



INFO@FARADAYMICRO.COM



949-305-7820



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STATEMENT OF QUALIFICATIONS

Custom, Turnkey Microgrid Solutions
that are Easy, Affordable, and SMART.



"Kaiser Permanente has been delighted to be the host for two groundbreaking Faraday Microgrids projects...we couldn't be more pleased with their professionalism, collaborative processes, and results."



SETH BARUCH
National Director for
Energy and Utilities at
Kaiser Permanente



FIRM INFORMATION

We work with each individual customer to develop & build custom, turnkey microgrid solutions that combine the power of solar, battery storage, & automated, intelligent controls. As your microgrid EPC, we do the heavy lifting from conception through construction & even operations.

You stay in command, but we carry the load.

TOTAL PROJECT MANAGEMENT:

- PROJECT PLANNING, SCHEDULING & PERMITTING
- CONSTRUCTION MANAGEMENT
- REGULATORY ASSISTANCE
- EQUIPMENT PROCUREMENT
- TAX ADVANTAGE GUIDANCE
- GRANT ASSISTANCE

REFERENCES:



KAISER PERMANENTE
Seth Baruch, National Director
of Energy and Utilities
Phone: 510-625-2376
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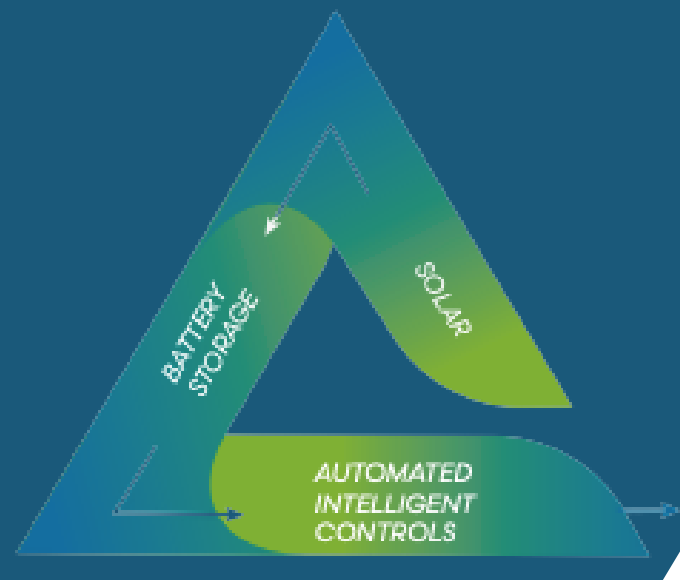


CONTECH, CA
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DAY ONE SOLAR
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**FIRST IN THE NATION
TO CONNECT AN
ALTERNATIVE ENERGY
SOURCE TO HOSPITAL
EMERGENCY POWER.**



FARADAY
MICROGRIDS



Operating continuously since 2011, Faraday Microgrids is uniquely prepared for virtually any commercial building microgrid project. We have deep roots in healthcare facilities and nonprofits, in addition to working successfully with multiple utilities and regulatory agencies.

**No renewable energy project is too large or complex
for us to handle.**



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RELEVANT PROJECT EXPERIENCE



KAISER PERMANENTE | RICHMOND, CA

First Essential Power Healthcare Microgrid in California



SYSTEM:

250KW SOLAR,
1MWH BATTERY,
CHARGE BLISS
CONTROLLER

COMMISSIONED: 2017
STATUS: ACTIVE

Faraday Microgrids was awarded a \$4.77MM grant by the California Energy Commission (CEC) in 2015 to build the first renewable energy microgrid for a California hospital. The Kaiser Permanente project in Richmond included 1) Analysis of facility energy consumption; 2) Collaborative design, engineering, permitting, and interconnection; 3) Construction and commissioning; and 4). Operation.

Construction and commissioning were completed without significant modifications to the plan, including penetrating into the Central Utility Plant (CUP) and interconnecting to one of the OSHPD-governed panels. Notably, we were permitted to construct the first parallel operating systems other than those used with existing diesels – allowing the microgrid to toggle from connection to normal or Life/Safety branches.

After completion of commissioning in 2017, the system has been owned, maintained, and operated by Faraday Microgrids through an agreement with Kaiser Permanente to provide energy services and peak demand reduction. Faraday provides continuous remote monitoring and system tuning – adjusting performance to meet changing facility needs.

RESULTS:

UP TO 50%
REDUCTION IN
UTILITY DEMAND
COSTS AND UP TO
20% OF ENERGY
EXPENSES.



