system design. There is no construction or demonstration aspect to this project and the prefabricated housing being analyzed will not be fabricated as part of this project. All work will be done in an office environment using computers, phones, and other tools common to a normal office environment.

Takachar

Decentralized, rural co-production of filtration
precursor chemical and industrial power

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	X	N/A
Trenching	<input type="checkbox"/>	X	N/A
New or replaced pipelines	<input type="checkbox"/>	X	N/A
Modification or conversion of a facility	<input type="checkbox"/>	X	N/A
New or modified operation of a facility or equipment	<input type="checkbox"/>	X	N/A
On-road demonstration	<input type="checkbox"/>	X	N/A
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	X	<input type="checkbox"/>	We will undertake simulated technoeconomic as well as life cycle analysis of our technology with collaborators from UC Berkeley.
Laboratory research	X	<input type="checkbox"/>	A 4' by 4' laboratory prototype will be built within an existing laboratory.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	X	N/A
Design/Planning	X	<input type="checkbox"/>	The laboratory prototype that we plan to build will need to be designed and fabricated in close consultation with an engineering firm.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	X	N/A

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1301 S 46 th St.	Richmond, Contra Costa	Laboratory experimentation
800 Buchanan St.	Albany, Alameda	Laboratory experimentation

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Is the site located on agricultural land?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Are the activities part of a larger project?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Is there public controversy about the proposed activities or	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
larger project?				
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	X	<input type="checkbox"/>	N/A

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

X **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

X **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

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California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine): Not applicable

P-Kap Systems LLC

Bi-facial, low-profile, solar rooftop tracking
boosts yield by 25%

CEQA Compliance Form

July 2019

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California Environmental Quality Act (CEQA) Compliance Form

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- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

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1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

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California Environmental Quality Act (CEQA) Compliance Form

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Temporary or mobile structures (skid-mounted)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Assembly of PV system on an unoccupied area that can be removed when finished as desired.
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As is necessary for aforementioned system.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
NA	NA	Proposed activities have yet to begin and site has not yet been determined, but will be selected to not trigger a CEQA review.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

No discretionary permits or determinations will be required for this project.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

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California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

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RAF Electronics Corp.

Advanced solid state lighting for commercial,
agricultural and residential use

CEQA Compliance Form

July 2019

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

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⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

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California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The activities will include indoor routine metal and plastic machining and assembly, and electronic circuit assembly, conducted in existing facilities already established for such activities.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
Blue Dolphin Engineering 1755 Broadway St Suite #104	Fresno/ Fresno	routine metal and plastic machining and assembly, and electronic circuit assembly
UC Merced/ UC Solar 5200 N Lake Road	Merced/ Merced	routine metal and plastic machining and assembly

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
project?				
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

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California Environmental Quality Act (CEQA) Compliance Form

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

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NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

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DAE Technologies, Inc.

RECHARGEABLE CF_x BATTERY

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must **complete** this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required. Research on the topic of realizing the potential for a rechargeable CF _x battery and the materials required to do so have been vetted thoroughly by members of the team.
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lab-scale research will include synthesis and optimization of novel carbon materials and electrolyte. Prototype cell testing will also be performed at the lab-scale. Lab space required for this effort will be about 2000-2500 ft ² .
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design and planning will involve synthetic approaches to prepare advanced carbon materials with the required properties to function as electrode materials in the proposed battery. This will also include the selection of materials and synthesis of an innovative electrolyte which provides the necessary mechanisms to store energy in the novel carbon materials.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not required

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1949 Fifth Street Suite 110	Davis	Materials development and laboratory coin cell fabrication and testing

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

These activities will not require discretionary permits or determinations.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		N/A
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		N/A

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		N/A

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

RePurpose Energy

Lithium Ion Battery Fire Suppression System

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Production of a prototype approximately the size of a computer server rack.
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Testing the effectiveness of the proposed fire-suppression system
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design of the fire suppression system
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1949 5th St.	Davis/Yolo	Prototype development and demonstration

