



## California Energy Commission June 16, 2023 Business Meeting Backup Materials for Agenda Item No 10a: Moxion Power CO.

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

- 1. Proposed Resolution
- 2. Grant Request Form
- 3. CEQA Documents
- 4. Scope of Work

## STATE OF CALIFORNIA

## STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

## **RESOLUTION:** Moxion Power CO.

**RESOLVED,** that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

**RESOLVED**, that the CEC approves agreement ZVI-22-039 with Moxion Power Co. for a \$14,999,997 grant to expand battery module manufacturing operations in Richmond, California. Upon completion, the battery modules will be integrated into a mobile charging system that is capable of charging battery electric vehicles; and

**FURTHER BE IT RESOLVED**, that the Executive Director or their designee shall execute the same on behalf of the CEC.

## **CERTIFICATION**

The undersigned Secretariat to the CEC 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 CEC held on June 16, 2023.

AYE: NAY: ABSENT: ABSTAIN:

Dated:

Liza Lopez Secretariat



# **GRANT REQUEST FORM (GRF)**

## A. New Agreement Number

**IMPORTANT**: New Agreement # to be completed by Contracts, Grants, and Loans Office.

## New Agreement Number: ZVI-22-039

## **B.** Division Information

- 1. Division Name: 600 Fuels and Transportation Division
- 2. Agreement Manager: Jonathan Bobadilla
- 3. MS-:27
- 4. Phone Number: 916-477-1589

# C. Recipient's Information

- 1. Recipient's Legal Name: Moxion Power Co.
- 2. Federal ID Number: 84-4863599

# D. Title of Project

Title of project: California ZEV Manufacturing Project: Scaling In-State Battery Production to Drive Mobile ZEV Charging

## E. Term and Amount

- 1. Start Date: 06/16/2023
- 2. End Date: 03/31/2026
- 3. Amount: \$14,999,997

# F. Business Meeting Information

- 1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
- 2. The Proposed Business Meeting Date: 06-16-2023
- 3. Consent or Discussion? Discussion
- 4. Business Meeting Presenter Name: Jonathan Bobadilla
- 5. Time Needed for Business Meeting: 5 minutes.
- 6. The email subscription topic is: Clean Transportation Program

# Agenda Item Subject and Description:

Moxion Power Co. Proposed resolution approving Agreement ZVI-22-039 with Moxion Power Co. for a \$14,999,997 grant to expand battery module manufacturing operations in Richmond, California, and adopting staff's determination that this action is exempt from CEQA. Upon completion, the battery modules will be integrated into a mobile charging system that is capable of charging battery electric vehicles. (General Fund Funding) Contact: Jonathan Bobadilla (Staff Presentation: 5 minutes)

# G. California Environmental Quality Act (CEQA) Compliance

## Is Agreement considered a "Project" under CEQA? Yes

If yes, skip to question 2.

If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a "Project":



# If Agreement is considered a "Project" under CEQA answer the following questions.

a) Agreement IS exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

PRC section number: None

CCR section number: None

**Categorical Exemption?** 

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

CCR section number:

CCR section number: Cal. Code Regs., tit. 14, § 15183

Common Sense Exemption? 14 CCR 15061 (b) (3)

No

If yes, explain reason why Agreement is exempt under the above section. If no, enter "Not applicable" and go to the next section.

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because: This project is sited within the jurisdiction of the City of Richmond (City). The City as lead agency made the determination that this project is exempt from CEQA under Cal. Code Regs., tit. 14, § 15183 and the CEC is adopting those findings.

Specifically, on December 14, 2022, a public hearing was held by the City of Richmond Design Review Board, which considered approval of the project. The City of Richmond Design Review Board reviewed the Portside Commerce Center CEQA Guidelines Section 15183 Checklist, which includes environmental analysis and considered the applicable provisions of CEQA and State CEQA Guidelines. This included Section 15183, which "mandates that projects that are consistent with the development established by existing zoning, community plan, or General Plan policies for which an Environmental Impact Report was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or its Site."

Staff then considered the City of Richmond General Plan Update (Plan), which was adopted along with a certified Final Environmental Impact Report by the City in 2012. Staff concluded that this project is consistent with the goals and policies of the Plan. The policies supported by the proposed battery assembly facility supports key goals from the Plan such as: EC5.1 which promotes Green Businesses and Jobs; LU3.J which support heavy industry's on-going efforts to



Grant Request Form CEC-270 (Revised 10/2022)

modernize and upgrade their plants to reduce energy use, increase efficiency and reduce emissions; and LU4.A which support on-going efforts to plan and redevelop key shoreline areas to fully transform them from blighted areas into resources and amenities for the community.

The project is consistent with the site's existing map code zoning designation of "Industrial, Water-Related (IW) District."

Ultimately, the City of Richmond Design Review Board conditionally approved the project. The findings of the Hearing Officer included that the project was to be categorically exempt from the requirements for preparation of environmental documents pursuant to Cal. Code Regs., tit. 14, § 15183. Since the project was found to be consistent with the goals and policies of the City of Richmond's General Plan Update and does not present any unusual circumstances, CEC is adopting the CEQA findings of the lead agency.

### b) Agreement IS NOT exempt.

**IMPORTANT:** consult with the legal office to determine next steps.

N/A

If yes, answer yes or no to all that applies. If no, list all as "no" and "None" as "yes".

Additional Documents	Applies
Initial Study	No
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

## H. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter "No subcontractors to report" and "0" to funds. **Delete** any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
No subcontractors to report	\$0	<b>\$</b> 0

## I. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter "No vendors or sellers to report" and "0" to funds. **Delete** any unused rows from the table.

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
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STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION

TBD Vendor 1	\$9,628,996	<b>\$</b> 13,441,807
TBD Vendor 2	\$4,070,966	\$5,213,900
TBD Vendor 3	\$742,877	\$795,967
TBD Vendor 4	<b>\$</b> 557,158	\$621,976

## J. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter "No key partners to report." **Delete** any unused rows from the table.

Key Partner Legal Company Name	
No key partners to report	

## K. Budget Information

Include all budget information. Insert additional rows if needed. If no budget information to report, enter "N/A" for "Not Applicable" and "0" to Amount. **Delete** any unused rows from the table.

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
General Fund	FY 2022-2023	601.129 MGB	\$14,999,997.00

# **TOTAL Amount:** \$14,999,997.00

R&D Program Area: N/A

Explanation for "Other" selection N/A

Reimbursement Contract #: N/A

Federal Agreement #: N/A

## L. Recipient's Contact Information

# 1. Recipient's Administrator/Officer

Name: Jared Mickle

Address: 1414 Harbour Way S. STE 1800

City, State, Zip: Richmond, CA 94804

Phone: (203) 246-6155

E-Mail: jed@moxionpower.com

# 2. Recipient's Project Manager

Name: Charles Shin Address: 1414 Harbour Way S. STE 1800 City, State, Zip: Richmond, CA 94804 Phone: (669) 247-8872



#### STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION

E-Mail: cshin@moxionpower.com

## M. Selection Process Used

There are three types of selection process. List the one used for this GRF.

Selection Process	Additional Information
Competitive Solicitation #	GFO-21-605
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

## N. Attached Items

1. List all items that should be attached to this GRF by entering "Yes" or "No".

ltem Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	CEC 105, Questionnaire for Identifying Conflicts	Yes
4	Recipient Resolution	No
5	Awardee CEQA Documentation	Yes

# Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager: Jonathan Bobadilla

Approval Date: 4/7/2023

Office Manager: Charles Smith

Approval Date: 4/28/2023

Deputy Director: Melanie Vail

Approval Date: 5/5/2023

California Environmental Quality Act

City of Richmond Environmental Impact Report, Checklist, and Notice of Exemption

Title of Project: California ZEV Manufacturing Project: Scaling In-State Battery Production to Drive Mobile ZEV Charging