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RELEVANT PROJECT EXPERIENCE



SAN BENITO HEALTHCARE FOUNDATION CLINIC MICROGRID | HOLLISTER, CA

Automatically Islandable System to Keep Facility
Operations Running when the Grid is Unreliable



SYSTEM:

47KW SOLAR,
500KWH BATTERY,
ELM CONTROLLER

COMMISSIONED: 2019

STATUS: ACTIVE

Faraday Microgrids was engaged to design, specify, procure, and supply the battery energy storage systems (BESS), balance of systems, and integration for the San Benito Renewable Energy Microgrid. We developed a fully integrated 500 kilowatt-hour battery energy storage system with power conditioning and third-party controller joined to a forty-seven-kilowatt rooftop solar array.

Notable design achievements included the ability to “island” the entire facility behind an automatic transfer switch – regulating the solar, diesel generator, and battery systems to maintain continuity of services and balance of systems. This keeps the facility up and running even when the Grid is unreliable. The San Benito system received rapid approvals for interconnection and from the AHJ.



RELEVANT PROJECT EXPERIENCE



KAISER PERMANENTE | ONTARIO, CA

First Renewable Energy Microgrid to Automatically Island and Support Hospital Emergency Power



SYSTEM:

2MW SOLAR, 9MWH
BATTERY, 1MW FUEL CELL,
6MW DIESEL
GENERATORS, CHARGE
BLISS CONTROLLER

COMMISSIONED: Q1 2023

STATUS: PENDING

In 2019, Faraday Microgrids was awarded an \$8.35MM grant from the California Energy Commission (CEC) to build the first renewable energy microgrid capable of sustaining the Critical branch of a hospital's power system for 10 hours or more. Not only will this be the largest capacity healthcare microgrid built to date in California, but it will also be one of the largest in the Nation.

This design has been executed with full OSHPD/HCAI engagement and approval. Perhaps most importantly, it has led to direct changes in the approach to supplementary energy resources for emergency power at hospitals that is expected to be reflected formally in the upcoming code cycle.

This will be the first Renewable Energy Project in California to incorporate solar, fuel cell, batteries, and existing diesels in microgrid design and operation. This will also be the first system allowed to supplement existing diesel back up and significantly reduce fossil fuel consumption. In terms of revenue, this will be the first microgrid connected to a hospital to offer the option of ancillary utility services. The solar, batteries, and fuel cell will be interconnected directly into the hospital emergency bus and, therefore able to provide power to the entire emergency system.



Faraday is leading the way for hospitals to become sustainable, energy efficient, and cost-effective with a custom Microgrid solution.

FARADAY
MICROGRIDS

OUR TEAM



David Bliss, MD FACS, FAAP, RMO, CEO

Project Executive; Company Owner

Years of Industry Experience: 11

- Vice-Chair of the Hospital Building Safety Board and previously served as Chair of the Energy Management and Technology Committees for HCAI
- Helped write new NFPA 99 standards for hospital energy systems
- Licensed California Pediatric Surgeon with direct knowledge of the operating requirements and pressures faced by Children's Hospitals across the nation and specifically California.

EDUCATION:

Harvard University Boston, MA
A.B. cum laude

UC San Diego School of Medicine
M.D.

HOSPITAL BUILDING SAFETY BOARD:

Member	2018 - Present
Chair Energy Comm:	2018-2020
Chair Tech. Comm.	2019-2020
Vice-Chair Board	2020-Present
NFPA 99 Comm.	2021

INVITED SPEAKER ON

HEALTHCARE MICROGRIDS:

California Energy Commission	2019
California Society of Healthcare	2019
American Society of Healthcare	2020
Intersolar Conference	2020
Microgrid Knowledge	2021-22

GRANT RECIPIENT:

CEC PON-14-301 (\$4.77MM)	2015
CEC GFO-15-312 (\$1.5MM)	2016
CEC GFO-19-306 (\$8.35MM)	2020



Project Experience

Developer, builder, and owner: Kaiser Permanente Renewable Energy Microgrid 2017

Led the team applying for, and receiving, a \$4.77MM grant from the California Energy Commission to fund the first renewable energy microgrid for a hospital in California. This resulted in interconnection to essential power, revision of NFPA 99 standards, and development of a novel microgrid controller designed for healthcare environments.

Consultant and Provider of BESS and Controls: San Benito Healthcare Foundation Microgrid 2018

Oversaw the development, procurement, installation, and commission of the Battery Energy Storage System (BESS) and controls for the microgrid at the San Benito Foundation medical clinic completed in 2019.

Developer, builder, owner: Kaiser Ontario Renewable Energy Microgrid Serving Critical Power

Applied for and received an \$8.35MM grant from the California Energy Commission to develop, design, engineer, build, own, and operate the first microgrid to support critical power in a hospital. He was able to secure the Kaiser Ontario site and assemble a team of experts for project execution – resulting in a project that has fundamentally changed the perspective regulatory agencies have on renewable energy microgrids as a source of backup power for hospitals.

Developer, builder, owner: DC Fast EVSE, Shops at Mauna Lani, HI 2014

Successfully negotiated with the mall management, the local utility, community organizers, and other stakeholders to design, engineer, build, own and operate the first DC fast electric vehicle charger on the Island of Hawaii. The system operated continuously for several years before being sold to the utility.



OUR TEAM



Ryan Bliss

Director of Operations

Years of Industry Experience: 10

- Extensive experience in both construction management and construction field work, bringing a strong operations and project management ability to the team.
- Provides diligent and detailed oversight of projects, and expert coordination of staff and subcontractors, to consistently deliver projects on time, in or even under budget, and to the satisfaction of each customer.

EDUCATION:

Portland State University: Portland, OR
 B.S. Finance with training in financial analysis, operations, and management

BUSINESS AND FINANCIAL SOFTWARE:

Microsoft Project	Proficient
Procore	Expert
Plangrid	Proficient
Bluebeam	Expert
Autocad	Proficient
OnScreen Takeoff	Proficient
Sage100	Proficient

CONSTRUCTION FIELD EXPERIENCE:

Skilled at communicating with all levels of personnel with a demonstrated capability to defuse conflicts and maintain a productive work group.

RAPID SKILL ACQUISITION:

High aptitude in improving personal and team performance through learning new skills and methods.

COMMUNICATION:

- Able to communicate at all levels from labor through ownership
- Keeps teams on task through clear information and regular contact
- Demonstrated ability to lead teams and be accountable for performance

ORGANIZATION AND EXECUTION:

- Demonstrated capacity to lead large teams across multiple projects
- Collaborates with leadership and customers for implementation
- Committed to project delivery on-time, on-budget, and with highest quality



Project Experience

Director of Operations: Faraday Microgrids

In this role, Mr. Bliss directly oversees the day-to-day operations of the company. His roles and responsibilities include:

- Project procurement, management and coordination
- Staff management
- Business development
- Grant writing and reporting
- Estimating, analysis, and contract review/negotiations
- Financial analysis and general accounting
- Value engineering

Application Developer: Faraday Microgrids Load Profile Analytics Application

Mr. Bliss developed a software tool for Faraday Microgrids that is used to analyze facility load data to determine optimal system configuration for maximizing the goals of the facility whether they be energy expense savings, back-up power, or some combination.

Whitaker/Ellis (Commercial Structural Concrete) Portland, OR: Project Manager [Total Project Value Managed: \$74 million] 06/2016-10/2020

- Project coordination and management
- Subcontractor acquisition and management
- Schedule and budget creation and execution
- Financial forecasting
- Training/overseeing/managing project engineers
- Contract review/negotiation and document organization
- Change order creation and execution
- Value engineering



Project Experience

Project Manager: Kaiser Permanente Ontario Microgrid Project (\$8.35MM)

The Ontario microgrid project includes 2 megawatts of solar, 1 megawatt of fuel cells, 9 megawatt-hours of battery, and over 6 megawatts of diesel generation that will be interconnected to the Critical branch of the hospital emergency system.

The system is designed to be able to island the entirety of required hospital operations for a minimum of 10 hours and is the first of its kind. Mr. Bliss' responsibilities have included team formation, organization, and management; oversight of project implementation; information dissemination; budget compliance; and California Energy Commission grant management.

He has successfully managed multiple major consultants and subcontractors, various suppliers, communications with site representatives, and submissions to HCAI, PG&E, and the City of Ontario. Despite obstacles related to insolvency of one major supplier, site features requiring design adjustments, and being the first project to connect to critical power of a hospital, the project is currently on-time, on-budget, and has received interconnection and HCAI approvals.

Operations Manager: Kaiser Permanente Richmond, CA Microgrid (\$4.77MM)

The Richmond microgrid project was completed in 2017. Since joining the Faraday Microgrids team full time, Mr. Bliss has taken over responsibility for day-to-day management of the systems including preventative maintenance, repairs, controller development, and reconciliation.

He interfaces with the controls management team to ensure continued systems technical and financial performance.



OUR TEAM



Julie Papike

Project Coordinator

Years of Industry Experience: 20

- Over two decades of experience in the construction industry in an administrative capacity.
- Worked in the HVAC, framing, earthwork, and general building contracting industries and joined Charge Bliss in 2015.
- Experience soliciting bids from and vetting subcontractors, overseeing accounts receivable and payable, collecting insurance and release documents, preparing and disseminating project progress documentation, applying for permits, and coordinating both overarching and specific logistics.
- An expert at grant processes: document preparation, submissions, progress reporting, budgeting, and cost reconciliation.

KEY SKILLS:

- Organization & Communication
- **Acquisition,** Logistics, Planning
- Document Control

Project Experience

Project Coordinator: Kaiser Permanente Ontario

Ms. Papike helped to create the successful grant application, identifies and evaluates possible subcontractors, organizes submittals, coordinates team meetings and communications, and assists the Project Manager.

Project Coordinator: Kaiser Permanente Richmond

Ms. Papike coordinated team members, disseminated information, assisted in creation of submittals, and learned OSHPD processes. Since project commissioning, Ms. Papike has been responsible for project performance reconciliation, billing, organizing maintenance and repairs, teaching and media events, and communications with stakeholders.



OUR TEAM



Michael Shine

Superintendent

Years of Industry Experience: 20

- Nearly two decades of electrical and construction management work.
- With his years of experience in the electrical industry, Michael serves as a Superintendent; responsible for ensuring workmanship and consistency.
- Michael has assisted in developing and executing the 3-week roller, directing the crew in day-to-day construction and remained responsible for the supervision of sub-contractors and the procurement of materials.

EDUCATION/CERTIFICATIONS:

Associate's Degree, Junior College -
 Bakersfield, CA
 OSHA 30 Certified, EM 385-1-1 USACE
 Safety & Health, Construction Quality
 Management (QCM). CPR & first Aid. Covid-
 19 Safety Training. NFP

KEY SKILLS:

- Project Management
- Regulatory Compliance
- Risk Assessment & Mitigation
- Safety & Quality Control
- Site Administration
- Stakeholder Collaboration
- Documentation & Reporting
- Team Leadership

PROJECT EXPERIENCE

Successfully managed two large scale solar canopy jobsites simultaneously at federal prisons, totaling about 15 MW as acting Construction Manager with Blue Oak Energy.

ELECTRICAL EXPERIENCE:

- Electrical/Technician: conducted testing and assessments of new systems and repairs to maintain electrical operations
- Ten years of owning/operating electrical entity: with focus on troubleshooting and repair, budget, timescales, service.
- Experience as Electrician/Foreman



OUR TEAM



David Reilly

Project Manager

Years of Industry Experience: 15

- Highly organized Project Manager with over 15 years of expertise in the electrical industry.
- Experience leading complex projects on schedule, within budget and exceeding expectations.
- Mr. Reilly has an international background, having worked in Ireland, UK, Australia, and now in the USA, has been instrumental in his deep understanding of communication and diverse people.
- A unique perspective and a strong track record of success in managing projects effectively.

EDUCATION/CERTIFICATIONS:

Dublin Institute of Technology Diploma in IT:

GPA: 3.5

Dublin Business School Diploma in Business:

GPA: 3.6

Electrical Engineering School (QQI) Master

Apprenticeship in Electrical: GPA: 3.6

PROFESSIONAL EXPERIENCE:

- Sr. Project Manager Regulatory Compliance
- Owner, Electrical Contractor
- Project Manager, Electrical

KEY ACHIEVEMENTS:

- Successfully operated and expanded & sold own electrical contracting business in the UK.
- Led project teams to complete numerous commercial rollouts across the US.
- Facilitated significant growth by expanding Irish-based company operations into the UK market.
- Built strong client relationships and expanded subcontractor networks, contributing to national-level.
- Built a subcontractor network at the national level.



OUR TEAM



Maria Naranjo

Finance Manager

Years of Industry Experience: 18

KEY SKILLS:

- Comprehensive Financial Management & Compliance
- Grant Expertise
- Interface with Accountants, Auditors, Payroll
- Extensive experience working in construction finance, with the skills to manage all aspects of project financials.
- Successfully navigated high value projects from initiation to close-out, including the most recent Charge Bliss microgrid at Kaiser Permanente, Ontario, CA.
- Adept with G.A.A.P., standard and complex financial reporting types, audits, sophisticated record keeping for disadvantaged business, prevailing wages, and State and Federal compliance.
- Bilingual (Spanish and English).
- Software Proficiency: Computerease, Timesuite Toolbox, QuickBooks, Peachtree, Microsoft Office, Procore, Prolog , Sage 300, TOM

Project Experience

Project Finance: Kaiser Permanente Ontario

Ms. Naranjo manages the full range of financial matters, including all reporting and reconciliation with the CEC and Kaiser Permanente, validating prevailing wage reporting, and project accounting. She interfaces with all levels of project participants from the design team to suppliers and subcontractors, funders, and regulatory agencies.

Project Finance: Kaiser Permanente Richmond

Ms. Naranjo managed all accounts receivable and payable activities related to the operation and maintenance of the Richmond microgrid. This includes process of subcontractor invoices, budget tracking, and regular invoicing to Kaiser for maintenance and operational activities.





Thank You for Considering Faraday Microgrids for Your Renewable Energy Project



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