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

CALSEED SOLICITATION 19-01 COHORT 3

SierraCrete LLC

Sierra Wall System

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Demonstration of the Sierra Wall System will require construction demonstration site
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Perform testing using non-harmful chemicals to bind waste-wood together
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1755 Broadway St. #104 Fresno, CA 93721	Fresno/Fresno	Prototype building and research-Pi Shop
4225 Hospital Rd. Merced, CA 95343	Merced/Merced	Prototype building and research
5141 N. Maple Ave. Fresno, CA 93726.	Fresno/Fresno	Fresno State Civil Engineering testing material
5200 N. Lake Rd. Merced, CA 95343	Merced/Merced	UC Merced research labs on wall system

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Activity sites are located in business districts and contained environments. Work will not require harmful chemicals
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Locations are located in business districts

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Project is focused on the building materials mentioned in the Project Description
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will be creating alternative to Insulated Concrete Forms by eliminating concrete
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Project is unrelated and will not be built around historic sites
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chemicals used in the research are not hazardous
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Activities operate on machines that are compliant with noise and odor levels
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Research will be conducted by a limited amount of individuals at a given facility at a time (5-10 people)

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)	N/A			

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ZYD Energy, Inc.

HEAT PUMP WATER HEATING OPTIMIZATION USING HOT WATER STORAGE MANAGEMENT

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Test integration of a water heating control system, which includes a heat pump water heater, a hot water storage tank, a control panel, sensors, valves, and a water pump.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Design hardware and software components of a control system, develop a business plan.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
2701 Bellows Street	Davis, CA	Control system design and testing, business planning

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

No discretionary permits or determinations will be required for this project.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

CALSEED SOLICITATION 19-01 COHORT 3

Ivy Energy LLC

Ivy Energy Software - Enabling Multi-Unit Shared Solar

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Software architecture and digital modeling.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
12544 High Bluff Dr #400	San Diego	Software Design, Development, & Online Research.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

Icarus RT, Inc.

Icarus Hybrid Energy Storage and Power Boost for Photovoltaic Systems

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a "**project**."² An activity funded by a contract, grant, or loan is considered a "project" under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a "project." This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a "**Responsible Agency**" under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
New or modified operation of a facility or equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we will modify an existing prototype with new features designed and fabricated per this project.
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we will conduct engineering design and analysis and prepare a report discussing test results.
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we will conduct research at the Solar and Combustion Lab at San Diego State University, and at the Icarus Solar Lab in Scripps Ranch, CA.
Temporary or mobile structures (skid-mounted)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we have a temporary solar array installed on a standing frame.
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we will conduct design and planning activities.
Other (describe and attach sheets as necessary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, we will conduct testing activities and prepare a report to discuss results and provide recommendations.

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
10201 Pomerado Rd. San Diego, CA 92128	Scripps Ranch/ San Diego	Testing and Demonstration
1892 Palisades Dr. Carlsbad, CA 92008	Carlsbad/San Diego	Design and Analysis, Report Preparation
6500 Campanile Rd. San Diego, CA	San Diego/San Diego	Design and Analysis, Testing, Report Preparation

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No, Nominal (1 vehicle per day)

4. Will the proposed activities require discretionary permits or determinations, as listed below?

There are no discretionary permits or determinations required for this test project.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		No
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		No
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		No
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		No
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		No
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		No
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		No
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		No

ATTACHMENT 8 **California Environmental Quality Act (CEQA) Compliance Form**

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☐ No. *N/A*

☐ Yes. Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☐ No. *N/A*

☐ Yes. Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

N/A

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

GreenTech Motors

High Efficiency Density (HED) Integrated Motor and Single Switching Cycle Control Variable Frequency Drive (VFD)

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

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² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

When issuing contracts, grants, or loans, the Energy Commission is typically a **“Responsible Agency”** under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The project will advance engineering design and analyses, formulate and execute engineering trade studies, execute simulations, develop design documentation, coordinate Subject Matter Expert activities, and investigate alternative candidate means of production and candidate components for same.
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Our project may utilize preexisting hardware to support testing that generates data to inform further engineering, design and analyses
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Our project involves advancement of the maturity of the motor and controller design
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
GreenTech Motors	Montclair, San	Principal Investigator and project

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

4681 Arrow Highway, Suite E	Bernardino County	management. Engineering design and analysis.
One Cycle Control, Inc. 18001 Mitchell S.	Irvine/Orange County	Engineering design and analysis.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		none
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		none
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		none

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		none
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		none
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		none
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		none
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		none

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt		N/A		

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbranc e deadline)
<input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption				
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

Luciant, Inc.

High thermal conductivity, broadband emitting
nitride ceramic downconverters for lighting
applications

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Testing the performance of down-sampled downconverter materials (ie. power output, luminosity, beam angle, etc.)
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
9500 Gilman Drive	La Jolla/ San Diego	Manufacturing and testing our ceramic downconverters

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		None required
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		None required

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

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California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

EndLiS Energy

Low cost Lithium Carbon batteries for wide
adoption of clean EV transportation

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

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When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Testing of electrodes will include measuring the cycle performance and cost/kwh.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
617-2 Fern Glen	La Jolla/ San Diego county	Research and Development of lithium carbon batteries and spray deposition electrodes

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	No	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):	No	M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

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California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

x ☐ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

Optec Led, Inc.

Third Generation LED with Diffusion Lens

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

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When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

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² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Testing a light fixture for light output with a light meter. This is a small project containing only one light fixture.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Assembling one light fixture.

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
5858 Dryden Place	Carlsbad	Design and assembly

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
by the activities?				
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

No discretionary permits or determinations will be required for this project

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

T2M Global

Thermal Energy Storage using Ultra-High Osmotic Pressure Polymers (TESOP)

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Benefits Questionnaire, Technology and Knowledge Transfer Reports to be Shared with California Stakeholders
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Advanced Polymer Synthesis, Functionalization, Characterization, and Cycle Testing
Temporary or mobile structures (skid-mounted)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sub-Scale TESOP Will Be Skid Mounted for Ease of Transportation, Handling, and Installation
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1938 N. Batavia #H	Orange/Orange	Laboratory Development of Higher Performance Polymers, Scale-up of Polymer Synthesis, and sub-scale TESOP Validation

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
larger project?				
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

We will **NOT** require discretionary permits or determinations.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8 **California Environmental Quality Act (CEQA) Compliance Form**

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

Not Applicable.

CALSEED SOLICITATION 19-01 COHORT 3

NanoDian, Inc.

Low-Cost, Safer, Cobalt-Free, Nanostructured Lithium Ion Battery Cathode Material

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Install Air Conditioning unit and moving equipment to make proper work space.
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
2905 Lomita Blvd,	Torrance, CA 90505	Li-ion cathode fabrication, lab work

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?				
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

CALSEED SOLICITATION 19-01 COHORT 3

NRGTEK INC.

Energy Storage with Na-Fe Flow

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fabrication and testing of single cells and full battery cells with membranes and components.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1938 N. Batavia # H	Orange/Orange	Flow battery fabrication and testing.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>	N/A	

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

Luminescent Energy

High Efficiency, Scalable Power Generating Windows for Urban Centers

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must **complete** this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Technoeconomic analysis of product assembly and installation performed through phone, teleconferencing, and in-person interviews with industry experts.
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Integration and assembly of lab-scale (100 cm2) module and in-lab performance testing.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Timeline planning for demonstration building and prototype centers, as well as development of proposed to-scale pilot line.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1945 Leman St.	S. Pasadena	Paper study, design/planning
1200 E. California Blvd.	Pasadena	Laboratory Research

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
historic buildings be impacted by the activities?				
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	NA	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):	NA	M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

SolarFlexes LLC

Rapidly Deployable Ground-Mounted Photovoltaic Solar Array

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Business case analysis, sales and marketing research on ground-mounted PV systems
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Manufacturing process design for PV system
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Engineering design/analysis of PV system
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
350 W Central Ave., Unit 410	Brea/Orange	Engineering Design & Analysis, business case analysis, sales/marketing research
525 S Hewitt St	Los Angeles/Los Angeles	Engineering Design & Analysis, business case analysis, sales/marketing research, manufacturing process design

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
historic buildings be impacted by the activities?				
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):	N/A	M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

N/A

ReJoule

Streamlined battery diagnostics platform for
electric vehicle battery packs

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)		x	
Trenching		x	
New or replaced pipelines		x	
Modification or conversion of a facility		x	
New or modified operation of a facility or equipment		x	
On-road demonstration		x	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	x		Looking at data from other relevant research reports.
Laboratory research	x		Battery cycling, stress testing, software development
Temporary or mobile structures (skid-mounted)		x	
Design/Planning		x	
Other (describe and attach sheets as necessary)		x	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
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ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

7690 Lampson Ave	Garden Grove	Similar to activities listed in the above table - lab testing and development
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3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?		X		
Is the site located on agricultural land?		X		
Are the activities part of a larger project?		X		
Is there public controversy about the proposed activities or larger project?		X		
Will historic resources or historic buildings be impacted by the activities?		X		
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?		X		
Will the activities generate noise or odors in excess of permitted levels?		X		
Will the activities increase traffic at the site, and by what amount?		X		

4. Will the proposed activities require discretionary permits or determinations, as listed below?

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Permit Type	No.	Modified (M) or New (N)	Appr o v i n g Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M N		
Water Quality		M N		
Conditional Use or Variance		M N		
Building Expansion		M N		
Hazardous Waste		M N		
Rezoning		M N		
Authority to Construct		M N		
Other (List types):		M N		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

(No.)

Yes. Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

(No.)

Yes. Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date <u>(must be prior to Energy Commission encumbrance deadline)</u>
Not a project Email Letter Resolution Other:		N/A		N/A
Exempt Notice of Exemption Resolution Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

- 7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):**

Noon Energy Inc.

Rechargeable carbon-oxygen battery

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

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The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Develop business model
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Build and test prototype device at Berkeley Lab
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Model-based design of full battery system
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1 Cyclotron Road	Berkeley	Laboratory research and system design
3745 La Selva Dr	Palo Alto	Business model development

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?				
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below? No

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact				

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbranc e deadline</u>)
Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

Coreshell Technologies, Inc.

Coreshell's Thin-Film Battery Electrode Coating Technology

CEQA Compliance Form

August 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must **complete** this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chemistry, battery fabrication; waste generated below CESQG limits
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
855 Parr Blvd. Unit WW23	Richmond, Contra Costa County	Chemistry, battery fabrication
1 Cyclotron Rd	Berkeley, Alameda County	Chemistry, battery fabrication, characterization

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	We don't believe so, but we are renting out the space in Richmond, CA and don't have the complete history of the site.
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

Antora Energy, Inc.

Solid State Thermal Battery

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	We will undertake academic, industrial, and economic literature review for technical and techno-economic analyses in support of our work.
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	We will fabricate and characterize high-efficiency TPV cells (modified solar cells with size between 1 cm ² and 10 cm ²). Characterization will include standard PV electrical characterization (e.g. measuring electrical resistance and power output under illumination) and using our existing TPV measurement platform to measure TPV conversion efficiency. In short, tests essentially involve shining light on PV cells and measuring the electricity they produce.
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	We will design high-efficiency TPV cells using semiconductor theory and computational modeling.
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

2 Cyclotron Road Berkeley, CA 94720	Berkeley/ Alameda	PV cell design and optical and electrical measurement of TPV devices.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
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ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct	None	M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):	None	M <input type="checkbox"/> N <input type="checkbox"/>		

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (<u>Attach the document to this form</u>)	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
Notice of Determination				
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

ActiveMEMS LLC

Powering Next-Generation IoT via Advanced Piezoelectric MEMS

CEQA Compliance Form

August 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Analytical design, computational simulation, assembly, and electromechanical testing of mm/cm scale vibration energy harvesters and their power management circuits with off-the-shelf electrical components to enable next-generation self-powered wireless sensors
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
Lawrence Berkeley National Laboratory, One Cyclotron Road, MS: 50R4038	Berkeley / Alameda County	Analytical design, simulation, and testing of micro electromechanical components and low-power electrical circuits

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Not Applicable

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		Not applicable.

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		N/A
Initial Study		N/A		N/A
Negative Declaration		N/A		N/A
Mitigated Negative Declaration		N/A		N/A
Notice of Preparation		N/A		N/A
Environmental Impact Report		N/A		N/A
Master Environmental Impact Report		N/A		N/A
Notice of Determination		N/A		N/A

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date <u>(must be prior to Energy Commission encumbrance deadline)</u>
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)		N/A		N/A

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

Not applicable.

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

EnZinc Inc.

Safe, High Performance Rechargeable Zinc Battery

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must complete this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Laboratory research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fabrication of zinc sponge anodes, assembly of Ni-Zn button cells (1 cm dia.), cycle testing said cells
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Designing test, analyzing results, planning how resulting battery can support sustainability efforts
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
1301 South 46 th Street	Richmond, Contra Costa	Richmond Field Station, UCB where all lab protocols regarding waste disposal, chemical storage and safety will be followed. Activities to include fabrication of anodes, assembly of coin cells, and cycle testing of cells.

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
project?				
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency:				
Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date <u>(must be prior to Energy Commission encumbrance deadline)</u>
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

Individual (Arvind Simhadri)

Pre-fabricated Affordable Renewable Energy Housing

CEQA Compliance Form

July 2019

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

All applicants must **complete** this form, regardless of whether the proposed activity is considered a “project” as defined below. Answer all questions as completely as possible. The Energy Commission may request additional information in order to clarify the responses provided on this form.

The California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.) requires public agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them, if feasible.¹ Under CEQA, an activity that may cause either a direct or reasonably foreseeable indirect physical change in the environment is called a “**project**.”² An activity funded by a contract, grant, or loan is considered a “project” under CEQA if it will cause a direct or reasonably foreseeable indirect physical change in the environment. Agencies must comply with CEQA before they approve a “project.” This may require the preparation of one or more of the following CEQA documents:

- A Notice of Exemption (if the project is exempt from CEQA under an exemption identified in the CEQA statutes or regulations);³
- An Initial Study (if the project may have a significant effect on the environment);⁴
- A Negative Declaration (if the Initial Study shows that the project will not have a significant effect on the environment) or a Mitigated Negative Declaration (if any significant effects identified by the Initial Study can be avoided or mitigated to a level of insignificance);⁵ or
- An Environmental Impact Report (if there is substantial evidence that the project will have significant effects).⁶

The **Lead Agency** is the public agency that has the greatest responsibility for carrying out, supervising, or approving a project, and for preparing environmental review documents under CEQA (e.g., initial study, environmental impact report). Where the award recipient is a *public agency*, the Lead Agency is typically the recipient. Where the award recipient is a *private entity*, the Lead Agency is the public agency that has the greatest responsibility for supervising or approving the project as a whole.⁷

When issuing contracts, grants, or loans, the Energy Commission is typically a “**Responsible Agency**” under CEQA, which means that it must make CEQA findings based on review of the funded activities and any environmental documents created by the Lead Agency. If the Energy Commission is the only public agency with responsibility for approving the funded activities and the project is not exempt under CEQA, the Energy Commission must act as the Lead Agency and prepare its own environmental documents before approving the project. This form will help the Energy Commission determine what type of CEQA review is necessary before it can approve the award, and which agency will perform any required environmental review as Lead Agency. It may also help the applicant determine the CEQA process necessary for the proposed activities.

1. What are the physical aspects of the proposed activities? (Check all that apply and provide a brief description of work, including the size or dimensions of the project).

¹ For a brief description of CEQA, visit <http://www.resources.ca.gov/ceqa/more/faq.html>.

² California Public Resources Code § 21065.

³ 14 California Code of Regulations (CCR) §§ 15061 and 15062.

⁴ 14 CCR § 15063.

⁵ 14 CCR §§ 15070 et seq.

⁶ 14 CCR §§ 15080 et seq.

⁷ 14 CCR §§ 15050 and 15051. The Lead Agency typically has general governmental powers (such as a city or county), rather than a single or limited purpose (such as an air pollution control district).

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Type of Project	Yes	No	Project Description
Construction (including grading, paving, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Trenching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or replaced pipelines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Modification or conversion of a facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
New or modified operation of a facility or equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
On-road demonstration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Paper study (including analyses on economics, feedstock availability, workforce availability, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Laboratory research	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Temporary or mobile structures (skid-mounted)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Design/Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other (describe and attach sheets as necessary)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2. Where are the proposed activities located or where will they be located? (Attach additional sheets as necessary.)

Street Address	City/ County	Type of Work to Be Completed at Site
438 West Grand Ave, Apt 428	Oakland	customer interviews, financial and market analysis and high level system design

3. Will the proposed activities potentially have environmental impacts that trigger CEQA review? (Check a box and explain for each question).

Question	Yes	No	Unsure	Explanation
Is the proposed activity site environmentally sensitive?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the site located on agricultural land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are the activities part of a larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there public controversy about the proposed activities or larger project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will historic resources or historic buildings be impacted by the activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Question	Yes	No	Unsure	Explanation
Has the proposed site been identified by the Dept. of Toxic Substances Control and the Secretary of the Environmental Protection as being affected by hazardous wastes or cleanup problems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities generate noise or odors in excess of permitted levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Will the activities increase traffic at the site, and by what amount?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

4. Will the proposed activities require discretionary permits or determinations, as listed below?

No discretionary permits or determinations will be required for this project.

Permit Type	No.	Modified (M) or New (N)	Approving Public Agency	Reason for Permit, Summary of Process, and Anticipated Issuance Date
Air Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Water Quality		M <input type="checkbox"/> N <input type="checkbox"/>		
Conditional Use or Variance		M <input type="checkbox"/> N <input type="checkbox"/>		
Building Expansion		M <input type="checkbox"/> N <input type="checkbox"/>		
Hazardous Waste		M <input type="checkbox"/> N <input type="checkbox"/>		
Rezoning		M <input type="checkbox"/> N <input type="checkbox"/>		
Authority to Construct		M <input type="checkbox"/> N <input type="checkbox"/>		
Other (List types):		M <input type="checkbox"/> N <input type="checkbox"/>		

5. Has any agency listed in #4 indicated that it will be the lead CEQA agency for the project?

☒ **No.**

☐ **Yes.** Provide the name of and contact information for the lead agency (contact person, phone number, and email address):

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

6. Has any agency listed in #4 prepared or indicated that it will prepare environmental documents (e.g., Notice of Exemption, Initial Study/ Negative Declaration/ Mitigated Negative Declaration, Environmental Impact Report) under CEQA for the proposed project?

☒ **No.**

☐ **Yes.** Complete the chart below for each agency. **Cut and paste** the chart if more than one agency has prepared environmental documents. **Attach** any document identified below to this form.

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document (Attach the document to this form)	State Clearinghouse Number	Completion Date	Planned Completion Date (must be prior to Energy Commission encumbrance deadline)
Not a project <input type="checkbox"/> Email <input type="checkbox"/> Letter <input type="checkbox"/> Resolution <input type="checkbox"/> Other:		N/A		N/A
Exempt <input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Resolution <input type="checkbox"/> Agenda item approving exemption		N/A		
Initial Study				
Negative Declaration				
Mitigated Negative Declaration				
Notice of Preparation				
Environmental Impact Report				
Master Environmental Impact Report				
Notice of Determination				

ATTACHMENT 8

California Environmental Quality Act (CEQA) Compliance Form

Name of Agency: Contact person, phone number, email:				
CEQA Determination/Type of Document	Title of Document <u>(Attach the document to this form)</u>	State Clearinghouse Number	Completion Date	Planned Completion Date (<u>must be prior to Energy Commission encumbrance deadline</u>)
NEPA Document ⁸ (Environmental Assessment, Finding of No Significant Impact, and/or Environmental Impact Statement)				

7. If any agency identified in #4 has indicated that it will prepare CEQA documents and has not done so, explain why no document has been prepared and provide an estimated date for approval (must complete the CEQA process within sufficient time for the Energy Commission to meet its encumbrance deadline, as the Energy Commission in its sole and absolute discretion may determine):

⁸ For additional information about NEPA (the National Environmental Policy Act, 42 U.S.C. 4321 et seq.), see: <http://www.epa.gov/compliance/basics/nepa.html>.

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: CALIFORNIA CLEAN ENERGY FUND DBA CALCEF
VENTURES

WHEREAS, pursuant to the Public Resources Code section 25710 *et seq.* the State Energy Resources Conservation and Development Commission ("Energy Commission") is authorized to establish and administer the Electric Program Investment Charge (EPIC) Program; and

WHEREAS, the Energy Commission has recognized that California's electricity ratepayers benefit from energy research, development and demonstration ("RD&D") activities conducted by individuals, small businesses, academics and small non-profit institutions; and

WHEREAS, the Energy Commission has created the California Sustainable Energy Entrepreneur Development (CalSEED) Initiative within the EPIC Program to provide funding for the aforementioned public interest RD&D activities; and

WHEREAS, the California Clean Energy Fund ("CalCEF") is the administrator of the CalSEED Initiative under Agreement Number 300-15-007 and is responsible for soliciting grant applications, recommending grant awards to the Energy Commission, and managing authorized grant projects; and

WHEREAS, CalCEF has completed Solicitation 19-01 and has requested a total of \$3,750,000 for the following twenty five small grant projects:

1. \$150,000 is being requested for the "Decentralized, Rural Co-Production of Filtration Precursor Chemical and Industrial Power" project with Takachar, a project to design and demonstrate a prototype of a portable, low cost technology that processes crop and forest residues into precursors that can be used for water and air filtration media.

2. \$150,000 is being requested for the "Bi-facial, Low-profile, Solar Rooftop Tracking" project with P-Kap Systems LLC, a project to design and demonstrate a low profile, lightweight, laminate photovoltaic tracking system that has

the potential to increase energy output per unit-area by 25 percent and specific energy yield by 50 percent without increasing cost for a rooftop system.

3. \$150,000 is being requested for the “Advanced Solid State Lighting for Better Performance” project with RAF Electronics Corp., a project to develop an ecosystem of efficient and compact solid-state lighting fixtures that has the potential to increase safety and reduce electrical costs in theatrical and agriculture buildings.

4. \$150,000 is being requested for the “Rechargeable CFx Battery” project with DAE Technologies Inc., a project to research and develop a low-cost rechargeable lithium carbon fluoride (LiCFx) battery that surpasses the current state-of-the-art energy density of lithium-ion and lithium sulfur batteries.

5. \$150,000 is being requested for the “Lithium Ion Battery Fire Suppression System” project with RePurpose Energy, Inc., a project to design and demonstrate a lithium-ion battery fire suppression system that combats fires and thermal runaway without internal short-circuiting of the batteries cells. The proposed innovation injects non-conductive liquid into the battery enclosure in a way that does not damage control electronics or additional battery cells.

6. \$150,000 is being requested for the “Sierra Wall System” project with SierraCrete LLC, a project to improve the design of the highly insulating Green Energy Brick that has the potential to achieve insulating values that allow for the construction of zero net energy homes without the additional cost burden required for traditional wall framing systems.

7. \$150,000 is being requested for the “Heat Pump Water Heating Optimization using Hot Water Storage Management” project with ZYD Energy, Inc., a project to develop an optimized electric water heating solution by integrating heat pump water heaters with a hot water storage management technology to achieve high efficiency operation, lower operational cost, and provide energy storage services.

8. \$150,000 is being requested for the “Ivy Energy Software – Enabling Multi Unit Shared Solar” project with Ivy Energy, a project to design and demonstrate a software platform that enables multi-unit building owners to install a shared solar system that equitably rewards residents for using energy when it is cheap or provided by the solar system. The Ivy platform will have a 15-minute interval load algorithm that can identify each housing unit’s “true” solar energy and EV charging usage considering real time-of-use.

9. \$150,000 is being requested for the “Icarus Hybrid Energy Storage and Power Boost for Photovoltaic Systems” project with Icarus RT, Inc., a project to design and demonstrate a low-cost hybrid solar photovoltaic/thermal system co-located with commercial and larger Solar PV arrays that has the potential to increase power availability 25 percent, and reduce costs by more than 50 percent over current systems.

10. \$150,000 is being requested for the “High Efficiency Density Variable HP Integrated Motor and Drive” project with GreenTech Motors Corp., a project to design and demonstrate a High Efficiency Density (HED) motor that has the potential to

dramatically reduce end-use industrial electricity consumption through reduced efficiency losses, size, and weight of the electric motor.

11. \$150,000 is being requested for the “High Thermal Conductivity, Broadband Emitting Nitride Ceramic Downconverters for Lighting Applications” project with Luciant Inc., a project to further the development of a ceramic downconverter for LED/Laser driven lighting that eliminates the need for color mixing and has the potential to dramatically improve thermal management which will provide significant improvements in temperature variation and energy efficiency.

12. \$150,000 is being requested for the “Lithium-carbon based rechargeable batteries” project with EndLis Energy, a project to design and demonstrate low-cost, environmentally-sustainable, lithium carbon based rechargeable batteries for electric vehicles and grid storage applications that has the potential to double EV range capacity and decrease grid energy storage costs.

13. \$150,000 is being requested for the “Third Generation LED with Diffusion Lens” project with Optec LED, Inc., a project to design and demonstrate LED street lights and parking lot lights that have the potential to reduce energy consumption by 70 to 90 percent while also reducing maintenance costs. A unique slim-line housing with specialized heat sinks will eliminate the need for integrated cooling fans and will provide 100,000 hours of use before chips will need to be changed.

14. \$150,000 is being requested for the “Thermal Energy Storage using Ultra-High Osmotic Pressure Polymers” project with T2M Global, LLC, a project to develop Thermal Energy Storage in Osmotic Polymers (TESOP), which stores low-temperature (less than 200 degrees Celsius) thermal energy indirectly through thermo-chemical reactions.

15. \$150,000 is being requested for the “Low-Cost, Safer, Cobalt-free, Nanostructured Lithium Ion Battery Cathode Material” project with NanoDian, Inc., a project to develop prototype Li-ion battery packs that replace the cobalt in the cathode portion of the battery with nanostructured lithium manganese oxide - a safer, cheaper, and non-toxic chemistry.

16. \$150,000 is being requested for the “Energy Storage with NaFe Flow Batteries” project with Nrgtek Inc., a project to develop a small scale prototype sodium-iron flow battery with significantly better power density while maintaining excellent cycle life and low cost.

17. \$150,000 is being requested for the “High Efficiency, Scalable Power Generating Windows for Urban Centers” project with Luminescent Energy, a project to create a small prototype power-generating window that uses microscale PV cells and quantum dot technology to produce electricity.

18. \$150,000 is being requested for the “Rapidly Deployable Ground-Mounted Photovoltaic Solar Array” project with SolarFlexes LLC, a project to engineer a low cost, easy-to-assemble ground mounted photovoltaic system that can be stowed flat to withstand winds up to 150 mph.

19. \$150,000 is being requested for the “Impedance-Based Battery Health Management for Large Format Lithium-ion Battery Packs” project with ReJoule Incorporated, a project to develop a portable battery diagnostic system that can be embedded in an EV battery pack management system to continuously monitor battery health while detecting and preventing thermal runaway.

20. \$150,000 is being requested for the “Rechargeable Carbon-Oxygen Battery” project with Noon Energy, Inc., a project to develop and test a closed system, passive-flow prototype battery that uses carbon and oxygen.

21. \$150,000 is being requested for the “Thin-Film Battery Electrode Coating Technology” project with Coreshell Technologies, Inc., a project to collect demonstration data on a battery electrode coating technology expected to lower the cost of lithium ion batteries by 35 percent while doubling the battery’s life.

22. \$150,000 is being requested for the “Solid State Thermal Battery” project with Antora Energy, a project to prototype an inexpensive thermal energy storage system. By storing energy as heat in inexpensive raw materials and converting that heat back to electricity with high efficiency PV modules exposed to light radiating from the hot storage medium, the technology delivers energy storage for less than \$10/kWh – over an order of magnitude cheaper than Li-ion batteries.

23. \$150,000 is being requested for the “Powering Next-Generation IoT via Advanced Piezoelectric MEMS” project with ActiveMEMS LLC, a project to develop high-performance piezoelectric energy harvesters that use tiny machinery vibrations to generate electricity.

24. \$150,000 is being requested for the “Safe, High Performance Rechargeable Zinc Battery” project with EnZinc Inc., a project to validate and prototype an innovative battery chemistry that combines a proprietary zinc sponge anode with nickel, silver, or carbon cathodes for different applications.

25. \$150,000 is being requested for the “Pre-fabricated Affordable Renewable Energy Housing” project with Arvind Simhadri, a project to explore and validate the concept for prefabricated housing that includes solar, storage, and community energy management.

WHEREAS, Energy Commission staff have reviewed the proposed projects and determined that categorical exemptions apply to each project, as described in the staff California Environmental Quality Act (“CEQA”) Compliance Analysis Memorandum dated August 14, 2019, a document that is included in the backup materials to this Agreement.

THEREFORE BE IT RESOLVED, that the Energy Commission adopts staff’s CEQA findings contained in the staff CEQA Compliance Analysis Memorandum dated August 14, 2019 for the twenty five proposed projects; and

FURTHER BE IT RESOLVED, that the Energy Commission approves the twenty five projects proposed for funding from CalCEF Solicitation 19-01 for a total of \$3,750,000; and

FURTHER BE IT RESOLVED, that the Energy Commission directs CalCEF to execute grant agreements with the approved projects pursuant to Agreement Number 300-15-007; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on August 14, 2019.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat