Empowering Our Clean Energy Future



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PITTSBURG | PLEASANT HILL | RICHMOND | SAN PABLO | SAN RAMON | WALNUT CREEK

MCE Technical Committee Meeting Friday, August 2, 2024 10:00 a.m.

Public comments may be made in person or remotely via the details below.

1125 Tamalpais Avenue, San Rafael, CA 94901 (MCE)
2300 Clayton Road, Suite 1150, Concord, CA 94920 (MCE)
11780 San Pablo Ave. Ste. D, El Cerrito, CA 94530 (Contra Costa County)
7000 Bollinger Canyon Road, San Ramon, CA 94583, City Hall, Second Floor, City Council
Offices (San Ramon)

Remote Meeting Participation for Meetings of the Public

Video Conference: https://t.ly/QzAmo
Phone: Dial (669)-900-9128, Meeting ID 828 5103 7385, Passcode 142534

The Technical Committee may discuss and/or take action on any or all of the items listed on the agenda irrespective of how the items are described.

This Committee may be attended by Board Members who do not serve on this Committee. In the event that a quorum of the entire Board is present, this Committee shall act as a Committee of the Whole. Any item acted upon by the Committee of the Whole will be considered advisory to the Board of Directors and require consideration and action by the Board of Directors at a noticed Board meeting before adoption or approval of the item.

DISABLED ACCOMMODATION: If you are a person with a disability who requires an accommodation or an alternative format, please contact MCE at (888) 632-3674 or <u>adacoordinator@mceCleanEnergy.org</u> at least 72 hours before the meeting start tie to ensure arrangements are made.

Agenda Page 1 of 2

- 1. Roll Call/Quorum
- 2. Board Announcements (Discussion)
- 3. Public Open Time (Discussion)
- 4. Report from Chief Executive Officer (Discussion)

Agenda Page 2 of 2

- 5. Consent Calendar (Discussion/Action)
 - C.1. Approval of 6.7.24 Meeting Minutes
 - C.2. Proposed Fifth Amendment to Master Services Agreement with R Systems International Limited
- 6. PG&E Transfer of Diablo Canyon GHG-Free Attributes (Discussion/Action)
- 7. Responsible Biomass Electricity Development Principles Update (Discussion)
- 8. Committee & Staff Matters (Discussion)
- 9. Adjourn

DRAFT

MCE TECHNICAL COMMITTEE MEETING MINUTES Friday, June 7, 2024 10:00 A.M.

Present: Bruce Ackerman, Alternate, Town of Fairfax¹

Mark Armstrong, Alternate, City of San Ramon

Gina Dawson, City of Lafayette

Alexis Fineman, Town of San Anselmo

John Gioia, Contra Costa County

Gayle McLaughlin, Alternate, City of Richmond

Charles Palmares, City of Vallejo Katie Rice, County of Marin

Absent: Devin Murphy, City of Pinole

Staff

& Others: Nicole Busto, Manager of Marketing

Shuvo Chowdhury, VP of Technology and Analytics Alice Havenar-Daughton, VP of Customer Programs

Darlene Jackson, Board Clerk and Executive Assistant to the CEO

Vicken Kasarjian, Chief Operating Officer Tanya Lomas, Internal Operations Assistant

Catalina Murphy, General Counsel

Ashley Muth, Internal Operations Assistant Enyonam Senyo-Mensah, Office Manager

Daniel Settlemyer, Internal Operations Coordinator

Dawn Weisz, Chief Executive Officer

1. Roll Call

Acting Chair Rice called the regular Technical Committee meeting to order at 10:00 a.m. with quorum established by roll call.

2. Board Announcements (Discussion)

There were no comments.

3. Public Open Time (Discussion)

Acting Chair Rice opened the public comment period and there were no comments.

¹ Due to Brown Act requirements, the Town of Fairfax was not included in the votes for action items.

DRAFT

Action: It was M/S/C (Palmares/Gioia) to approve Consent Calendar item C.1.

Motion carried by roll call vote. (Abstain: Directors McLaughlin and Kullaway.

Absent: Director Murphy).

4. Report from Chief Executive Officer (Discussion)

CEO Dawn Weisz introduced this item and addressed questions from Committee members.

5. Consent Calendar (Discussion/Action)

C.1 Approval of 5.3.24 Meeting Minutes

Acting Chair Rice opened the public comment period and there were no comments.

6. Solar Storage Credit Update (Discussion)

Nicole Busto, Manager of Marketing, and Shuvo Chowdhury, VP of Technology & Analytics, presented this item and addressed questions from Committee members.

Acting Chair Rice opened the public comment period and comments were made by members of the public Dan Segedin, Howdy Goudey, and Ken Strong.

Action: No action required.

7. Customer Programs Overview (Discussion)

Alice Havenar-Daughton, VP of Customer Programs, presented this item and addressed questions from Committee members.

Acting Chair Rice opened the public comment period and there were comments from member of the public Dan Segedin.

Action: No action required.

8. Committee & Staff Matters (Discussion)

There were no comments.

9. <u>Adjournment</u>

Acting Chair Rice adjourned the meeting at 11:44 a.m. to the next scheduled Technical Committee Meeting on July 5, 2024.

DRAFT

Katie Rice, Acting Chair	
Attest:	
Dawn Weisz, Secretary	

Empowering Our Clean Energy Future





August 2, 2024

TO: MCE Technical Committee

FROM: Shuvo Chowdhury, Vice President of Technology and Analytics

Karamvir Singh, Director of Analytics, Data Systems Joseph Kombarakkaran, Senior Product Manager

RE: Proposed Fifth Amendment to Master Services Agreement with R

Systems International Limited (Agenda Item #05 C.2)

ATTACHMENTS: A. Fifth Amendment to Master Services Agreement with R Systems

International Limited

B. Amended and Restated Schedule A.19 Statement of Work for Customer Relationship Management and Amended and Restated

Attachment O

C. Master Services Agreement with R Systems International Limited

D. First Amendment to Master Services Agreement with R Systems

International Limited

E. Second Amendment to Master Services Agreement with R Systems

International Limited

F. Third Amendment to Master Services Agreement with R Systems

International Limited

G. Fourth Amendment to Master Services Agreement with R Systems

International Limited

Dear Technical Committee Members:

Summary:

Over the last four years, MCE has been working with R Systems International Limited ("R Systems") via a Master Services Agreement ("MSA") and adjoining scopes of work (which include Schedules A.1-A.19) to build MCE's own Data Analytics Platform ("DAP") and Customer Relationship Management ("CRM") system. MCE's CRM is built upon the industry leading Salesforce platform; however, much of the interface, business logic, and operations have been custom-designed to support, streamline, and enhance MCE's unique business needs. MCE's CRM became the system-of-record for Customer Operations in December 2022. It replaced the previously used CRM which was owned by Calpine Energy Solutions. MCE's CRM is currently being used by Program

Implementation partners to validate customers, check eligibility for various programs and to update the program participation information and customer interactions in quasi-real time. The Customer Programs department at MCE uses the CRM as the main platform for overall program management.

MCE also operates and maintains a data lake; a centralized repository of data, on which the DAP is built. The DAP allows MCE staff to analyze and correlate data from a wide range of sources, both external, such as Pacific Gas & Electric Company and the Department of Motor Vehicles, and internal, such as the Public Affairs and Customer Programs departments, to better target initiatives, identify trends, and increase efficiency of California Public Utility Commission and California Energy Commission audits and reporting to regulatory entities on cycles.

The Amendment:

MCE proposes to continue working with R Systems through a Fifth Amendment to the MSA ("Amendment") which would increase the contract value by \$200,000. If approved, the additional \$200,000 would allow for R Systems to continue to maintain the DAP and CRM systems and enhance the abilities of the CRM through an amended and restated statement of work ("A&R Schedule A.19"). If the proposed Amendment is approved, R System's scope of work would be expanded to include:

CRM [100% of the requested funding]:

- Increase stability of the CRM by adding features to minimize the effects of corrupted or inaccurate data from PG&E [10%];
- Bring onboard the remaining MCE Customer Programs to enable visibility of Project Pipelines for Energy Efficiency, Richmond Virtual Power Plant ("VPP") pilot, and Transportation Electrification Programs [15%];
- Enable Program Implementation Partners with the ability to send Program data in quasi-real time [10%];
- Enable Partners to validate customer applications in real-time and confirm Program eligibility, by building generic Application Program Interfaces [10%];
- Enhance MCE Product choices and Selection for customers, by enabling dynamic product configuration [25%];
- Enable smoother enrollment of Hercules customers in 2025 [15%]; and
- Migrate the older technology components in the CRM into the latest supported solution [15%].

DAP [0% of the requested funding]:

R Systems would continue their DAP maintenance work as well, which includes:

- Host and build solutions for customer energy usage information using Share My Data ("SMD"). This is a PG&E interface that allows residential customers to share their energy data with designated third parties much sooner than available through PG&E's data interfaces;
- Facilitate backend processing of customer opt-ins, opt-outs, and product change requests;
- Support the CRM with more timely data feeds from external sources to reduce delays;
- Enhance the dashboarding solutions to serve multiple MCE teams, covering areas such as customer profiles, programs participation, and information about MCE service area; and
- Support data needs for the Richmond VPP project and any future needs for Distributed Energy Resource-related pilot initiatives.

Fiscal Impacts:

Net increase in contract amount of \$200,000 to the existing not-to-exceed total of \$2,149,500 (as amended), bringing the total not-to-exceed contract value to \$2,349,500. Costs related to the proposed Amendment are included in the Proposed FY 2024/25 Operating Fund Budget.

Recommendation:

Approve the proposed Fifth Amendment to the Master Services Agreement with R Systems International Limited.

- Host and build solutions for customer energy usage information using Share My Data ("SMD"). This is a PG&E interface that allows residential customers to share their energy data with designated third parties much sooner than available through PG&E's data interfaces;
- Facilitate backend processing of customer opt-ins, opt-outs, and product change requests;
- Support the CRM with more timely data feeds from external sources to reduce delays;
- Enhance the dashboarding solutions to serve multiple MCE teams, covering areas such as customer profiles, programs participation, and information about MCE service area; and
- Support data needs for the Richmond VPP project and any future needs for Distributed Energy Resource-related pilot initiatives.

Fiscal Impacts:

Net increase in contract amount of \$200,000 to the existing not-to-exceed total of \$2,149,500 (as amended), bringing the total not-to-exceed contract value to \$2,349,500. Costs related to the proposed Amendment are included in the Proposed FY 2024/25 Operating Fund Budget.

Recommendation:

Approve the proposed Fifth Amendment to the Master Services Agreement with R Systems International Limited.

FIFTH AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

This FIFTH AMENDMENT is made and entered into on August 2, 2024 by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and R SYSTEMS INTERNATIONAL LIMITED (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, MCE and Contractor entered into an agreement on April 9, 2021, which was subsequently amended on March 7, 2022, March 16, 2023, March 19, 2024 and June 27, 2024, to implement phases of MCE's Data Analytics Platform and Customer Relationship Manager Platform ("Agreement"); and

WHEREAS, Section 3 and Exhibit B to the Agreement, as amended, provided for Contractor to be compensated in an amount not to exceed \$2,149,500 to implement phases of MCE's Data Analytics Platform and Customer Relationship Manager Platform described within the statements of work therein; and

WHEREAS, the parties desire to amend the Agreement to increase the contract amount by \$200,000 for total consideration not to exceed \$2,349,500;

NOW, THEREFORE, the parties agree to modify Section 3 and Exhibit B as set forth below.

AGREEMENT

1. Section 3 is hereby amended to read as follows:

MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of **\$2,349,500**.

2. The last sentence of Exhibit B is hereby amended to read as follows:

In no event shall the total cost to MCE for the Services provided herein exceed the **maximum sum of \$2,349,500** for the term of the Agreement.

3. Except as otherwise provided herein all terms and conditions of the Agreement shall remain in full force and effect.

MCE Standard Form Amendment Page 1 of 2

IN WITNESS WHEREOF, the parties hereto have executed this FIFTH AMENDMENT TO THE MASTER SERVICES AGREEMENT on the day first written above.

MARIN CLEAN ENERGY:	CONTRACTOR:
Ву:	Ву:
Date:	Date:
Chairperson:	
Ву:	
Date:	

Statement of Work

Amended and Restated Schedule A.19 Statement of Work for Customer Relationship Management ("CRM")

This Amended and Restated Schedule A.19 is entered into as of **August 2**, **2024** ("**A&R Schedule A.19"**) pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and R SYSTEMS INTERNATIONAL LIMITED, hereinafter referred to as "Contractor," dated **April 9**, **2021**, as amended **March 7**, **2022**, **March 16**, **2023**, **March 19**, **2024**, **June 27**, **2024**, and **August 2**, **2024** ("MSA").

Contractor will provide the following services as requested and directed by MCE Vice President of Technology and Analytics, up to the maximum time/fees allowed under this Statement of Work:

Continue to implement the next phase of CRM for MCE, as detailed in Amended and Restated Attachment
 O

Attached as **Amended and Restated Attachment O** is the technical scope of work for this request. In the event there is any conflict between the Terms of this MSA and Amended and Restated Attachment O regarding the services and the relationship between the Parties, the Terms of this MSA shall govern and control the rights and obligations of MCE and Contractor.

Billing:

Contractor shall bill monthly on a time and materials basis and according to the rate schedule listed in Exhibit B of the MSA for hours performed. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of \$281,500 for the term of this Statement of Work. In no event shall the total cost to MCE for the services provided under all statements of work between Contractor and MCE exceed the contract amount set forth in Section 3 of the MSA, as amended.

Term of Statement of Work:

This Amended and Restated Statement of Work shall commence on **August 2, 2024**, and shall terminate on **March 31, 2025**.

IN WITNESS WHEREOF, the parties have executed this Statement of Work – Amended and Restated Schedule A.19 on the date first above written.

APPROVED BY Marin Clean Energy:	Contractor:
By:	By:
Title:	Name:
Date:	Date:

Amended and Restated Attachment O

Technical Scope of Work for Customer Relationship Management (CRM)

Contractor will hereinafter be referred to as "Implementer", "R Systems", "our" and/or "we" and MCE will hereinafter be referred to as "User", "you" and/or "your".

1.1 Maintenance of existing CRM System

The requirements will be implemented in concurrence with Agile methodology framework.

1.1.1 Project Standard Operating Procedures

The following section will define roles and responsibilities of Implementer for the Project

- We will create user stories based on the requirements shared by MCE
- We will follow Source Code versioning standards as defined by MCE
- Our team will be responsible for Code reviews before deployments
- We will be responsible for Solution Design, development activities, unit testing
- We will ensure adherence to Salesforce coding standards and subsequent coding best practices
- Deployment to be undertaken by the Implementer along with publishing a consolidated list of deployment artefacts at end of each sprint
- MCE Business Team to provide written user acceptance testing sign-off prior to Production deployment
- We will provide following set of documents at the time of Project completion including but not limited to:
 - Technical Implementation details
 - Architectural Limitations details (if any)
 - Deployment Document
 - Change Log
- We will provide 2 weeks of Post Go Live warranty support
- MCE to provide Project Completion Certificate Post Go Live
- We will provide user training as required by MCE

1.1.2 MCE Responsibilities

MCE should provide the following to enable successful delivery:

- Provide development and QA sandboxes
- Validate and sign off acceptance criteria for each story
- Establish a bug tracking interface and turnaround cadence
- Publish a fully detailed test case repository on any tool as chosen by MCE
- Publish a passing percentage report for each sprint increment

1.2 General Scope and Deliverable

CRM Setup & Security

The Salesforce setup will encompass the following artifacts:

a. User Profiles & Permission Sets

Profiles in Salesforce defines the tasks an authorized user can perform in the system. It also controls what data they can or cannot see. Permission Sets open additional access that is required by only a specific sub-set of users underneath a common / different profile(s).

b. User Roles

The Implementer will modify the user role hierarchy structure in Salesforce, as needed. Role Hierarchy can be used with Organization-Wide Security settings to determine the levels of access that users have to your CRM org's data. Roles within the hierarchy affect access on key components such as records and reports.

c. User Credentials

The Implementer will modify each user to unique username, password, and Profile, as needed. This deliverable will include creating Salesforce Users for identified MCE Resources.

d. Organization-Wide Security

The org-wide sharing defaults will set the baseline access for records. This allows controlling visibility of record rows based on Record Ownership. It allows controlling access to an Object's records by setting them as Full control to Owner, Read Only for Everyone except Owner, Read Write for Everyone, etc. It also allows opening record access to Salesforce users above the Owner in the Role Hierarchy.

Document Deliverables & User Trainings

The Implementer will work with MCE staff to support the preparation of the following:

Business Requirement Document - This will document the User Stories for each Major Deliverable.

The Implementer will provide the following:

- Solution Design Document This document will include:
 - Technical Implementation
 - Architectural Limitations
- Deployment Document This document will include the Pre and Post Deployment steps to take for successfully deploying the changes to the Production CRM Environment.

The Implementer will also conduct the following Trainings for MCE Administrators:

- Managing the Salesforce Environment
- Onboarding and Offboarding Salesforce Users

The Implementer will conduct the following Trainings for identified MCE users to help them understand and familiarize themselves with the system. MCE will be responsible for providing the list of users.

1.3 Specific Technical Deliverables

Implementer will provide the following deliverables in Sprints, based upon priority from top to bottom:

High level CRM deliverables. Specific deliverables will be tracked using Asana.

- Maintenance of existing system
- Support of existing features
- Enhancement of existing and new functionality
- Hercules Customers onboarding
- Additional Customer Programs Onboarding
- Additional Program Implementation Partners Onboarding
- Re-factoring of objects and APEX and standardization of CRM Architecture
- Decommissioning of deprecated Salesforce Process builders and Conversion to appropriate solution
- Deployment of the solution using GearSet

1.4 Deployment

The following environment will be provisioned:

Prod Environment

The development will start in a sandbox environment and once the user acceptance training ("UAT") is complete, all changes will be pushed into production.

DEV ENVIRONMENT

Each developer will have their own dev environment if needed and push changes daily to fullcopy sandbox, after clearing the QA.

1.4.1 Discovery Process

For each Discovery Phase R Systems will engage with a stakeholder identified by MCE. This engagement will be over daily scheduled calls between the MCE Stakeholder and R Systems at a mutually acceptable time.

MCE Stakeholders will be responsible for sharing the Business processes and Security considerations required. As part of the discussions, R Systems will document and prepare:

- A System Requirement Specification Document (SRS) capturing the requested Business processes and Security considerations for review and approval by MCE stakeholders. This SRS will be considered as an Epic.
- b) Individual user stories under the Epic by breaking the SRS into small, manageable, and trackable development pieces. Each User Story will include but not be limited to:
 - a. Schema Changes (Custom Objects & Fields)
 - b. Display Layout Changes (Page Layouts)
 - c. Security Changes (Field Level Security, Organization Wide Sharing Settings, Profile Access, Sharing Rules)
 - d. Business Processes (Validation Rules, Automations)
 - e. Acceptance Criteria which will define Definition of Done (DoD) which will be pre-signed off by the MCE Stakeholder to freeze the requirement of each ticket.
 - f. Each story will be recorded as a project backlog.
 - g. These stories will be planned for each Sprint Milestone as part of the details outlined in Section 1.3 Project Charter

R Systems will be documenting the above in a Tool provided and approved by MCE. MCE stakeholder will be responsible for signing off on the Acceptance Criteria for each story documented in the tool (Jira / Asana / Trello / Any other tool proposed by MCE).

1.4.2 Quality Assurance Process

The Quality Assurance process will be MCE's Responsibility. The scope of this process will include details laid out under Section 1.1.2 Quality Assurance Scope.

The following process will be followed per Sprint:

- a) R Systems will develop individual user stories defined in the Discovery Phase in Developer Sandboxes and perform unit testing to ensure that the stories meet the defined Acceptance Criteria.
- b) R Systems will then deploy changes for individual user stories to QA Sandbox thereby making these changes available for MCE's QA team to validate.
- c) MCE's QA team will test these deployed user stories as per the QA scope and ensure that all the parameters laid out under the Acceptance criteria are met.
- d) In case any deviation is identified, QA Team will raise appropriate Bug / Enhancement Tickets for the Development team to fix either as part of the current Sprint or as part of the upcoming Sprint.
- e) Once all laid out parameters for the story are met, the QA Team will be responsible to mark the Story as QA Complete
- f) Any Change Requests identified during QA Testing, will be logged as a separate User Story (Enhancement), and will be placed in the Project Backlog. R Systems will be responsible to perform Effort estimations to evaluate if it can be absorbed as part of this project's scope or taken up as a future project.

1.4.3 Project Planning & Coordination

At project kick-off, R Systems will engage all the stakeholders responsible for implementation of the project. The stakeholders including MCE's designee will be involved in the initial project planning and shall be kept in consultation

and with information while monitoring the progress and refining the plans and documents across different phases in consultation. The R Systems Project Manager will be responsible for managing the activities identified during Discovery and support R Systems in the execution of the project and for coordinating the response to the queries raised by R Systems during the project.

1.4.4 Project Tracking & Reporting

Following communication mechanism will be used for regular and effective tracking of project progress.

a) Daily Scrum Calls

R Systems team will conduct a daily scrum call and involve respective MCE business stakeholders to resolve impediments (if any) on as needed basis.

b) Weekly & Monthly Status Report

R Systems team will publish a weekly & a monthly status report to all stakeholders from R Systems and MCE providing the following details:

- Dashboard of progress against planned activities with original schedule, overruns, reasons for overruns and revised schedule (if required)
- Milestones achieved in previous week, with plan for the next week
- Problems encountered, corrective actions taken, and outstanding problems
- Change request tracking, risk identification, analysis, mitigation and contingencies

1.4.5 User Acceptance Testing

The testing will be based on an acceptance test plan, prepared by the MCE Technology and Analytics team and other designated members. The prime objective of user acceptance testing is to allow the users to test the complete Request Tracking Systems (RTS) built on Salesforce ensure that it satisfies the business objectives and requirements that were originally mentioned in the RFO and validated later during phase one with the users. The users are responsible for testing the application; the role of R Systems' team is to support. Before this test can begin, the following activities would need to be completed beforehand:

- Conversion & migration of existing data to new system that serves two purposes, viz. validating data conversion and testing via real data
- Creation of user acceptance test (UAT) case
- Use of bug tracking system to log and monitor identified bugs. Test cases would be repeated till the program successfully passes the test cases
- Creation of Test Report and a joint review meet by R Systems, at the conclusion of UAT phase, to discuss the UAT Report
- All bugs will be resolved prior to UAT completion. Successful completion of a UAT marks acceptance of the Request Tracking system, and any other new implementations

1.4.6 Knowledge Transfer & Training

The R Systems Project Manager along with the team will perform a knowledge transfer to MCE. The knowledge transfer will involve:

- Delivering a written comprehensive plan that outlines all elements of the knowledge transfer
- Providing MCE representatives access to all development, testing, staging, and other environments needed to support the Salesforce enhancements
- Providing MCE IT Staff training on Salesforce enhancements at the conclusion of each iteration cycle and no less than one training session a month.

- Providing execution and control status of knowledge transfer at the end of each development sprint cycle/iteration.
 As requested by MCE Director of Technology and Analytics, R Systems will provide execution and control status of knowledge transfer in weekly status reports
- Delivering a written report along with a presentation to MCE on lessons learned on the knowledge transfer process
- Ensuring a successful knowledge transfer to MCE at the end of each iteration. Successful completion of knowledge
 transfer requires a formal MCE acceptance in writing. A successful knowledge transfer includes delivery of desk
 procedures, user guides on software updates, maintenance, and operations

1.5 High Level Project Schedule

Throughout the work scope, there will be multiple sprints where each sprint will focus on delivering a predefined and agreed set of features. Each sprint will be of Two weeks duration. The sprint will include:

Story Boarding/Task Planning

Solution/Feature Development

Test Deployment

User Demo

1.6 Assumptions

- MCE will assign appropriate contact(s) to participate on-need basis. The contact(s) should be able to
 understand the project purpose, make decisions related to requirements, provide & facilitate access to
 necessary individuals & information within MCE, and to approve final deliverables
- MCE will provide necessary and sufficient access to software applications and network for this effort
- The Solution is based on the provided Requirement document
- As part of the best practice recommended by Salesforce, Implementer will be leveraging Out of the Box (OOB) functionality
- Any customization needs to be approved by both MCE's Director of Technology and Analytics and R Systems.
- The Solution Design consideration should be 90% OOB and only 10% customization. Any deviation should require proper discussion, impacts, and email approval from MCE.
- Test Coverage for customization should be minimum 90%
- All User stories should be captured in Asana
- Implementation should be by using Agile Methodology
- Complete implementation will happen by using Lightning Web Component (LWC)
- Following Sandbox, will be provided for implementation
 - 1 (Partial Copy) Sandbox will be available for DEV
 - 1 (Partial Copy) Sandbox will be available for QA
 - 1 (Full Copy Sandbox) will be available for UAT.

1.7 Cost

Includes design and implementation.

Offshore and onsite engagement

Name	Hours	Total
Offshore CRM developer 1	40 hours/week	\$35
Offshore CRM developer 2	40 hours/week	\$35
Offshore Marketing Cloud developer	20 hours/week	\$35
Offshore CRM lead	40 hours/week	\$35
Offshore Salesforce Technical Lead	20 hours/week	\$55

2 Duration

The term of this SOW begins on August 2, 2024 and ends on March 31, 2025. Any change in project duration, resource requirement, and scope will be subject to change request to be mutually discussed, agreed, and approved in writing by MCE and Implementer.

MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

THIS MASTER SERVICES AGREEMENT ("Agreement") is made and entered into on April 9, 2021 by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") with principal office at 1125 Tamalpais Avenue, San Rafael, CA 94901 and R Systems International Limited, an Indian corporation with principal office at C-40, Sector 59, Noida 201307 UP India and United States address at: 5000 Windplay Drive, El Dorado Hills, CA 95762 (hereinafter referred to as "Contractor") (each, a "Party," and, together, the "Parties").

RECITALS:

WHEREAS, MCE desires to retain Contractor to provide the services described in statements of work ("Statement of Work") to be agreed by the Parties, in form and substance as set forth on **Exhibit A** attached hereto, and which shall be considered Schedules hereto;

Each Statement of Work executed by and between the Parties are made a part hereof ("Services");

WHEREAS, Contractor desires to provide the Services to MCE;

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. SCOPE OF SERVICES:

Contractor agrees to provide all of the Services in accordance with the terms and conditions of this Agreement. "Services" shall also include any other work performed by Contractor pursuant to this Agreement.

2. FEES AND PAYMENT SCHEDULE; INVOICING:

The fees and payment schedule for furnishing Services under this Agreement shall be based on a time and materials basis and as further set forth in **Exhibit B** and by this reference incorporated herein. The hourly rates in Exhibit B shall remain in effect for the entire term of the Agreement ("Term"). The hourly rates in Exhibit B are exclusive of any applicable sales tax or GST which shall be added on the invoices. MCE will pay the applicable fees after MCE reviews and accepts the itemized invoices provided by Contractor for a particular Statement of Work on a monthly basis for services rendered the month prior. Contractor will bill MCE based on the number of hours expended on a Statement of Work for that month, however MCE will not be obligated to pay the applicable fees unless and until MCE Manager of Technology and Analytics has accepted the weekly Deliverables (as set forth in each Statement of Work and attachments thereto) delivered during the invoiced month. Invoices submitted by Contractor shall be considered as accepted and final in case there is no objection by MCE, in writing, within twenty-one business (21) days from the date of submission of the invoice. Contractor shall provide MCE with Contractor's Federal Tax I.D. number prior to submitting the first invoice. Contractor is responsible for billing MCE in a timely and accurate manner. Contractor shall email invoices to MCE on a monthly basis for any Services rendered or expenses incurred hereunder. Fees and expenses invoiced beyond ninety (90) days will not be reimbursable. The final invoice must be submitted within thirty (30) days of completion of the stated scope of services or termination of this Agreement. MCE will process payment for undisputed invoiced amounts within thirty (30) days after acceptance of the applicable Deliverables.

3. MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$550,000.

4. <u>TERM OF AGREEMENT</u>:

This Agreement shall commence on **April 1, 2021** ("Effective Date") and shall terminate on **March 31, 2022**, unless earlier terminated pursuant to the terms and conditions set forth in Section 12.

5. REPRESENTATIONS; WARRANTIES; COVENANTS:

5.1. CONTRACTOR REPRESENTATIONS AND WARRANTIES. Contractor represents, warrants and covenants that (a) it is a corporation duly organized, validly existing and in good standing under the laws of India, (b) it has full power and authority and all regulatory authorizations required to execute, deliver and perform its obligations under this Agreement and all exhibits, schedules and addenda and to engage in the business it presently conducts and contemplates conducting, (c) it is and will be duly licensed or qualified to do business and in good standing under the laws of the State of California and each other jurisdiction wherein the nature of its business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder, (d) it is qualified

and competent to render the Services and possesses the requisite expertise to perform its obligations hereunder, (e) the execution, delivery and performance of this Agreement and all exhibits, schedules and addenda hereto are within its powers and do not violate the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it, (f) this Agreement and each exhibit, schedule and addendum constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, and (g) it is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt.

- **5.2. RIGHTS AND AUTHORITY.** Contractor represents, warrants and covenants that the Services and Deliverables will not: (i) infringe any third-party patent, copyright, trademark, trade secret, or other proprietary right, (ii) contain viruses or other malicious code that will degrade or infect any Deliverables, products, services, software, or MCE's network or systems and (iii) the Deliverables are not governed, in whole or in part, by an Excluded License. "Excluded License" means any software license requiring, as a condition of use, modification, or distribution that the software or other software combined or distributed with it be (i) disclosed or distributed in source code form, (ii) licensed to make derivative works, or (iii) redistributable at no charge.
- **5.3. COMPLIANCE WITH APPLICABLE LAW:** At all times during the Term and the performance of the Services, Contractor shall comply with all applicable federal, state and local laws, regulations, ordinances and resolutions ("Applicable Law")
- **5.4. LICENSING.** At all times during the performance of the Services, Contractor represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all required permits, licenses, certificates and registrations required for the operation of its business and the performance of the Services. Contractor shall promptly provide copies of such licenses and registrations to MCE at the request of MCE.
- **5.5. NONDISCRIMINATORY EMPLOYMENT:** Contractor shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, gender identity, age or condition of disability. Contractor understands and agrees that Contractor is bound by and shall comply with the nondiscrimination mandates of all federal, state, and local statutes, regulations, and ordinances.
- **5.6. PERFORMANCE ASSURANCE:** Regardless of the specific Services provided, Contractor shall also maintain any performance assurances as may be reasonably requested by MCE during the performance of the Services.
- 5.7. SAFETY: At all times during the performance of the Services, Contractor represents, warrants and covenants that it shall:
 - (a) abide by all applicable federal and state Occupational Safety and Health Administration requirements and other applicable federal, state, and local rules, regulations, codes and ordinances to safeguard persons and property from injury or damage;
 - (b) abide by all applicable MCE security procedures, rules and regulations and cooperate with MCE security personnel whenever on MCE's property;
 - (c) abide by MCE's standard safety program contract requirements as may be provided by MCE to Contractor from time to time:
 - (d) provide all necessary training to its employees, and require Subcontractors to provide training to their employees, about the safety and health rules and standards required under this Agreement;
 - (e) have in place an effective Injury and Illness Prevention Program that meets the requirements all applicable laws and regulations, including but not limited to Section 6401.7 of the California Labor Code. Additional safety requirements (including MCE's standard safety program contract requirements) are set forth elsewhere in the Agreement, as applicable, and in MCE's safety handbooks as may be provided by MCE to Contractor from time to time:
 - (f) be responsible for initiating, maintaining, monitoring and supervising all safety precautions and programs in connection with the performance of the Agreement; and
 - (g) monitor the safety of the job site(s), if applicable, during the performance of all Services to comply with all applicable federal, state, and local laws and to follow safe work practices.

5.8. BACKGROUND CHECKS:

(a) Contractor hereby represents, warrants and covenants that any employees, members, officers, contractors, Subcontractors and agents of Contractor (each, a "Contractor Party," and, collectively, the "Contractor Parties") having or requiring access to MCE's assets, premises, customer property ("Covered Personnel") shall have successfully passed background screening on each such individual, prior to receiving access, which screening may include, among other things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of assignment to perform the Services.

- (b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Contractor permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of assignment to perform the Services, or at any time after the individual's date of, assignment to perform the Services, for any of the following ("Serious Offense"): (i) a "serious felony," similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 476, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations ("RICO") Statute (18 U.S.C. Sections 1961-1968)).
- (c) To the maximum extent permitted by applicable law, Contractor shall maintain documentation related to such background and drug screening for all Covered Personnel and make it available to MCE for audit if required pursuant to the audit provisions of this Agreement.
- (d) To the extent permitted by applicable law, Contractor shall notify MCE if any of its Covered Personnel is charged with or convicted of a Serious Offense during the term of this Agreement. Contractor shall also immediately prevent that employee, representative, or agent from performing any Services.
- 5.9. FITNESS FOR DUTY: Contractor shall ensure that all Covered Personnel report to work fit for their job. Covered Personnel may not consume alcohol while on duty and/or be under the influence of drugs or controlled substances that impair their ability to perform the Services properly and safely. Contractor shall, and shall cause its Subcontractors to, have policies in place that require their employees, contractors, subcontractors and agents to report to work in a condition that allows them to perform the work safely. For example, employees should not be operating equipment under medication that creates drowsiness.
- **5.10. QUALITY ASSURANCE PROCEDURES** (REQUIRED IF CHECKED ⊠). Contractor shall comply with the Quality Assurance Procedures and requirements as established in any Statement of Work.
 - Additionally, Quality Assurance Procedures must include, but are not limited to: (i) industry standard best practices; and (ii) procedures that ensure Measure functionality, customer satisfaction, and that the Minimum Qualifications are satisfied
- **5.11. ASSIGNMENT OF PERSONNEL**. The Contractor shall not substitute any personnel for those specifically named in its proposal, if applicable, unless personnel with substantially equal or better qualifications and experience are provided, acceptable to MCE, as is evidenced in writing.
- **5.12. ACCESS TO CUSTOMER SITES** (REQUIRED IF CHECKED □). Contractor shall be responsible for obtaining any and all access rights for Contractor Parties, from customers and other third parties to the extent necessary to perform the Services. Contractor shall also procure any and all access rights from Contractor Parties, customers and other third parties in order for MCE and CPUC employees, representatives, agents, designees and contractors to inspect the Services.

6. INSURANCE:

At all times during the Term and the performance of the Services, Contractor shall maintain the insurance coverages set forth below. All such insurance coverage shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to MCE. The general liability policy shall be endorsed naming Marin Clean Energy and its employees, directors, officers, and agents as additional insureds. The certificate(s) of insurance and required endorsement shall be furnished to MCE prior to commencement of Services. Certificate(s) of insurance must be current as of the Effective Date, and shall remain in full force and effect through the Term. If scheduled to lapse prior to termination date, certificate(s) of insurance must be automatically updated before final payment may be made to Contractor. Contractor shall provide thirty (30) days' advance written notice to MCE of any cancellation or reduction in coverage; failure to provide such notice will be a material breach of this Agreement and MCE may immediately terminate this Agreement or take other actions in its discretion. Insurance coverages shall be payable on a per occurrence basis only, except those required by Section 6.4 which may be provided on a claims-made basis consistent with the criteria noted therein.

Nothing in this Section 6 shall be construed as a limitation on Contractor's indemnification obligations in Section 17 of this Agreement.

Should Contractor fail to provide and maintain the insurance required by this Agreement, in addition to any other available remedies at law or in equity, MCE may suspend payment to the Contractor for any Services provided during any period of time that insurance was not in effect and until such time as the Contractor provides adequate evidence that Contractor has obtained the required insurance coverage.

6.1. GENERAL LIABILITY. The Contractor shall maintain a commercial general liability insurance policy in an amount of no less than **two million dollars (\$2,000,000)** per incident with a four million dollar (\$4,000,000) aggregate limit. "Marin Clean

Energy" shall be named as an additional insured on the commercial general liability policy and the certificate of insurance shall include an additional endorsement page (see sample form: ISO - CG 20 10 11 85).

- **6.2. AUTO LIABILITY** (REQUIRED IF CHECKED ☑). Where the Services to be provided under this Agreement involve or require the use of any type of vehicle by Contractor in order to perform said Services, Contractor shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit (\$1,000,000) and in aggregate. This liability will only be applicable when automobile use is required for performing Services under applicable Statement of Work.
- 6.3. WORKERS' COMPENSATION. The Contractor acknowledges that the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Contractor has employees, it shall comply with this requirement and a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to MCE prior to commencement of Services in compliance with applicable law.
- 6.4. PROFESSIONAL LIABILITY INSURANCE (REQUIRED IF CHECKED ☑). Contractor shall maintain professional liability insurance with a policy limit of not less than \$1,000,000 per incident and \$2,000,000 USD in aggregate. If the deductible or self-insured retention amount exceeds \$100,000, MCE may ask for evidence that Contractor has segregated amounts in a special insurance reserve fund, or that Contractor's general insurance reserves are adequate to provide the necessary coverage and MCE may conclusively rely thereon. Coverages required by this subsection may be provided on a claims-made basis with a "Retroactive Date" prior to the Effective Date. If the policy is on a claims-made basis, coverage must extend to a minimum of twelve (12) months beyond termination of this Agreement. If coverage is cancelled or non-renewed, and not replaced with another claims made policy form with a "retroactive date" prior to the Effective Date, Contractor must purchase "extended reporting" coverage for a minimum of twelve (12) months after termination of this Agreement.
- **6.5. PRIVACY AND CYBERSECURITY LIABILITY** (REQUIRED IF CHECKED ☑). Contractor shall maintain privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs) of at least \$1,000,000 US per occurrence and \$2,000,000 USD in aggregate.

7. OMITTED.

8. **SUBCONTRACTING**:

The Contractor shall not subcontract nor assign any portion of the work required by this Agreement without prior, written approval of MCE, except to R Systems, Inc. which is Contractor's subsidiary or for any subcontract work expressly identified in each Statement of Work and attachments thereto. If Contractor hires a subcontractor under this Agreement (a "Subcontractor"), Subcontractor shall be bound by all applicable terms and conditions of this Agreement, and Contractor shall ensure the following:

- **8.1.** Subcontractor shall comply with the following terms of this Agreement: Sections 9, 10, each Statement of Work and attachments thereto.
- **8.2.** Subcontractor shall provide, maintain and be bound by the representations, warranties and covenants of Contractor contained in Section 5 hereof (as may be modified to be applicable to Subcontractor with respect to Section 5.1(a) hereof) at all times during the Term of such subcontract and its provision of Services.
- 8.3. Subcontractor shall comply with the terms of Section 6 above, including, but not limited to providing and maintaining insurance coverage(s) identical to what is required of Contractor under this Agreement, and shall name MCE as an additional insured under such policies. Contractor shall collect, maintain, and promptly forward to MCE current evidence of such insurance provided by its Subcontractor. Such evidence of insurance shall be included in the records and is therefore subject to audit as described in Section 9 hereof.
- **8.4.** Subcontractor shall be contractually obligated to indemnify the MCE Parties (as defined in Section 17 hereof) pursuant to the terms and conditions of Section 17 hereof.
- 8.5. Subcontractors shall not be permitted to further subcontract any obligations under this Agreement.

Contractor shall be solely responsible for ensuring its Subcontractors' compliance with the terms and conditions of this Agreement made applicable above and to collect and maintain all documentation and current evidence of such compliance. Upon request by MCE, Contractor shall promptly forward to MCE evidence of same. Nothing contained in this Agreement or otherwise stated between the Parties

shall create any legal or contractual relationship between MCE and any Subcontractor, and no subcontract shall relieve Contractor of any of its duties or obligations under this Agreement. Contractor's obligation to pay its Subcontractors is an independent obligation from MCE's obligation to make payments to Contractor. As a result, MCE shall have no obligation to pay or to enforce the payment of any monies to any Subcontractor.

9. RETENTION OF RECORDS AND AUDIT PROVISION:

Contractor shall keep and maintain on a current basis full and complete records and documentation pertaining to this Agreement and the Services, whether stored electronically or otherwise, including, but not limited to, valuation records, accounting records, documents supporting all invoices, employees' time sheets, receipts and expenses, and all customer documentation and correspondence (the "Records"). MCE shall have the right, during regular business hours, to review and audit all Records during the Term and for at least five (5) years from the date of the completion or termination of this Agreement. Any review or audit may be conducted on Contractor's premises or, at MCE's option, Contractor shall provide all records within a maximum of fifteen (15) days upon receipt of written request from MCE. Contractor shall refund any monies erroneously charged. Contractor shall have an opportunity to review and respond to or refute any report or summary of audit findings, and shall promptly refund any overpayments made by MCE based on undisputed audit findings.

10. DATA, CONFIDENTIALITY AND INTELLECTUAL PROPERTY:

10.1. DEFINITION OF "MCE DATA". "MCE Data" shall mean all data or information provided by or on behalf of MCE, including but not limited to, customer Personal Information; energy usage data relating to, of, or concerning, provided by or on behalf of any customers; all data or information input, information systems and technology, software, methods, forms, manuals, and designs, transferred, uploaded, migrated, or otherwise sent by or on behalf of MCE to Contractor as MCE may approve of in advance and in writing (in each instance); account numbers, forecasts, and other similar information disclosed to or otherwise made available to Contractor. MCE Data shall also include all data and materials provided by or made available to Contractor by MCE's licensors, including but not limited to, any and all survey responses, feedback, and reports subject to any limitations or restrictions set forth in the agreements between MCE and their licensors.

"Confidential Information" under this Agreement shall have the same meaning as defined in the Marin Clean Energy Non-Disclosure Agreement between the Parties dated **July 13, 2020**.

- 10.2. DEFINITION OF "PERSONAL INFORMATION". "Personal Information" includes but is not limited to the following: personal and entity names, e-mail addresses, addresses, phone numbers, any other public or privately-issued identification numbers, IP addresses, MAC addresses, and any other digital identifiers associated with entities, geographic locations, users, persons, machines or networks. Contractor shall comply with all applicable federal, state and local laws, rules, and regulations related to the use, collection, storage, and transmission of Personal Information.
- 10.3. MCE DATA SECURITY MEASURES. Prior to Contractor receiving or having access to any MCE Data, Contractor shall comply, and at all times thereafter continue to comply, in compliance with MCE's Data security policies set forth in MCE Policy 009 (available upon request) and MCE's Advanced Metering Infrastructure (AMI) Data Security and Privacy Policy ("Security Measures") and pursuant to MCE's Confidentiality provisions in Section 5 of the Marin Clean Energy Non-Disclosure Agreement between the parties dated July 13, 2020, and as set forth in MCE Policy 001 Confidentiality. MCE's Security Measures and Confidentiality provisions require Contractor to adhere to reasonable administrative, technical, and physical safeguard protocols to protect the MCE's Data from unauthorized handling, access, destruction, use, modification or disclosure.
- 10.4. CONTRACTOR DATA SECURITY MEASURES. Additionally, Contractor shall, at its own expense, adopt and continuously implement, maintain and enforce reasonable technical and organizational measures consistent with the sensitivity of Personal Information and Confidential Information including, but not limited to, measures designed to (1) prevent unauthorized access to, and otherwise physically and electronically protect, the Personal Information and Confidential Information, and (2) protect MCE content and MCE Data against unauthorized or unlawful access, disclosure, alteration, loss, or destruction.
- 10.5. RETURN OF MCE DATA. Promptly after this Agreement or a Statement of work terminates or expires, and for each Statement of work, (i) Contractor shall securely destroy all MCE Data in its possession and certify the secure destruction in writing to MCE, and (ii) each Party shall return (or if requested by the disclosing Party, destroy) all other Confidential Information and property of the other (if any), provided that Contractor's attorney shall be permitted to retain a copy of such records or materials solely for legal purposes.

10.6. OWNERSHIP AND USE RIGHTS.

a) **MCE Data.** Unless otherwise expressly agreed to in writing by the Parties, MCE shall retain all of its rights, title and interest in MCE's Data.

- b) Intellectual Property. Unless otherwise expressly agreed to in writing by the Parties, any and all materials, information, or other intellectual property created, prepared, accumulated or developed by Contractor or any Contractor Party under this Agreement ("Intellectual Property"), including finished and unfinished inventions, processes, templates, documents, drawings, computer programs, designs, calculations, valuations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be owned by MCE on behalf and for the benefit of MCE's respective customers. MCE shall have the exclusive right to use Intellectual Property in its sole discretion and without further compensation to Contractor or to any other party upon payment of all applicable undisputed invoices as per section 2 of this Agreement. Contractor shall, at MCE's expense, provide Intellectual Property to MCE or to any party MCE may designate upon written request. Contractor may keep one file reference copy of Intellectual Property prepared for MCE solely for legal purposes and if otherwise agreed to in writing by MCE. In addition, Contractor may keep one copy of Intellectual Property if otherwise agreed to in writing by MCE.
- c) Intellectual Property shall be owned by MCE upon its creation. Contractor agrees to execute any such other documents or take other actions as MCE may reasonably request to perfect MCE's ownership in the Intellectual Property.
- d) Contractor's Pre-Existing Materials. If, and to the extent Contractor retains any preexisting ownership rights ("Contractor's Pre-Existing Materials") in any of the materials furnished to be used to create, develop, and prepare the Intellectual Property, Contractor hereby grants MCE on behalf of its customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Contractor or any Contractor Party for the sole purpose of using such Intellectual Property for the conduct of MCE's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto. Unless otherwise expressly agreed to by the Parties, Contractor shall retain all of its rights, title and interest in Contractor's Pre-Existing Materials. Any and all claims to Contractor's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Intellectual Property must be expressly disclosed to MCE prior to performing any Services under this Agreement. Any such Pre-Existing Material that is modified by work under this Agreement is owned by MCE.
- 10.7. EQUITABLE RELIEF. Each Party acknowledges that a breach of this Section 10 would cause irreparable harm and significant damages to the other Party, the degree of which may be difficult to ascertain. Accordingly, each Party agrees that MCE shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of MCE Data or Personal Information, in addition to any other rights and remedies that it may have at law or otherwise; and Contractor shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of Contractor's Pre-Existing Materials, in addition to any other rights and remedies that it may have at law or otherwise.

11. FORCE MAJEURE:

Neither Party shall be responsible for delays or failures in performance resulting from unforeseen acts of God, strikes, lockouts, riots, acts of war, and government regulations (collectively, a "Force Majeure Event") where the Party seeking to excuse its performance has used commercially reasonable efforts to ensure its ability to perform despite a Force Majeure Event, including having and maintaining a commercially reasonable business continuity program. A Party that is unable to perform due to a Force Majeure Event must give the other Party prompt notice but no less than three (3) business days after it becomes aware of or reasonably believes it will be unable to perform due to a Force Majeure Event. If as a consequence of Force Majeure, performance by a Party under this Agreement is prevented for a period longer than one (1) month, then the other Party shall have the right to terminate this Agreement without penalties, provided however, MCE will be obligated to pay for any Services it has received and accepted prior to the date the Agreement is terminated.

12. TERMINATION:

- 12.1. Breach; Convenience. Either party may terminate this Agreement or any Statement of Work if the other party is in material breach of any of its obligations under this Agreement and has not cured the breach within thirty (30) days of written notice specifying the breach. MCE may terminate this Agreement or any Statement of work for any reason by giving Contractor thirty (30) calendar days' written notice. Further, MCE may terminate this Agreement including any Statement of Work immediately by providing notice if Contractor: (a) breaches its confidentiality obligations or (b) files for bankruptcy, becomes insolvent or makes an assignment for the benefit of its creditors.
- 12.2. Effect. In the event of termination not the fault of Contractor, Contractor shall be paid for Services performed to the date of termination and accepted in accordance with the terms of this Agreement so long as proof of required insurance is provided for the periods covered in the Agreement, amendment(s), or schedules. Notwithstanding anything contained in this Section 12, in no event shall MCE be liable for lost or anticipated profits or overhead on uncompleted portions of the Services. Contractor shall not enter into any agreement, commitments or subcontracts that would incur significant cancelation or termination costs without prior written approval of MCE, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12. Also, as a condition precedent to the payment of any

cancellation or termination charges by MCE under this Section 12, Contractor shall have delivered to MCE any and all reports, drawings, documents and deliverables prepared for MCE before the effective date of such cancellation or termination.

- 12.3. Changes. This Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission ("CPUC"). The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case MCE shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such CPUC order or directive. MCE may also terminate this Agreement or any Statement of Work if funding for this Agreement or any Statement of Work is reduced or eliminated by a third-party funding source.
- 12.4. Transition. Upon MCE's termination of this Agreement or any Statement of Work for any reason, Contractor shall, and shall cause each Contractor Party to, bring the Services to an orderly conclusion as directed by MCE. Contractor and each Contractor Party shall vacate the worksite but shall not remove any material, plant or equipment thereon without the approval of MCE. MCE, at its option, may take possession of any portion of the Services paid for by MCE.

13. ASSIGNMENT:

The rights, responsibilities, and duties under this Agreement are personal to the Contractor and may not be transferred or assigned without the express prior written consent of MCE except to R Systems, Inc. which is Contractor's subsidiary.

14. AMENDMENT; NO WAIVER:

This Agreement may be amended or modified only by written agreement of the Parties. Failure of either Party to enforce any provision or provisions of this Agreement will not waive any enforcement of any continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

15. DISPUTES:

Either Party may give the other Party written notice of any dispute which has not been resolved at a working level. Any dispute that cannot be resolved between Contractor's contract representative and MCE's contract representative by good faith negotiation efforts shall be referred to Legal Counsel of MCE and an officer of Contractor for resolution. Within 20 calendar days after delivery of such notice, such persons shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If MCE and Contractor cannot reach an agreement within a reasonable period of time (but in no event more than 30 calendar days), MCE and Contractor shall have the right to pursue all rights and remedies that may be available at law or in equity. All negotiations in the course of any mediation agreed to by the Parties are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and Section 1119 is incorporated herein by reference.

16. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California and the Parties hereto agree that venue shall be in Marin County, California. Neither Party will claim lack of personal jurisdiction or forum non conveniens in these courts. Contractor agrees that MCE may serve process on its California subsidiary, R Systems Inc.

17. INDEMNIFICATION:

17.1 Indemnification. Contractor agrees to indemnify, defend, and hold MCE, its employees, officers, and agents, (collectively "MCE Indemnified Parties"), harmless from any and all liabilities including, but not limited to, litigation costs and attorney's fees arising from any and all Claims and losses to anyone who may be injured or damaged by reason of Contractor's negligence, recklessness or willful misconduct in the performance of this Agreement or any Statement of Work. Additionally, Contractor will defend, indemnify, and hold MCE Indemnified Parties harmless from and against all Claims to the extent such Claims arise out of or relate to:

- (A) Contractor's breach of Sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.7, 5.8, 5.9 and Section 10,
- (B) Contractor's infringement, misuse, or misappropriation of third-party intellectual property or proprietary rights, or
- (C) Contractor's non-compliance with applicable laws, rules, or regulations.

"Claim(s)" means any and all (1) third-party claims, actions, demands, lawsuits, or proceedings and (2) damages, costs (including reasonable fees of attorneys and other professionals), or liabilities of any kind (including any fine, penalty, judgement or order issued by a governmental, regulatory or judicial body), in each case arising out of that third party claim, action, demand, lawsuit, or proceeding.

17.2 Additional Remedies. In addition to all other remedies available to MCE, if use of services or Deliverables under this Agreement or any Statement of Work is enjoined or injunction is threatened, Contractor, at its expense, will notify MCE and immediately (i) procure for MCE the right to continue using such services and Deliverables, or (ii) replace or modify such services and Deliverables so that they are noninfringing and useable to MCE's satisfaction. If Contractor does not comply with this Section 17.2, then in addition to any amounts reimbursed under this Section 17, Contractor will refund all amounts paid by MCE for infringing services and Deliverables and pay reasonable costs to transition Services to a new supplier.

18. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF MCE:

MCE is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.). Pursuant to MCE's Joint Powers Agreement, MCE is a public entity separate from its constituent members. MCE shall solely be responsible for all debts, obligations, and liabilities accruing and arising out of this Agreement. No Contractor Party shall have rights and nor shall any Contractor Party make any claims, take any actions, or assert any remedies against any of MCE's constituent members in connection with this Agreement.

19. INVOICES; NOTICES:

This Agreement shall be managed and administered on MCE's behalf by the Contract Manager named below. All invoices shall be submitted by email to:

Email Address:	invoices@mcecleanenergy.org		
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All other notices shall be given to MCE at the following location:

Contract Manager:	Troy Nordquist
MCE Address:	1125 Tamalpais Avenue
	San Rafael, CA 94901
Email Address:	contracts@mcecleanenergy.org
Telephone No.:	(925) 378-6767

Notices shall be given to Contractor at the following address:

Contractor:	R Systems International Limited
Address:	C-40, Sector 59, Noida 201307 UP India
Email Address:	mandeep@rsystems.com
Telephone No.:	

20. ENTIRE AGREEMENT; ACKNOWLEDGMENT OF EXHIBITS:

This Agreement along with the attached Exhibits marked below constitutes the entire Agreement between the Parties. In the event of a conflict between the terms of this Agreement and the terms in any of the following Exhibits, the terms in this Agreement shall govern.

	☒	Check applicable Exhibits	CONTRACTOR'S INITIALS	MCE'S INITIALS
EXHIBIT A.	×	Form of Statement of Work	DS MS	DW Ds
EXHIBIT B.	×	Fees and Payment	DS W/S	DS DS
Schedule A.1	×	Statement of Work for Data Analytics Platform ("DAP")	DS MS	DS DS DS
Schedule A.2	×	Statement of Work for Customer Relationship Management ("CRM")	DS MS	DS DS

21. SEVERABILITY:

Should any provision of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, such invalidity will not invalidate the whole of this Agreement, but rather, the remainder of the Agreement which can be given effect without the invalid provision, will continue in full force and effect and will in no way be impaired or invalidated.

22. INDEPENDENT CONTRACTOR:

Contractor is an independent contractor to MCE hereunder. Nothing in this Agreement shall establish any relationship of partnership, joint venture, employment or franchise between MCE and any Contractor Party. Neither MCE nor any Contractor Party will have the power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided for herein.

23. TIME:

Time is of the essence in this Agreement and each and all of its provisions.

24. THIRD PARTY BENEFICIARIES:

The Parties agree that there are no third-party beneficiaries to this Agreement either express or implied.

25. FURTHER ACTIONS:

The Parties agree to take all such further actions and to execute such additional documents as may be reasonably necessary to effectuate the purposes of this Agreement.

26. PREPARATION OF AGREEMENT:

This Agreement was prepared jointly by the Parties, each Party having had access to advice of its own counsel, and not by either Party to the exclusion of the other Party, and this Agreement shall not be construed against either Party as a result of the manner in which this Agreement was prepared, negotiated or executed.

27. COUNTERPARTS:

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be deemed one and the same Agreement.

28. CONSEQUENTIAL DAMAGES; LIMITATION OF LIABILITY:

28.1 IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR OTHER DIRECT OR INDIRECT DAMAGES, INCLUDING LOST PROFITS OR LOST GOODWILL, WHETHER ARISING FROM CONTRACT OR NEGLIGENCE, EVEN IF THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

- **28.2** Notwithstanding anything contained under this Agreement, each Party's maximum aggregate liability for damages (including attorney's fees and any other costs and expenses related to the collection of such damages), shall be limited to the total fees paid by MCE to Contractor under this Agreement for each approved Statement of Work, for which damages are alleged within twelve (12) calendar months period prior to the action resulting in said damages.
- **28.3** The limitations in Sections 28.1 and 28.2 do not apply to Contractor's indemnification obligations; breach of confidentiality, privacy and security obligations; failure to comply with applicable laws as set forth in Section 5.3; or fraud, willful or intentional misconduct or gross negligence.

CONTRACTOR:

29. SOLICITATION OF EMPLOYEES:

During the term of this Agreement and continuing for two (2) years thereafter, both MCE and Contractor mutually agree not to hire, contract, or solicit the employment of any current or previous employee of either party who has been involved with this Agreement or performance hereunder, either indirectly or directly, unless a period of twelve (12) months has elapsed from the last date that such employee was employed by either MCE or Contractor as the case may be, without the prior written authorization of their respective companies, provided, however, that this Section 29 shall not restrict general advertisements of employment or the rights of any employee of one party, on that employee's own initiative, or in response to general advertisements, to seek employment from the other party and under such circumstances, for the other party to hire such employee.

IN WITNESS WHEREOF,	, the parties have	executed this	Agreement of	on the date	first above v	written.
APPROVED BY						

Marin Clean Energy:

DocuSigned by:

Dawn Wuish

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Docusigned by:
mandup sodlii

Dawn Weisz Name:	mandeep sodhi Name:
Title:	Title:
4/12/2021 Date:	4/12/2021 Date:
By: By: 8ABF434893064F1 Chairperson	
4/13/2021 Date:	
MODIFICATIONS TO STANDARD SHORT FORM MASTER	SERVICES AGREEMENT
☑ Standard Short Form Master Services Agreement C	Content Has Been Modified
	0.3, 10.5, 10.6(b), 11, 12, 13, 15, 16 and 17; added section 5.2, 12.4,
DocuSigned by:	
Approved by MCE Counsel: (atalina Murphy	Date: 4/9/2021

Exhibit A Form of Statement of Work

Schedule A.__ Statement of Work for [Describe Work]

This Schedule A.__ is entered into on **[Date]** pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and R SYSTEMS, INTERNATIONAL LIMITED, hereinafter referred to as "Contractor", dated **April 1**, **2021** ("MSA").

Contractor will provide the following services as requested and directed by MCE Manager of Technology and Analytics, up to the maximum time/fees allowed under this Statement of Work:

[Describe work]

Attached as **Attachment A** is the technical scope of work for this request.

Billing:

Contractor shall bill upon completion of each milestone after MCE has accepted the deliverables within that milestone. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of \$[____] for the term of this Statement of Work. In no event shall the total cost to MCE for the services provided under all statements of work between Contractor and MCE exceed the contract amount set forth in Section 3 of the MSA.

Term of Statement of Work:

This Statement of Work shall commence on April 1, 2021 and shall terminate on March 31, 2022.

IN WITNESS WHEREOF, the parties have executed this Statement of Work – Schedule A.__ on the date first above written.

APPROVED BY Marin Clean Energy:	Contractor:
Ву:	Ву:
Title:	Name:
Date:	Date:

EXHIBIT B FEES AND PAYMENT SCHEDULE

For Services provided under this Agreement, MCE shall pay Contractor in accordance with the amount(s) and the payment schedule as specified below:

Contractor will bill MCE on a time and materials basis based on the number of hours expended on the Project for the previous month according to the following rate schedule:

Salesforce Developer	\$34/hour
Senior Salesforce Developer	\$35/hour
BI Engineer	\$35/hour
Data Engineer	\$35/hour
Visualization Developer	\$35/hour
Onsite Salesforce Developer	\$110/hour
Solution Architect/PM	\$140/hour
Marketing Cloud Blended Support	\$75/hour

Contractor will provide monthly invoices with the following details:

- Approved Time Sheets
- Total Hours Spent by each member
- Project Deliverables achieved during each billing cycle.

Contractor will bill MCE based on the number of hours expended on the Project for the previous month, however MCE will not be obligated to pay the applicable fees unless and until MCE Manager of Technology and Analytics has reviewed and approved each detailed, monthly invoice.

In no event shall the total cost to MCE for the services provided herein exceed the maximum sum of \$550,000 for the term of the Agreement.

Statement of Work

Schedule A.1 Statement of Work for Data Analytics Platform ("DAP")

This Schedule A.1 is entered into on **April 1, 2021** pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and R SYSTEMS, INTERNATIONAL LIMITED, hereinafter referred to as "Contractor", dated **April 1, 2021** ("MSA").

The First Agreement between MCE and Contractor dated August 3, 2020 is terminated as of April 1, 2021.

Contractor will provide the following services as requested and directed by MCE Manager of Technology and Analytics, up to the maximum time/fees allowed under this Statement of Work:

Implement phase 2 of Data Analytics Platform for MCE

Attached as **Attachment A** is the technical scope of work for this request. In the event there is any conflict between the Terms of this MSA and Attachment A regarding the services and the relationship between the Parties, the Terms of this MSA shall govern and control the rights and obligations of MCE and Contractor.

Billing:

Contractor shall bill monthly on a time and materials basis and according to the rate schedule listed in Exhibit B of the MSA for hours performed. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of **\$60,000** for the term of this Statement of Work. In no event shall the total cost to MCE for the services provided under all statements of work between Contractor and MCE exceed the contract amount set forth in Section 3 of the MSA.

Term of Statement of Work:

This Statement of Work shall commence on April 1, 2021 and shall terminate on March 31, 2022.

IN WITNESS WHEREOF, the parties have executed this Statement of Work – Schedule A.1 on the date first above written.

APPROVED BY	
Marin Clean Energy:	Contractor:
By: Dawn Wish	By: Mandey Solli
Title: CEO	Name: COO
4/12/2021 Date:	Date:

Statement of Work

Schedule A.2 Statement of Work for Customer Relationship Management ("CRM")

This Schedule A.2 is entered into on April 1, 2021 pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE" and R Systems, International Limited, hereinafter referred to as "Contractor," dated April 1, 2021 ("MSA").

The Second Agreement between MCE and Contractor dated November 30, 2020 is terminated as of April 1, 2021.

Contractor will provide the following services as requested and directed by MCE Manager of Technology and Analytics, up to the maximum time/fees allowed under this Statement of Work:

Implement phase 2 of CRM System

Attached as Attachment B is the technical scope of work for this request. In the event there is any conflict between the Terms of this MSA and Attachment B regarding the services and the relationship between the Parties, the Terms of this MSA shall govern and control the rights and obligations of MCE and Contractor.

Billing:

Contractor shall bill monthly on a time and materials basis and according to the rate schedule listed in Exhibit B of the MSA for hours performed. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of \$150,000 for the term of this Statement of Work.

Term of Statement of Work:

4/13/2021

This Statement of Work shall commence on April 1, 2021 and shall terminate on March 31, 2022.

IN WITNESS WHEREOF, the parties have executed this Statement of Work – Schedule A.2 on the date first above written.

APPROVED BY Marin Clean Energy: DocuSigned by: Dawn Wush A50878416EBG4F8 Title: CEO 4/12/2021 Date:	Contractor: By: Manday Sollid F50E6B593cD64FF Name: COO Date: 4/12/2021
DocuSigned by: 8ABF434893064F1 Chair Technical Committee	

Attachment A Technical Scope of Work for Data Analytics Platform Phase 2

Major milestones for the Phase-2

1. **Data Ingestion**

- a. Customer data ingestion
- SMD Usage data ingestion (Share my data from PG&E)
- Billing data ingestion c.
- PG&E Blue bills (Monthly Energy Statements)
- Gas Data ingestion and processing е.
- f. Spatial dataset ingestion
- BI Environment creation and report generation g.
- h. Ad-hoc data ingestion

ETL data pipeline

- a. Interval/Usage data Transformation logic (3 days window for Usage data)
- b. XML Data modeling
- c. Create the ETL job using PySpark.
- d. Test the ETL job end to end.
- e. The ETL Data pipeline will

Azure Databricks (Provision on demand)

- a. Analyze Cost effectiveness of Azure Databricks (Provision on demand)
- Design the flow using ADF to launch Azure Data Bricks on demand and shut it down when pipeline finished running. This will save the compute cost.

Data warehouse (Synapse)

- a. Create tables and views for the folloing data:
 - i. Customer data
 - ii. SMD date
 - iii. Billing data
 - iv. PG&E Blue bills
- Utilize Azure Synapse as serverless service to usitlize pay-per-use.

Job Monitoring

- a. Robust metadata and auditing log tables.
- Monitoring design for both Customer and Usage Job.
- The metrics could be but not limited to:
 - i. How many jobs ran in a time window?
 - ii. Job Status: Which Job failed or succeeded.
 - iii. ETL job execution time and detail.

Resource plan

Not all the team member will be working full time except the Azure Engineers.

File Type	Task Type	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
	Development																				
Customer Master - 401	Unit and Integration Testing																				
	Name parsing																				
	Development																				
SMD	Unit and Integration Testing																				
	Development																				
Billing Data	Unit and Integration Testing																				
PG&E Blue bills																					
UAT and Prod support	Support																				
		R-1																			
		R-2																			

2.1 R Systems Resources

The primary responsibilities of the roles are described herein, but it is also understood that the individuals will not be limited to the stated responsibilities but will be required to take up other appropriate tasks and responsibilities as the project demands.

Role	Role Description	Responsibilities
Data Engineer	Will have 5-10 years of experience in working with ETL data pipelines on-prem and cloud. 2+ years of experience working with Azure data platform including ADLS and Azure Data warehouse.	Configure, install, develop, deploy and schedule Data pipeline in-line with designed Azure architecture and infrastructure. Job design review sessions and performance recommendations. Also, Perform ETL and do data validation

Project Manager	10+ years of experience in project management for ETL and Data projects.	Manage and guide data to day activities of the project and give status to the Product
		owner.

2.2 Assumption

- Adding/removing resource will require 2 weeks of notice period.
- For Customer 4013

Files will be copied from PG&E server only There are approx. 15 Reference tables Design will be provided by client

SMD

Design will be provided by client

3.1 Team Composition

Here is the proposed team composition:

Team Member	Number of Members
Azure Data Engineer	2
Project Manager	1

4.1 Effort for Phase-2

It will be 20 weeks of effort for the phase. And, this is T&M based project.

5.1 Cost

Includes Phase-2 design and implementation.

Offshore 20 weeks engagement

Name	Hours	Total			
Data Engineer 1	40 hours/week	\$35			
Data Engineer 2	20 hours/week	\$35			
BI Engineer	20 hours/week	\$35			

Rough estimate of total cost in 26 weeks would be:

80 hours x 40 hrs./week x 20 weeks

= \$56,000

Note: The total cost of the project will not exceed more than \$56,000, assuming there is no change request. Any change request will be approved by MCE and R Systems project manager.

Phase-2 will be T&M based project. As per estimation, this phase will be of 20 weeks.

Add-on resources

In case more resources are needed besides two data engineers and one project manager, those can be added as need basis as mentioned in the rate card below:

Resource	Hourly rate
Data Engineer	\$35
Visualization Developer	\$35

Payment Terms

R Systems will invoice MCE for all time expended at the agreed upon hourly rate and plus actual travel and living expenses. Any travel and/or living expenses needed by Contractor to perform the Services herein require MCE's approval prior to the expense being incurred. Client will be billed monthly.

5.1 Change Request Form

	CHANGE REQUEST FORM							
Change Description								
Project Name: MCE DAP	Change Name:		Number:					
Requested By:	Contact:		Date:					
Description of Change:								
Reason for Change:								
Priority [Circle One]: 1. High 2. Medium 3.	Low							
Impact on Deliverables:								
Import of Not Demanding to Charge (and Des	oon Whyl							
impact of Not Responding to Change (and Rea	Impact of Not Responding to Change (and Reason Why):							
Date Needed:	Approval of Request:		Date:					
	Change Impact							
Tasks/Scope Affected:								
Cost Evaluation:								
Risk Evaluation:								
Additional Resources:								
Duration:								
Impact on Deadline:								
Comments:								
	Sign Offs							
[Circle One]: 1. Accepted 2. Deferred 3. Rej	ected 4. More Info Requested							
Comments:								
Project Manager Signature:		Date:						
Decision Maker Signature:		Date:						

Attachment B

Technical Scope of Work for Customer Relationship Management Phase 2

1.1 Project Lifecycle

This Project will be implemented in concurrence with Agile methodology framework.

1.1.1 Project Standard Operating Procedures

The following section will define roles and responsibilities of Implementer for the Project

- We will create user stories based on the requirements shared by MCE
- We will follow Source Code versioning standards as defined by MCE
- Our team will be responsible for Code reviews before deployments
- We will be responsible for Solution Design, development activities, unit testing
- We will ensure adherence to Salesforce coding standards and subsequent coding best practices
- Deployment to be undertaken by the Implementer along with publishing a consolidated list of deployment artefacts at end of each sprint
- MCE Business Team to provide written user acceptance testing sign-off prior to Production deployment
- We will provide following set of documents at the time of Project completion including but not limited to:
 - Technical Implementation details
 - Architectural Limitations details (if any)
 - Deployment Document
 - Change Log
- We will provide 2 weeks of Post Go Live warranty support
- MCE to provide Project Completion Certificate Post Go Live
- We will provide user training as required by MCE

1.1.2 Quality Assurance Scope

The responsibility for Quality Assurance will be with MCE which should include but not limited to:

- Validate and sign off acceptance criteria for each story
- Smoke and Sanity checks at end of each deployment cycle
- Regression testing at point of delivery of each sprint increment
- Establish a bug tracking interface and turnaround cadence
- Publish a fully detailed test case repository on any tool as chosen by MCE
- Publish a passing percentage report for each sprint increment

1.2 General Scope and Deliverable

CRM Setup & Security

The Salesforce setup will encompass the following artifacts:

d. User Profiles & Permission Sets

Profiles in Salesforce defines the tasks an authorized user that can perform in the system. It also controls what data they can or cannot see. Permission Sets open additional access that is required by only a specific sub-set of users underneath a common / different profile(s).

The Implementer will build upon the basic structure created in Phase 1 to be more specific, as needed, per MCE's requirements.

e. User Roles

The Implementer will modify the user role hierarchy structure in Salesforce, as needed. Role Hierarchy can be used with Organization-Wide Security settings to determine the levels of access that users have to your CRM org's data. Roles within the hierarchy affect access on key components such as records and reports.

f. User Credentials

The Implementer will modify each user to unique username, password, and Profile, as needed. This deliverable will include creating Salesforce Users for identified MCE Resources.

g. Organization-Wide Security

The org-wide sharing defaults will set the baseline access for records. This allows controlling visibility of record rows based on Record Ownership. It allows controlling access to an Object's records by setting them as Full control to Owner, Read Only for Everyone except Owner, Read Write for Everyone, etc. It also allows opening record access to Salesforce users above the Owner in the Role Hierarchy.

The Implementer will build upon the basic structure created in Phase 1 to be more specific, as needed, per MCE's requirements.

Powerpath Instance Migration To CRM

- R Systems will continue the work started in Phase 1 to complete the integration of POWERPATH into the CRM, functionality and data migration.
- Review POWERPATH Architecture for future enhancements to work seamlessly with other changes. This involves analysis of how POWERPATH is setup and capturing / identifying the Data Points captured by Aiqueous. These will be documented for replication in CRM system
- Production Migration & Go-Live plan and documentation

SalesForce Marketing Cloud Integration

As part of this project, the Implementer will perform real time integration of Marketing Cloud_with Salesforce to allow it to reference the data stored natively in Salesforce objects of Accounts, Leads, Contacts and other Custom objects for running the Campaigns. The integration will be done using third party integration tools that MCE will procure.

R Systems will implement the following Marketing Cloud functionality

- Campaigns & Metrics
- Custom Fields Birthdays/Anniversaries & Bounce Data/Reasons
- Leads & Contacts
- Accounts & Person Accounts
- Custom Objects

The implementation will include the following Marketing Cloud components:

- Journey Builder
- Advertising Studio Professional
- Email Studio
- Mobile Studio
- Datorama Reports

Document Deliverables & User Trainings

The Implementer will provide the following documentation as part of this implementations:

• Business Requirement Document

This will document the User Stories for each Major Deliverable.

Solution Design Document

This document will include:

- Technical Implementation
- Architectural Limitations
- Deployment Document

This document will include the Pre and Post Deployment steps to take for successfully deploy the changes to the Production CRM Environment.

The Implementer will also conduct the following Trainings for MCE Administrators:

- Managing the Salesforce Environment
- Onboarding and Offboarding Salesforce Users
- Setup Salesforce Surveys
- Setup Formstack forms

The Implementer will conduct the following Trainings for identified MCE Users to help them understand and familiarize themselves with the system. MCE will be responsible to provide the list of users

1.3 Specific Technical Deliverables

Implementer will provide the following deliverables in Sprints:

- Top 250 Customers: Modify current implementation to use actual energy usage as a criterion for this report
- Train users on all new features and provide documentation for those features as they are implemented during sprints
- Data Migration from Calpine CRM
 - Identify data that is currently managed and hosted by Calpine. At a minimum, at this time we know that this will include:
 - Data that is one-to-one with the Account and/or Service Agreement, such as MCE Product and Opt-In Date
 - Repeating related data, such as Activities, Tasks, Notes, Contacts
 - Implement MCE CRM architecture
 - Identify statuses and fields that needs to be changed
 - Extract Calpine data
 - Product Opt-in and Opt-Out dates
 - Contacts that are only in the Calpine CRM
- Migrate from 4013 Customer data in the MCE data warehouse as needed, to support new and modified functionality
- Migrate and integrate customer usage data
- Migrate or link to data specific to customer billing, including pdfs of customer bills
- When needed, restructure data structure in the CRM architecture to support new and modified functionality, to include remigration of data if needed
- Up to 10 Dashboards with Metrics (only based on available data in MCE CRM and within CRM limits)
- Up to 15 reports (only based on available data in MCE CRM and within CRM limits)
- Set up complex Roles and permissions to support different groups of users having different data access needs, including within departments, as needed
- Set up new Account Record types, with different data sets within objects, as needed
- PMP Migration to Production and Integration to other teams
- Migrate activity data for all Accounts
- Create Custom Component to show more than 8 columns for the historical data
- Field level history tracking for beyond 18 months of history for other objects
- Marketing Cloud integration to CRM (Service Cloud Setup to Marketing Cloud)
- Bidirectional updates between MCE's CRM and MCE's data warehouse (Leveraging middleware tool like Mulesoft/Boomi)
- Setup customer energy profiles
- R Systems will design a process by which new contacts that are communicated to the CRM through automated means (i.e. Formstack) do not directly create Contact records, but rather are set to be processed by MCE to determine if these are new or existing Contacts.
- Modify current DW to CRM integration to account for the correct interpretations of "Closed" accounts
- Analyze and implement a method to make visible to the end-user customers' changes for Opt-In, Opt-out, Opt-up, and Opt-down

1.4 Deployment

For Phase 2 the following environment will be provisioned:

PROD ENVIRONMENT

The development will start in a sandbox environment and once the user acceptance training ("UAT") is complete, all changes will be pushed into production.

DEV ENVIRONMENT

Each developer will have their own dev environment if needed and push changes daily to fullcopy sandbox.

1.4.1 Discovery Process

For each Discovery Phase R Systems will engage with a stakeholder identified by MCE. This engagement will be over daily scheduled calls between the MCE Stakeholder and R Systems at a mutually acceptable time.

MCE Stakeholders will be responsible for sharing the Business processes and Security considerations required. As part of the discussions, R Systems will document and prepare:

- a) A System Requirement Specification Document (SRS) capturing the requested Business processes and Security considerations for review and approval by MCE stakeholders. This SRS will be considered as an Epic.
- b) Individual user stories under the Epic by breaking the SRS into small, manageable, and trackable development pieces. Each User Story will include but not be limited to:
 - a. Schema Changes (Custom Objects & Fields)
 - b. Display Layout Changes (Page Layouts)
 - c. Security Changes (Field Level Security, Organization Wide Sharing Settings, Profile Access, Sharing Rules)
 - d. Business Processes (Validation Rules, Automations)
 - Acceptance Criteria which will define Definition of Done (DoD) which will be pre-signed off by the MCE Stakeholder to freeze the requirement of each ticket.
 - f. Each story will be recorded as a project backlog.
 - g. These stories will be planned for each Sprint Milestone as part of the details outlined in Section Error! Reference source not found.

R Systems will be documenting the above in a Tool provided and approved by MCE. MCE stakeholder will be responsible for signing off on the Acceptance Criteria for each story documented in the tool (Jira / Asana / Trello / Any other tool proposed by MCE).

1.4.2 Quality Assurance Process

The Quality Assurance process will be MCE's Responsibility. The scope of this process will include details laid out under Section 1.1.2 Quality Assurance Scope.

The following process will be followed per Sprint:

- a) R Systems will develop individual user stories defined in the Discovery Phase in Developer Sandboxes and perform unit testing to ensure that the stories meet the defined Acceptance Criteria.
- b) R Systems will then deploy changes for individual user stories to QA Sandbox thereby making these changes available for MCE's QA team to validate.
- c) MCE's QA team will test these deployed user stories as per the QA scope and ensure that all the parameters laid out under the Acceptance criteria are met.
- d) In case any deviation is identified, QA Team will raise appropriate Bug / Enhancement Tickets for the Development team to fix either as part of the current Sprint or as part of the upcoming Sprint.
- e) Once all laid out parameters for the story are met, the QA Team will be responsible to mark the Story as QA Complete
- f) Any Change Requests identified during QA Testing, will be logged as a separate User Story (Enhancement), and will be placed in the Project Backlog. R Systems will be responsible to perform Effort estimations to evaluate if it can be absorbed as part of this project's scope or taken up as a future project.

1.4.3 Project Planning & Coordination

At project kick-off, R Systems will engage all the stakeholders responsible for implementation of the project. The stakeholders including MCE's designee will be involved in the initial project planning and shall be kept in consultation and with information while monitoring the progress and refining the plans and documents across different phases in consultation. The R Systems Project Manager will be responsible for managing the activities identified during Discovery and support R Systems in the execution of the project and for coordinating the response to the queries raised by R Systems during the project.

1.4.4 Project Tracking & Reporting

Following communication mechanism will be used for regular and effective tracking of project progress.

a) Daily Scrum Calls

R Systems team will conduct a daily scrum call and involve respective MCE business stakeholders to resolve impediments (if any) on as needed basis.

b) Weekly & Monthly Status Report

R Systems team will publish a weekly & a monthly status report to all stakeholders from R Systems and MCE providing the following details:

- Dashboard of progress against planned activities with original schedule, overruns, reasons for overruns and revised schedule (if required)
- Milestones achieved in previous week, with plan for the next week
- Problems encountered, corrective actions taken, and outstanding problems
- Change request tracking, risk identification, analysis, mitigation and contingencies

1.4.5 User Acceptance Testing

The testing will be based on an acceptance test plan, prepared by the MCE Technology and Analytics team and other designated members. The prime objective of user acceptance testing is to allow the users to test the complete Request Tracking Systems (RTS) built on Salesforce ensure that it satisfies the business objectives and requirements that were originally mentioned in the RFO and validated later during phase one with the users. The users are responsible for testing the application; the role of R Systems' team is to support. Before this test can begin, the following activities would need to be completed beforehand:

- Conversion & migration of existing data to new system that serves two purposes, viz. validating data conversion and testing via real
 data
- Creation of user acceptance test (UAT) case
- Use of bug tracking system to log and monitor identified bugs. Test cases would be repeated till the program successfully passes
 the test cases
- Creation of Test Report and a joint review meet by R Systems, at the conclusion of UAT phase, to discuss the UAT Report
- All bugs will be resolved prior to UAT completion. Successful completion of a UAT marks acceptance of the Request Tracking system, and any other new implementations

1.4.6 Knowledge Transfer & Training

For all 14 weeks of the R Systems Project Manager along with the team will perform a knowledge transfer to MCE. The knowledge transfer will involve:

- Delivering a written comprehensive plan that outlines all elements of the knowledge transfer
- Providing MCE representatives access to all development, testing, staging, and other environments needed to support the Salesforce enhancements
- Providing MCE IT Staff training on Salesforce enhancements at the conclusion of each iteration cycle and no less than one training session a month.
- Providing execution and control status of knowledge transfer at the end of each development sprint cycle/iteration. As requested by MCE Manager of Technology and Analytics, R Systems will provide execution and control status of knowledge transfer in weekly status reports
- Delivering a written report along with a presentation to MCE on lessons learned on the knowledge transfer process
- Ensuring a successful knowledge transfer to MCE at the end of each iteration. Successful completion of knowledge transfer requires a formal MCE acceptance in writing. A successful knowledge transfer includes delivery of desk procedures, user guides on software updates, maintenance, and operations

1.5 High Level Project Schedule

The CRM implementation will be delivered in 14 Weeks, with five sprints where each sprint will focus on delivering a predefined and agreed set of features. Each sprint will be of Two weeks duration. The sprint will include:

- Story Boarding/Task Planning
- Test Deployment

- Solution/Feature Development
- User Demo

1.6 Assumptions

- MCE will assign appropriate contact(s) to participate on-need basis. The contact(s) should be able to understand the project purpose, make decisions related to requirements, provide & facilitate access to necessary individuals & information within MCE, and to approve final deliverables
- MCE will provide necessary and sufficient access to software applications and network for this effort
- The Solution is based on the provided Requirement document
- As part of the best practice recommended by Salesforce, Implementer will be leveraging Out of the Box (OOB) functionality
- Any customization needs to be approved by both MCE's Manager of Technology and Analytics and R Systems.

- The Solution Design consideration should be 90% OOB and only 10% customization. Any deviation should require proper discussion, impacts, and email approval from MCE.
- Test Coverage for customization should be minimum 90%
- All User stories should be captured in JIRA
- Implementation should be by using Agile Methodology
- Complete implementation will happen by using Lightning Web Component (LWC)
- Following Sandbox, will be provided for implementation
 - o 1 (Partial Copy) Sandbox will be available for DEV
 - o 1 (Partial Copy) Sandbox will be available for QA
 - o 1 (Full Copy Sandbox) will be available for UAT.

FIRST AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

This FIRST AMENDMENT TO MASTER SERVICES AGREEMENT is made and entered into on March 7, 2022, by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and R SYSTEMS INTERNATIONAL LIMITED (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, MCE and Contractor entered into a Master Services Agreement on April 9, 2021 to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform ("MSA"); and

WHEREAS, Section 3 and Exhibit B to the MSA provided for Contractor to be compensated in an amount not to exceed \$550,000 for the services described within the statements of work therein; and

WHEREAS, the parties desire to amend the MSA to increase the contract amount by \$700,000 for total consideration not to exceed \$1,250,000; and

WHEREAS, Section 4 of the MSA stated the MSA shall terminate on March 31, 2022; and

WHEREAS, the parties desire to amend the MSA to extend the time of the MSA;

NOW, THEREFORE, the parties agree to modify Section 3, Section 4, and Exhibit B as set forth below.

MSA

1. Section 3 is hereby amended to read as follows:

MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of **\$1,250,000**.

2. Section 4 is hereby amended to read as follows:

TERM OF AGREEMENT:

This Agreement shall commence on **April 1, 2021** ("Effective Date") and shall terminate on **March 31, 2023**, unless earlier terminated pursuant the terms and conditions set forth in Section 12.

3. The last sentence of Exhibit B is hereby amended to read as follows:

In no event shall the total cost to MCE for the services provided herein exceed the **maximum sum of** \$1,250,000 for the term of the Agreement.

4. Except as otherwise provided herein all terms and conditions of the MSA shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this FIRST AMENDMENT TO MASTER SERVICES AGREEMENT on the day first written above.

MARIN CLEAN ENERGY:

CONTRACTOR:

By: DocuSigned by:

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By: Mandup Sodlii

MCE Standard Form Amendment Page 1 of 2

Date: 3/9/2022 Date: 3/18/2022

CHAIRPERSON:

By: 8ABF434893064F1...

Date: 3/7/2022

SECOND AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

This SECOND AMENDMENT is made and entered into on March 16, 2023, by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and R SYSTEMS INTERNATIONAL LIMITED (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, MCE and Contractor entered into an agreement on April 9, 2021, and subsequently amended on March 7, 2022, to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform ("Agreement"); and

WHEREAS, Section 3 and Exhibit B to the Agreement, as amended, provided for Contractor to be compensated in an amount not to exceed \$1,250,000 for the services described within the statements of work therein; and

WHEREAS, the parties desire to amend the Agreement to increase the contract amount by \$500,000 for total consideration not to exceed \$1,750,000; and

WHEREAS, Section 4 of the Agreement stated the Agreement shall terminate on March 31, 2023; and

WHEREAS, the parties desire to amend the Agreement to extend the time of the Agreement;

NOW, THEREFORE, the parties agree to modify Section 3, Section 4, and Exhibit B as set forth below.

AGREEMENT

1. Section 3 is hereby amended to read as follows:

MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$1,750,000.

2. Section 4 is hereby amended to read as follows:

TERM OF AGREEMENT:

This Agreement shall commence on **April 1, 2021** (Effective Date"), and shall terminate on **March 31, 2024**, unless earlier terminated pursuant the terms and conditions set forth in Section 12.

3. The last sentence of Exhibit B is hereby amended to read as follows:

In no event shall the total cost to MCE for the services provided herein exceed the **maximum sum of** \$1,750,000 for the term of the Agreement.

MCE Standard Form Amendment Page 1 of 2

4. Except as otherwise provided herein all terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this SECOND AMENDMENT TO THE MASTER SERVICES AGREEMENT on the day first written above.

MARIN CLEAN ENERGY:

By: Docusigned by:

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3/20/2023 Date:

Chairperson:

By: S185F1BAECF0439...

Date: 3/20/2023

CONTRACTOR:

By: Mandey Sodii

Date: 3/26/2023

THIRD AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

This THIRD AMENDMENT is made and entered into on by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and R SYSTEMS INTERNATIONAL LIMITED (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, MCE and Contractor entered into an agreement on April 9, 2021, and subsequently amended on March 7, 2022 and March 16, 2023, to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform ("Agreement"); and

WHEREAS, Section 3 and Exhibit B to the Agreement, as amended, provided for Contractor to be compensated in an amount not to exceed \$1,750,000 to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform described within the statements of work therein; and

WHEREAS, the parties desire to amend the Agreement to increase the contract amount by \$318,000 for total consideration not to exceed \$2,068,000; and

WHEREAS, Section 4 of the Agreement stated the Agreement shall terminate on March 31, 2024; and

WHEREAS, the parties desire to amend the Agreement to extend the time of the Agreement;

NOW, THEREFORE, the parties agree to modify Section 3, Section 4, and Exhibit B as set forth below.

AGREEMENT

1. Section 3 is hereby amended to read as follows:

MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$2,068,000.

2. Section 4 is hereby amended to read as follows:

TERM OF AGREEMENT:

This Agreement shall commence on **April 1, 2021** ("Effective Date"), and shall terminate on **March 31, 2025**, unless earlier terminated pursuant the terms and conditions set forth in Section 12.

3. The last sentence of Exhibit B is hereby amended to read as follows:

In no event shall the total cost to MCE for the Services provided herein exceed the **maximum sum of \$2,068,000** for the term of the Agreement.

 Except as otherwise provided herein all terms and conditions of the Agreement shall remain in full force and effect.

MCE Standard Form Amendment Page 1 of 2

IN WITNESS WHEREOF, the parties hereto have executed this THIRD AMENDMENT TO THE MASTER SERVICES AGREEMENT on the day first written above.

MARIN CLEAN ENERGY:

CONTRACTOR:

DocuSigned by:

By: Vicken Kasayinan

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Vicken Kasariian

Date: 3/19/2024 Date: 3/19/2024

FOURTH AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND R SYSTEMS INTERNATIONAL LIMITED

This FOURTH AMENDMENT is made and entered into on 6/27/2024 , by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and R SYSTEMS INTERNATIONAL LIMITED (hereinafter referred to as "Contractor").

RECITALS

WHEREAS, MCE and Contractor entered into an agreement on April 9, 2021, and amended on March 7, 2022, March 16, 2023, and March 19, 2024, to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform ("Agreement"); and

WHEREAS, Section 3 and Exhibit B to the Agreement provided for Contractor to be compensated in an amount not to exceed \$2,068,000 to implement phases of the Data Analytics Platform and Customer Relationship Manager Platform services described within the scope therein; and

WHEREAS, the parties desire to amend the Agreement to increase the contract amount by \$81,500 for total consideration not to exceed \$2,149,500;

NOW, THEREFORE, the parties agree to modify Section 3, and Exhibit B as set forth below.

AGREEMENT

1. Section 3 is hereby amended to read as follows:

MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$2,149,500.

2. The last sentence of Exhibit B is hereby amended to read as follows:

In no event shall the total cost to MCE for the services provided herein exceed the maximum sum of \$2,149,500 for the term of the Agreement.

Except as otherwise provided herein all terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this FOURTH Amendment on the day first written above.

MARIN CLEAN ENERGY:

CONTRACTOR:

By: Jamie Tukey
AC9BC7A118EE4B1...

Date: 6/27/2024

By: Mandup Sodlar 41823A26DE73449...

Date: 6/27/2024

MCE Standard Form Amendment Page 1 of 1

Empowering Our Clean Energy Future





August 2, 2024

TO: MCE Technical Committee

FROM: Alexandra McGee, Vice President of Strategic Initiatives

RE: Responsible Biomass Electricity Development Principles Update

(Agenda Item #07)

ATTACHMENTS: A. Revised Principles on Responsible Biomass Electricity

Development (Redlined Version)

B. Current and Prospective Biomass Projects

C. Responsible Biomass Presentation

Dear Technical Committee Members:

Summary:

MCE supports the development of local small-scale biomass facilities to diversify its portfolio of renewable baseload energy resources. Because there are some environmental impacts related to biomass, the Principles on Responsible Biomass Electricity Development ("Principles") were developed with community feedback as a living document to iterate on the best practices necessary for local projects to minimize emissions while creating opportunities for wildfire mitigation, landfill waste diversion, and workforce opportunities. The Principles were brought to the Technical Committee in November 2021 to guide staff and encourage vendors to bid and select community-sensitive projects.

Benefits and Challenges of Biomass

The generation profile of biomass electricity is fixed, flat, and can run 24/7, making it a valuable baseload resource that can reliably produce energy during critical evening hours. This is highly complementary to intermittent sources of renewable energy like wind or solar. Biomass can also create opportunities for wildfire mitigation by creating an end-use for woody biomass. It can also help jurisdictions meet their waste diversion requirements as set forth by Senate Bill 1383 (2016), which states that jurisdictions must reduce organic waste disposal by 75% by 2025.

On the other hand, Biomass technologies can have varying impacts on the environment, including emitting localized criteria pollutants such as carbon monoxide, nitrogen dioxide, lead, ozone (or smog), particulate matter, and sulfur dioxide.

Policy Engagements

Prioritizing small-scale and environmentally-sensitive biomass facilities can help limit

emissions and local environmental impacts. However, without the economies of scale to support expansion, costs for such facilities remain high. To reduce costs, staff engaged in a multi-year advocacy effort to gain access to the California Public Utilities Commission's (CPUC) Bioenergy Market Adjusting Tariff (BioMAT) program. This program offers the potential for cost-recovery for select bioenergy projects, including biomass projects. After unsuccessful regulatory lobbying, staff began a legislative approach to allow CCAs to access these funds. Staff worked with Napa County Assemblymember Cecilia Aguiar-Curry to write and advocate for Assembly Bill (AB) 843, which was signed in September 2021. CCA customers have always paid into the BioMAT program but, until this bill, CCAs were precluded from participating in the program.¹

Pursuant to AB 843, the resulting CPUC proceeding, and the subsequent CCA advocacy, CCAs can now participate in the CPUC's BioMAT program to secure funds, subject to regulatory processes and on-going CPUC oversight, for certain projects including:

- a) Biogas from wastewater, municipal composting, food processing, or co-digestion;
- b) Biomethane from dairy and other agricultural bioenergy; and
- c) Biogas or biomass from sustainable forest management.

BioMAT is set to expire at the end of 2025 unless extended. As such, MCE would need to execute Power Purchase Agreements (PPAs) for BioMAT-eligible projects before the end of 2025. MCE's current and potential biomass projects are described in Attachment B.

Revision to the Principles

Discussion only.

Staff continue to engage with multiple stakeholders to encourage local projects to align with MCE's need for a time-bound, year-round renewable energy portfolio. The original Principles included feedback from MCE's Community Power Coalition, the Marin Biomass Collaborative, as well as the Bay Area Air Quality Management District. The updated Principles include feedback from Canal Alliance, Natural Resources Defense Council, and other allies. After introductions from MCE Board members, staff also met with Marin Wildfire Prevention Authority, BEAM Circular (Bio-Economy, Agriculture, Manufacturing), and the San Mateo Sustainability Department to invite their edits to the Principles, though they did not have further suggestions. A summary of the edits provided by these stakeholders is outlined on the final slide of Attachment C.

on the final slide of Attachment C.	ie earts provided by triese stakeriolders is outlined
Fiscal Impacts: None.	
Recommendation:	

¹ A detailed history of this effort can be found in a July 2022 article written by MCE staff, "Community Choice Aggregators, Biomass Energy, and California's Just Transition: A Case Study of AB 843 and Responsible Biomass Procurement Principles." https://www.colorado.edu/law/sites/default/files/attached-files/swaroop_online.pdf



CONTRA COSTA | MARIN | NAPA | SOLANO

Principles on Responsible Biomass Electricity Development

Revised August 2024

Technology Preferences:

- MCE will prioritize resources that use a source of organic material that has been diverted from landfills, in support of organic waste diversion requirements set forth and therebymaking them compliance with the requirements of in Senate Bill 1383.
- MCE will prioritize carbon neutral resources and adaptations wherever possible.
- Selected facilities must use BACT (best available control technology) or BARCT (best available retrofit control technology) to reduce emissions to the greatest extent possible.
- Staff will seek to understand if <u>any we can catalyze</u> secondary environmental benefits with new technologies are developed at these facilities, such as creating biochar or biocarbon.
- MCE will support developers in their pursuit of expedited licensing and certification by providing relevant staff expertise and guidance.

Environmental Considerations:

- MCE will prioritize resources that support sustainable forest management and wildfire reduction strategies to minimize the fuels for uncontrolled wildfire (i.e., no fuel farms).
- MCE will prioritize procurement opportunities that proactively minimize local air quality impacts, both from the facility and from the transportation of fuel from its source to the facility. This includes prioritizing procurement from smaller facilities, as a strategy to minimize local air quality impacts.
- MCE will <u>seek to</u> enter into strict agreements pertaining to eligible and prohibited fuels at
 each facility (i.e., no propane or chemically treated wood waste when primary feedstock is
 low).
- MCE will ensure that biomass facilities with which it contracts will have the appropriate California Environmental Quality Act (CEQA) and local air district permits.

Community Sensitivity:

- MCE will not procure biomass electricity from resources located in vulnerable communities
 defined by CalEPA's current CalEnviroScreen tool at the time of contract execution.
 Whenever possible, MCE will strive to procure biomass electricity from facilities that are not
 located in densely populated areas.
- Wherever possible, MCE will strive to avoid improving or prolonging the financial viability of polluting industries at odds with its mission through procurement of electricity produced as a byproduct of those industries. To this end, MCE will not procure electricity generated from biogas produced at concentrated animal feeding operations:
- MCE will solicit feedback from the Community Power Coalition and other partners to identify
 preferred locations and MCE will bring bioenergy procurement opportunities to MCE's
 Community Power Coalition to solicit their input and guidance on project investments.



Current and Prospective Biomass Projects

1. Current MCE Biomass Projects

MCE's current bioenergy contracts include:

- 4.8 MW at the Lincoln Landfill in Lincoln, Placer County
- 3.5 MW at the Redwood Landfill in Novato, Marin County
- 1.6 MW at the Hay Road Landfill in Vacaville, Solano County
- 1.6 MW at the Ostrom Road Landfill in Wheatland, Yuba County
- 1 MW at the Central Marin Sanitation Agency in San Rafael, Marin County

2. Local Prospective Biomass Projects

With the new opportunity to participate in BioMAT, staff engaged with local and regional agencies pursuing biomass projects to ensure they're aware of MCE's appetite to purchase energy from their future facilities. To date, local prospect projects include:

- **Marin Sanitary Service (San Rafael):** Revised their master use permit for a 2 MW biomass facility to produce electricity and fuel for an electric or hydrogen fleet. As of late 2023, the project is stalled due to cost and PG&E requirements.
- Napa Recycling and Waste Services (Napa): Pursuing a 3 MW biomass gasification facility with Phoenix Energy for disposal of urban wood waste and woody "compost overs." The City of Napa has purchased 2.87 acres for this purpose and is aiming for an active PPA by the end of 2024 to use the BioMAT legislation and funding.
- Novato Sanitary (Novato): Worked with Anaergia to use wastewater biosolids, food waste, and wildfire prevention biomass. Financial issues caused Anaergia to withdraw so staff is exploring other vendors to convert biogas to renewable natural gas instead.

While not directly related with a site-specific project, MCE also participates in the Marin Biomass Collaborative. The Collaborative works to capture the opportunities of an expanded biomass recovery and utilization economy in and around Marin County. This includes assessing local feedstock, determining pathways and analyzing the economic and emission potential of local projects. This effort is funded by the Governor's Office of Planning and Research as part of its Woody Feedstock Aggregation Pilot Program and is hosted by the Marin Resource Conservation District. Staff joins meetings, provides input on their forthcoming white paper, sends relevant grant opportunities and even nominated them for the McGlashan Award in 2021.

3. Biomass and Green Hydrogen

The biological material that can be used for biomass electricity can also be used for green hydrogen production. Given this nexus and community concerns about hydrogen, staff have co-developed the Green Hydrogen Principles presented to the Board in May 2024. Staff will continue to monitor notable local projects, including:

- **HCycle (Pittsburg):** Developing a 24/7 renewable hydrogen facility to use waste in a non-combustion thermal conversion process for electricity and hydrogen. The non-hazardous slag byproduct can be used as a concrete aggregate, otherwise it will be disposed. They have a union commitment and have received designation for federal funding through the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES).
- Raven SR (Richmond): Developing a project to turn 99 tons of diverted waste per day from Republic Services via non-combustion technology to 2,400 metric tons of hydrogen per year. This will produce 60% of its own power needs, which will need to ramp up to 5.5 MW of power by 2025. The City Council unanimously approved their CEQA permit, making this the first waste diversion to renewable hydrogen facility permitted in California.

MCE

Principles on Responsible Biomass Electricity Development Update

August 2024 Technical Committee











MCE's Biomass Principles

The principles reflect MCE's efforts to promote responsible biomass electricity development in local and regional communities. They were adopted by MCE's Technical Committee in 2021.



Sourcing Material

Prioritize sourcing material diverted from landfills and not from concentrated animal feeding operations



Carbon Neutral Resources

Prioritize resources with net zero emissions or those that adopt emission reduction technologies



Local Air Quality

Avoid facilities in disadvantaged communities and prioritize reduction of air quality impacts, complying with CEQA and local air permits

MCE's Biomass Principles



Wildfire Reduction Strategies

Prioritize resources that support sustainable forest management



Catalyzing Secondary Benefits

Seek to identify secondary benefits like biochar or biocarbon production



Continuous Community Feedback

Listen to community concerns through the Community Power Coalition

Benefits of Biomass

- Diversify MCE's portfolio of renewable baseload energy resources
- Produces energy at a fixed rate, so it can run constantly, including during peak hours
- Creates wildfire mitigation opportunities
- Meets waste diversion requirements, like those in Senate Bill 1383



Sensitivity to Local Needs

Staff are encouraged to recognize potential environmental drawbacks to biomass technology

- Not all biomass technology has the same environmental impact
- Biomass energy can emit pollutants such as carbon monoxide, nitrogen dioxide, lead, ozone (or smog), particulate matter, sulfur dioxide



Policy Engagements

- Prioritizing small-scale, environmentally sensitive facilities can limit anticipated emissions and negative environmental impacts
- Staff used a multi-year regulatory approach to gain entrance to the CPUC's BioMAT Feed In Tariff program
- When unsuccessful, staff began a legislative approach to be eligible for the funds to develop biomass projects

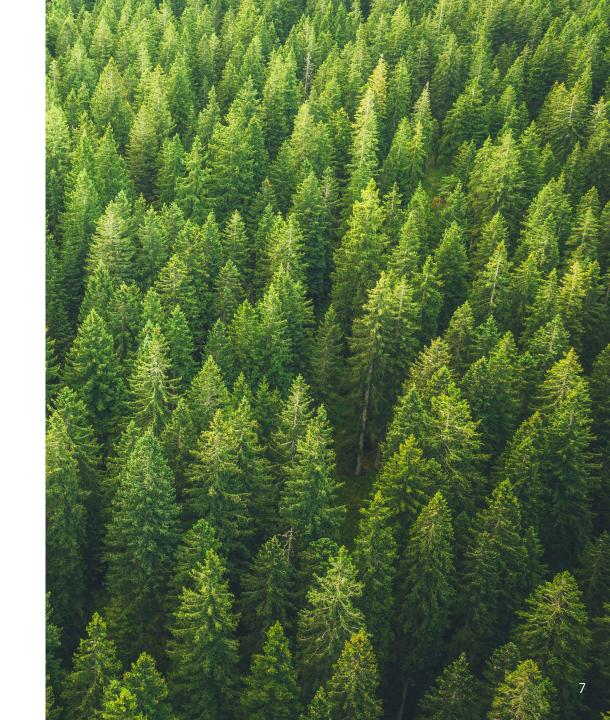


Policy Engagements

- Staff worked with Assemblymember Cecilia Aguiar-Curry to write Assembly Bill 843, allowing CCAs to access these biomass funds
- Signed in September 2023, the bill was part of a climate action package including \$15 billion in state investment for various climate programs

Thanks to Assembly Bill 843, CCAs can now secure funding for projects including:

- Biogas from wastewater treatment, municipal composting, food processing, or co-digestion;
- Biomethane from dairy and other agricultural bioenergy; and
- Biogas or biomass from sustainable forest management



Current Local Projects

MCE can expand its current bioenergy contracts:

- 4.8 MW Lincoln Landfill in Placer County
- 3.5 MW Redwood Landfill in Marin County
- 1.6 MW Hay Road Landfill in Solano County
- 1.6 MW Ostrom Road Landfill in Yuba County
- 1 MW Central Marin Sanitation Agency in Marin County



Potential Local Prospects

Marin Sanitary Service (San Rafael)

- 2 MW biomass facility to produce electricity and possibly fuel
- Updated master use permit, but stalled due to cost and PG&E requirements

Napa Recycling and Waste Services (Napa)

- 3MW biomass gasification facility with Phoenix Energy
 - Would use urban wood waste, woody "compost overs"
- City of Napa purchased 2.87 acres for this project, aiming for an active power purchase agreement by end of 2024 to use BioMAT funding

Novato Sanitary (Novato)

- Worked with Anaergia on biomass project using wastewater biosolids, food waste, wildlife prevention biomass
- Unrelated financial issues caused Anaergia to withdraw
- Exploring other vendors to convert biogas to natural gas instead of electricity

Biomass <> Green Hydrogen Nexus

Especially given community concerns and questions about hydrogen, staff continues to monitor the overlap between biomass and hydrogen:

HCycle (Pittsburg)

- Developing renewable hydrogen from waste
- Non-combustion conversion
- Union commitment
- Federal funding designation

Raven SR (Richmond)

- Would turn 99 tons of diverted waste per day into 2,400 metric tons of hydrogen per year
- Non-combustion conversion
- Richmond City Council unanimously approved CEQA permit
- First waste diversion to renewable hydrogen facility permitted in CA



Revisions to the Principles

- Staff continuously engages with stakeholders to encourage local projects align with MCE's needs for a time-bound and diverse renewable energy portfolio
- Original Principles include feedback from MCE's Community Power Coalition, Marin Biomass Collaborative, and Bay Area Air Quality Management District
- Updated Principles include feedback from Canal Alliance and Natural Resources Defense Council
- Staff also met with Marin Wildfire Prevention
 Authority, BEAM Circular (Bio-Economy, Agriculture, Manufacturing), and the San Mateo Sustainability
 Department who did not provide further edits



Revisions to the Principles

- Reorganized into three categories for ease of understanding: Technology Preferences, Environmental Considerations, and Community Sensitivity
- Acknowledges that organic waste diversion from landfills alone is an important component of, but does not guarantee, SB 1383 compliance
- Addresses environmental justice concerns about ways to mitigate air quality & community impacts
- Responded to suggestions about ways to avoid exacerbating the cumulative effects of extensive nitrogen soil and groundwater contamination from concentrated animal feeding operations
- More accurately reflects the mechanics of the competitive procurement process MCE uses
- Clarifies that projects may be located in areas with lower population density



Thank You



mceCleanEnergy.org amcgee@mcecleanenergy.org