Follow the links below to view the documents listed above:

City of Richmond - <u>Filing of Notice of Exemption (NOE</u>) in compliance with Section 21108 or 21152 of the Public Resources Code.

https://ceqanet.opr.ca.gov/2008022018/3

City of Richmond - <u>Portside Commerce Center CEQA Guidelines Section 15183</u> Checklist Administrative Draft

https://www.ci.richmond.ca.us/DocumentCenter/View/64157/Portside-Commerce-Cntr-ADMIN-DRAFT\_Compliance-Checklist\_clean

City of Richmond – <u>General Plan Update Final Environmental Impact Report</u> (SCH No. 2008022018)

https://www.ci.richmond.ca.us/DocumentCenter/View/59004/General-Plan-Final-EIR

## TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	Х	Manufacturing Readiness
3		Facility Readiness
4		Supply Chain Readiness
5		Production Validation
6		Workforce Development and Community Engagement
7	Х	Scale Production and Manufacturing
8		Data Collection and Analysis
9		Project Fact Sheet

## KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Charles Shin		
2	Charles Shin		
3	Jared Mickle		
4	Gildardo Moreno		
5	Charles Shin		
6	Alex Meek		
7	Charles Shin		
8	Charles Shin		
9	Jared Mickle		

### GLOSSARY

Specific terms and acronyms used throughout this scope of work are defined as follows:

Term/ Acronym	Definition
AB	Assembly Bill
ADA	Americans with Disabilities Act
AHJ	Authority Having Jurisdiction
AIA	Master Agreement Between Architect and Consultant
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CD	Construction Documents
CEC	California Energy Commission
CPR	Critical Project Review
СТР	Clean Transportation Program
DD	Development Design
EHS	Environmental Health & Safety
FAT	Factory Acceptance Testing
FTD	Fuels and Transportation Division
GMP	Guaranteed Maximum Price
MEP	Mechanical, Electrical, and Plumbing
MES	Manufacturing Data Collection Software
RCCP	Rough Cut Capacity Planning
PPAP	Production Part Approval Process
Recipient	Moxion Power Co.
SB	Senate Bill
SD	Schematic Design
ZEV	Zero-Emission Vehicle

#### Background

The Budget Act of 2021 (Assembly Bill (AB) 128, Ting, Chapter 21, Statutes of 2021, as amended by Senate Bill (SB) 129, Skinner, Chapter 69, Statutes of 2021 and SB 170, Skinner, Chapter 240, Statutes of 2021) appropriated \$785,000,000 from the General Fund to support infrastructure deployments and manufacturing projects for zero-emission light-duty and medium-and heavy-duty vehicles. The Budget Act of 2022 (SB 154, Skinner, Chapter 43, Statutes of 2022, as amended by AB 178, Ting, Chapter 45, Statutes of 2022) appropriated an additional June 2023 Page 2 of 17 ZVI-22-039

Moxion Power Co.

\$255,000,000 from the General Fund to support infrastructure deployments and manufacturing projects for zero-emission light-duty and medium- and heavy-duty vehicles.

On March 30, 2022, the California Energy Commission (CEC) released a Grant Funding Opportunity (GFO) entitled "Zero-Emission Transportation Manufacturing." This competitive grant solicitation was to increase in-state manufacturing of zero-emission vehicles (ZEV), ZEV components and batteries, and ZEV charging or refueling equipment. In response to GFO-21-605, the Recipient submitted application #12 which was proposed for funding in the CEC's Notice of Proposed Awards on August 24, 2022. GFO-21-605 and the Recipient's application are hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of CEC's Award, CEC's Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

#### **Problem Statement:**

ZEV fleet operators need mobile battery storage charging solutions that will provide flexibility from the limitations of fixed charging infrastructure and accelerate the adoption of ZEV fleets. Fixed hardware charging ties entire fleets to the aging electric grid, which subjects them to demand charges. This often results in inability to provide sufficient power without expensive service upgrades that may take years to complete due to utility resource constraints. The mobile nature of many fleet operations along with logistical obstacles of moving vehicles around on a site make fixed charging infrastructure inefficient, time consuming, and cost-prohibitive. Consequently, there is an immediate demand to manufacture batteries for mobile charging solutions to serve fleets, and, unfortunately, a high likelihood that the scaling of this battery manufacturing may occur outside California due to lower manufacturing costs.

#### Goals of the Agreement:

The goals of this Agreement are to:

- Build a world class battery manufacturing facility to support mobile ZEV charging in Richmond, California, a disadvantaged community.
- Scale the manufacturing capacity and related supply chains to support mobile ZEV charging technology in California.
- Support California's ZEV deployment goals by manufacturing an industry-first mobile ZEV charging solution.
- Diversify the labor market from the fossil fuel industry in the City of Richmond.
- Support a successful local workforce development program.
- Decrease costs and improve economies of scale for mobile ZEV charging products.
- Help California achieve its decarbonization, air quality, and emissions reduction targets by accelerating the deployment of ZEVs.

#### **Objectives of the Agreement:**

The objectives of this Agreement are to:

- Create more than 400 new, direct high-quality jobs in Richmond, California and support approximately 1,075 indirect jobs in California by the end of the grant term.
- Increase Moxion Power's supplier base to include over 38 California-based companies.
- Add approximately \$320 million to California's tax base by the end of the grant term.
- Scale production to manufacture over 6 GWh of battery modules to support more than 10,000 mobile ZEV charging units by the end of the grant term.

## TASK 1 ADMINISTRATION

## Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

- Attend a "Kick-Off" meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Provide a written statement of project activities that have occurred after the notice of proposed awards but prior to the execution of the agreement using match funds. If none, provide a statement that no work has been completed using match funds prior to the execution of the agreement. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Discuss the following administrative and technical aspects of this Agreement:
  - Agreement Terms and Conditions
  - Critical Project Review (Task 1.2)
  - Match fund documentation (Task 1.7) No reimbursable work may be done until this documentation is in place.
  - Permit documentation (Task 1.8)
  - Subawards needed to carry out project (Task 1.9)
  - The CAM's expectations for accomplishing tasks described in the Scope of Work
  - An updated Schedule of Products and Due Dates
  - Monthly Calls (Task 1.4)
  - Quarterly Progress Reports (Task 1.5)
  - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
  - Final Report (Task 1.6)

#### **Recipient Products:**

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits
- Written Statement of Match Share Activities

#### **Commission Agreement Manager Product:**

• Kick-Off Meeting Agenda

### Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the CEC and the Recipient. The goal of this task is to determine if the project should continue to receive CEC funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the CAO, the Fuels and Transportation Division (FTD) program lead, other CEC staff and Management as well as other individuals selected by the CAM to provide support to the CEC.

#### The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Lead Commissioner for Transportation for his or her concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

### The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

#### CAM Products:

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

#### **Recipient Product:**

• CPR Report(s)

#### Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

#### The Recipient shall:

• Meet with CEC staff to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Recipient and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the CAM.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM about the following Agreement closeout items:

- What to do with any equipment purchased with CEC funds (Options)
- CEC request for specific "generated" data (not already provided in Agreement products)
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

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### Products:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

#### Task 1.4 Monthly Calls

The goal of this task is to have calls at least monthly between CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to verbally summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted, or the CAM determines that a monthly call is unnecessary.

#### The CAM shall:

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

#### The Recipient shall:

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

#### **Product:**

• Email to CAM concurring with call summary notes.

#### Task 1.5 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

#### The Recipient shall:

• Prepare a Quarterly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10<sup>th</sup> day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at <a href="https://www.energy.ca.gov/media/4691">https://www.energy.ca.gov/media/4691</a>.

### Product:

• Quarterly Progress Reports

### Task 1.6 Final Report

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document and is limited to 25-pages. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

In addition to any other applicable requirements, the Final Report must comply with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability; all applicable regulations and guidelines issued pursuant to the ADA; Cal. Gov. Code sects. 7405 and 11135; and Web Content Accessibility Guidelines 2.0, or a subsequent version, as published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.

#### The Recipient shall:

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report complying with ADA requirements and following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit Final Report in Microsoft Word format or similar electronic format as approved by the CAM.

#### Products:

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

#### Task 1.7 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

#### The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
  - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
  - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

#### Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

### Task 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

#### The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
  - A list of the permits that identifies the:
    - Type of permit
    - Name, address and telephone number of the permitting jurisdictions or lead agencies
  - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

#### Products:

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)

• A copy of each final approved permit (if applicable)

#### Task 1.9 Obtain and Execute Subawards

The goal of this task is to ensure quality products and to procure subrecipients required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures.

#### The Recipient shall:

- Manage and coordinate subrecipient activities.
- If requested by the CAM, submit a draft of each subaward required to conduct the work under this Agreement to the CAM for review.
- If requested by the CAM, submit a final copy of the executed subaward.
- If Recipient intends to add new subrecipients or change subrecipients, then the Recipient shall notify the CAM.

#### Products:

- Letter describing the subawards needed, or stating that no subawards are required
- Draft subcontracts (if requested)
- Final subcontracts (if requested)

#### **TECHNICAL TASKS**

#### TASK 2 MANUFACTURING READINESS

The goal of this task is to finalize the preparation for an operational manufacturing facility that includes battery module manufacturing lines, general assembly equipment, and subassembly stations.

- Develop a *Production Intent Build Process Plan* that documents vendor processes and timelines to establish the production line equipment and provide to CAM for review and approval.
- Prepare Acceptance Test and Validation Plan and provide to CAM for input.
- Develop *Factory and Site Acceptance Procedures* including checklists of all acceptance criteria (such as safety, quality, fault recovery) and provide to CAM for review and approval.
- Create an *Automation Sustainment Plan*, for preventative maintenance schedules (ensures cleaning, inspection, lubrication, and retightening activities to mitigate downtime and issues) and provide to CAM for review and approval.
- Develop a *Safety Standards and Protocols Plan* that outlines operational safety standards and employee protocols used in the manufacturing process and provide to CAM for review and approval.

- Develop a list of *Training Program Certifications* listing the training certifications the Recipient's manufacturing workers will receive in preparation for manufacturing operations and provide to CAM for review and approval.
- Develop a *Process and Production Plan* that outlines the processes and protocols for operating the manufacturing lines and equipment for CAM review and approval.
- Define *Job Certifications* required for equipment operators and technicians and provide to CAM review and approval.

### Products:

- Production Intent Build Process Plan
- Acceptance Test and Validation Plan
- Factory and Site Acceptance Procedures
- Automation Sustainment Plan
- Safety Standards and Protocols Plan
- Training Program Certifications
- Process and Production Plan
- Job Certifications Document

## [CPR WILL OCCUR DURING THIS TASK. SEE TASK 1.2 FOR MORE DETAILS.]

## TASK 3 FACILITY READINESS

The goal of this task is to finalize the project site, manage the construction and design, and prepare the facility for manufacturing equipment and operations.

- Select tenant improvement architect, general contractor(s), and design-build subcontractor(s) and provide a *List of Architects, Contractors, and Subcontractors* to CAM for review and approval.
- Review and execute pre-construction Master Agreement Between Architect and Consultant (AIA Agreement) with General Contractor and provide copies of agreements to the CAM for review and approval.
- Review and approve schematic design (SD) and design development (DD) documents with the landlord and submit a *Letter of Approval* to the CAM for review and approval.
- Develop a *Procurement and Facility Improvement Plan* which contains executed construction AIA Agreement with General Contractor, procurement lead times, and start date of tenant improvement construction and submit to CAM for review and approval.

- Install module manufacturing production assembly equipment, including but not limited to automated module line; final assembly and automated storage of modules system; end of line functional tester; and end of line charger/discharger. Notify CAM when installation of each component commences and completes.
- Request final AHJ inspections for *Substantial Completion Certificate* and provide a copy to the CAM.
- Provide a *Notice of Completion* when the final base building Mechanical Electrical Plumbing (MEP) interconnections to equipment and commission is complete, and the equipment is ready to be installed for CAM review and approval.
- Provide *Photos of Installed Manufacturing Equipment* to the CAM with a notice that equipment installation is complete.
- Develop and provide for CAM review and approval an *Environmental Health and Safety (EHS) Policies and Procedures Plan* which describes how the Recipient protects employee safety, safety features within the facility, emergency action response plans, and waste/hazardous material plans.

## Products:

- List of Architects, Contractors, and Subcontractors
- Pre-construction agreements with General Contractor
- Letter of Approval
- Final SD, DD, and CD Documents
- Procurement and Facility Improvement Plan
- Substantial Completion Certificate
- Notice of Completion
- Photos of Installed Manufacturing Equipment
- EHS Policies and Procedures Plan

# TASK 4: SUPPLY CHAIN READINESS

The goal of this task is to establish a robust supply base to support the Recipient's manufacturing sites.

# The Recipient shall:

• Develop a *Product and Supplier List* which identifies potential tier 1 and 2 suppliers and items up for bid. List will show five major indexes: Cost, Quality, Delivery, Ease of doing business and technical expertise and provide to CAM for review and approval.

- Document validation of existing prototype suppliers through Production Part Approval Process (PPAP) inspections, which includes testing and validation, and provide a summary of results to the CAM.
- Develop a *Dual Source Plan* for each key inventory item in the manufacturing line where redundancy is needed in suppliers and supplies and provide to CAM.
- Develop a Supplier Performance Index which is a process to measure supplier performance, drive actionable continuous improvement and growth, and maintain and/or de-source suppliers that are not meeting the Recipient's goals. Provide a *Supplier Performance Index Summary of Findings* to the CAM.
- Establish a Rough Cut Capacity Planning (RCCP) process, which is a process to measure and identify gaps and continuous improvement for supplier capacity, in order to meet the Recipient's growth and provide a summary of the processes to the CAM.

Products:

- Product and Supplier List
- Validation and PPAP Summary Document
- Dual Source Plan
- Supplier Performance Index Summary of Findings
- RCCP Procedure Summary

# TASK 5: PRODUCTION VALIDATION

The goal of this task is to finalize testing and validation for all new manufacturing equipment and begin battery manufacturing to support mobile ZEV charging products in the new manufacturing facility.

# The Recipient shall:

- Establish Validation and Test Plan and provide to CAM.
- Design and implement Manufacturing Data Collection Software (MES) and provide *MES Summary Report* that lists the MES data being collected on the manufacturing line, and how it supports product manufacturing to CAM.
- Develop a *Manufacturing Process Validation Plan* which identifies the end of line testing and validation processes used and provide to CAM.
- Take photos from validation of modules and final assembly units during Factory Acceptance Testing at the vendor sites and provide to CAM.

## Products:

- Validation and Test Plan
- MES Summary Report
- Manufacturing Process Validation Plan
- Photos of the Validation Production run

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## TASK 6: WORKFORCE DEVELOPMENT AND COMMUNITY ENGAGEMENT

The goal of this task is to establish a robust recruiting plan that engages with the City of Richmond and targets local job-seekers from disadvantaged communities to recruit a talented, diverse workforce for the manufacturing facility.

### The Recipient shall:

- Develop a *Moxion Education and Recruitment Plan* which details education programs with local educations institutions, and recruitment programs with organizations such as RichmondWORKS, the RichmondBUILD Academy, and Richmond's YouthWORKS program, and Aerotek and provide to CAM.
- Develop the *Moxion Richmond Workforce Plan*, a documented local hiring initiative that includes detailed hiring and training programs in partnership with the City of Richmond and associated recruiting programs in the City and provide a copy to the CAM.
- Take photos during The Moxie Challenge, where Recipient employees perform community service that includes training, coaching, and mentoring initiatives within the Richmond community and local community colleges under the Moxion Richmond Workforce Plan. Provide photos of The Moxie Challenge to CAM.

### **Products:**

- Moxion Education and Recruitment Plan
- Moxion Richmond Workforce Plan
- The Moxie Challenge Photos

# TASK 7: SCALE PRODUCTION AND MANUFACTURING

The goal of this task is to ramp-up production to operate with two shifts on four manufacturing lines running at full capacity.

- Scale production to manufacture over 6 GWh of battery modules to support more than 10,000 mobile ZEV charging units at the Richmond facility by the end of the grant term. Provide *Letter of Scale-Up Completion* once target output is reached for CAM review and approval.
- Develop a *Training Course Report* which identifies the training curriculum for newly hired technicians and number of technicians receiving the curriculum and provide to CAM.
- Develop a *Risk Mitigation Matrix* the shows the management operating systems procedures around safety, quality, delivery, recognition, and training to ensure all activities are done within company procedures surrounding the use of equipment and inventory along with employee safety, well-being, and provide to CAM.
- Establish on-the-job training program for training and certification program for employee advancement and safety and provide copies of resulting documents to the CAM.
- Provide copies of preventative maintenance manuals for equipment to CAM.

- Develop a problem-solving training course for employees and provide copies of course material to the CAM.
- Develop an *Escalation Flow Protocols* document which outline the protocols in place for an effective tiered communication system for escalation flow and provide to CAM for review and approval.
- Develop a *Continuous Improvement Recognition Program* which identifies the goals the Recipient is setting for improvement, and how the Recipient is enabling their employees to improve on those goals and provide to CAM for review.
- Pursue the Zero Waste Certification by establishing procedures to eliminate/reduce manufacturing waste and provide a list those procedures, and the organization providing the certification, to the CAM for review.

## Products:

- Letter of Scale-Up Completion
- Training Course Report
- Risk Mitigation Matrix
- Job Training and Certification Documents
- Equipment Maintenance Manuals
- Problem-Solving Training Course Material
- Escalation Flow Protocols
- Continuous Improvement Recognition Program
- Zero Waste Procedures

# [CPR WILL OCCUR DURING THIS TASK. SEE TASK 1.2 FOR MORE DETAILS.]

# TASK 8: DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational data from the project and to analyze that data for economic and environmental impacts.

- Develop a Data Collection Outline and Plan.
- Identify key project issues encountered and resolution of the issues.
- Collect a minimum of 6 months of project and operations data.
- Identify the number and description of units produced from product beta testing and validation through commercial production. The Recipient shall also characterize the use of these products after the project.
- Describe the market(s) for the manufactured products and compare the market status from the time of the original project proposal to the time of the project's completion.
- Provide a projection of the number of units to be manufactured per year, for the products identified in the original application, 3 years after the completion of the project. The Recipient shall also provide assumptions for projected growth.

- Compare project performance and expectations provided in the original project proposal with actual project performance, results, and accomplishments.
- Provide data on specific jobs and economic impact as a direct result of the project, including, but not limited to:
  - Number and type of short-term jobs created or retained by the project
  - Number and type of sustained, long-term jobs created or retained by the project
  - Estimates and descriptions of future jobs resulting from the project
  - Estimates of local economic impacts and revenues to state and local governments
  - Number of employees participating in training programs, and types of training programs
  - Number of indirect jobs resulting from the project.
- Provide a *Data Collection and Information Analysis Report* that lists and analyzes all the data and information described above.

#### Products:

- Data Collection Outline and Plan
- Data Collection and Information Analysis Report

#### TASK 9 PROJECT FACT SHEET

The goal of this task is to develop an initial and final project fact sheet that describes the CECfunded project and the benefits resulting from the project for the public and key decision makers.

#### The Recipient shall:

- Prepare an *Initial Project Fact Sheet* at the start of the Project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the Project's conclusion that describes the project, the actual benefits resulting from the Project, and lessons learned from implementing the Project. Use the format provided by the CAM.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the Project site or related project photographs.

#### Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs