



# Statement of Qualifications Mission Springs Water District Energy Conservation and Efficiency Services Plan

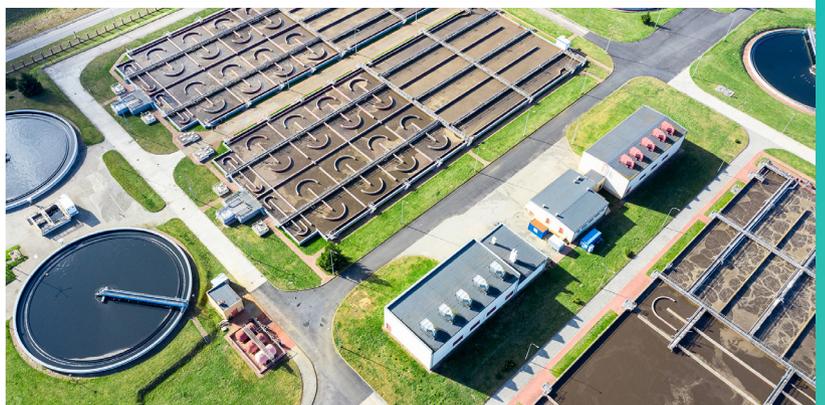
July 28, 2022

**Prepared For:**

Mission Springs Water District  
66575 Second Street  
Desert Hot Springs, CA 92240

**Prepared By:**

ENGIE  
1420 Iowa Avenue  
Riverside, CA 92507



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# Mission Springs Water District Energy Conservation and Efficiency Services Plan

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Mission Springs Water District  
66575 Second Street  
Desert Hot Springs, CA 92240

**PREPARED BY:**

ENGIE  
1420 Iowa Avenue  
Riverside, CA 92507

Ashu Jain, PE  
Senior Program Development Manager  
714-473-7837  
ashu.jain@engie.com

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# A. Table of Contents

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## B. Cover Letter and Executive Summary



## B. Cover Letter and Executive Summary

July 28, 2022

Assistant General Manager  
Mission Springs Water District  
66575 Second Street  
Desert Hot Springs, CA 92240

### RE: Energy Conservation and Efficiency Services Plan

Dear Sir:

Mission Springs Water District (MSWD or the District) can save money through a guaranteed energy savings program and engage its local community with a custom program by partnering with ENGIE Services U.S. Inc.

The District can reduce its energy, save money, and modernize its facilities by partnering with ENGIE Services U.S. through a no-cost, no-risk energy project.

As one of the largest energy efficiency companies in the world with a strong local presence and deep experience in Riverside County, ENGIE Services U.S. is qualified to serve the District's objectives specified in this RFQ. By choosing ENGIE Services U.S., the District will partner with one of the **most experienced and financially sound companies in the energy services industry.**

The Respondent, ENGIE Services U.S. Inc. (ENGIE Services U.S.), is part of the ENGIE Group (ENGIE), a global company in low-carbon energy services.

We bring an unparalleled record working with California public entities and have an unmatched understanding of the unique facilities, financial, and community needs that the District will face in the development and delivery of this project. We are confident that the increased rigor of our Water District specific process results in improved outcomes across the board, including lower costs, optimized savings, a greater breadth of proposed technological solutions, reduced risk, and an on-time, on-budget delivery.

ENGIE Services U.S. is the best energy partner for the District and our experience and qualifications will benefit the District in the following ways:

- **No-Cost, No-Risk IGA:** ENGIE Services U.S.'s proposal includes performing the comprehensive energy audit, also known as the Investment Grade Audit (IGA), at no cost and at our own risk. If the District decides not to implement the project after receipt of the IGA, the District will not owe money to ENGIE Services U.S., making the project development risk-free for the District.
- **Excellent Customer References:** We have several Special District partnerships around the state of California, including **Yucaipa Valley Water District, Indian Wells Valley Water District, West County Wastewater District**, and many others. Specifically, in Riverside County, we have completed projects with the following entities: City of Palm Springs, City of Moreno Valley, City of San Jacinto, Banning USD, Jurupa USD, Lake Elsinore USD, Moreno Valley USD, Nuvview USD, and Perris Union High School District.

- More Experienced Resources Than Any Other Company:** We offer more resources in California than any of our competitors. Because of this, ENGIE Services U.S. can work efficiently and effectively to meet and exceed the project schedule. Our California team includes 27 registered California PEs, 11 Certified Energy Managers, and 9 LEED Accredited Professional certified engineers. Our project team has decades of experience and includes in-house project finance, project management, water/wastewater process upgrades, construction management, operations and maintenance (O&M), post-construction training, and measurement & verification (M&V) professionals to ensure savings for years to come. **ENGIE Services U.S. has a team of some of the most talented individuals in the industry that are dedicated to water/wastewater projects.**
- Financial Strength:** We currently have a \$75,000,000 single project bonding limit, with an aggregate bonding capacity of \$1,000,000,000. As a wholly owned subsidiary of ENGIE, we have an investment-grade credit rating and significant balance sheet strength. ENGIE Services U.S. has delivered billions in public sector energy performance contracts nationwide. Our strong fiscal backing means we will be able to offer the District multiple financing options and proudly stand behind our work for years to come.
- Guaranteed Performance:** While our customer references and repeat business can speak to the customer satisfaction and quality of our work, our actual guaranteed performance speaks to our quality performance as well. Our M&V team oversees a **guarantee portfolio in excess of \$900 million** with a national average inception-to-date performance against guarantee is **108% for Comprehensive** projects. This performance is among the leaders in the energy services industry. If project performance does not meet or exceed our guaranteed performance, ENGIE Services U.S. writes the customer a check for the difference, without delay or legal hassle.
- On-Time, On-Budget Delivery with Transparent Open Book Pricing:** ENGIE Services U.S. contracts are firm fixed price where we absorb the technical and financial risks. The only change orders we implement are driven by the customer to incorporate scope they would like to add to the project. **We have a straightforward open book pricing approach.** This approach assures you will receive a top-performing project at a fair and reasonable price. Each identified expense or cost item will be reviewed by the District prior to contract approval. We will bid the installation work competitively and provide all the bids to the District for information.
- Community Based Programs:** We understand your District area’s population is growing immensely, therefore, we believe we can provide a large impact for the residents. At our cost, ENGIE Services U.S. offers a robust community engagement program. Through our community engagement professionals, we can partner with the District and identify ways to support and enrich the community through our energy partnership. ENGIE Services U.S. can create a customized community engagement and education program. For example, we can explore new programs, identify existing District programs that we can support, and partner with the local school district.

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 **48**  
Years of ESPC experience

 **Highest Industry Accreditation**  
NAESCO Energy Services Provider designation

 **\$700 million**  
Customer energy costs saved over 11 years

 **108%**  
Savings guarantee success rate

 **\$75 million**  
Available bonding for single project

 **9,000+**  
Energy projects to date

 **500+**  
Energy projects for Public Sector Agencies

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### *Potential Project Savings*

As discussed in further depth in the proposal, ENGIE Services U.S. has in-house experience for all of the measures listed in the RFQ. Based on the knowledge of our highly experienced team, and our review of publicly available information, we believe there is an excellent opportunity for a financially attractive project for MSWD. However, without having access to your facilities, drawings, and electrical data, all the potential energy conservation measures (ECMs) mentioned below remain to be confirmed. A more detailed description of these ECMs is given in Section D of the SOQ:

- **ECM 1:** Oxidation Ditch Sequenced Aeration at Horton Wastewater Treatment Plant (Horton)
- **ECM 2:** Install VFDs on Oxidation Ditch Aerators at Horton
- **ECM 3:** Solar Installation for Horton
- **ECM 4:** Solar Installation for New Regional Water Reclamation Facility
- **ECM 5:** Mixing in the Storage Tanks to Reduce Disinfectant Use
- **ECM 6:** Pump Upgrades

The total estimated savings from this project are \$580,000 annually with a total project price of \$5,400,000. As the cash flow given on page 19 shows, this project could be very attractive for MSWD with almost \$0.5 million in net savings annually and almost \$15 million over the life of the project.

Given our extensive experience contracting with California public entities on design-build energy projects, we applaud the District's process for carefully considering both qualifications and compliance. Our standard development process as described in Section D ensures clear communication, collaboration and transparency with District staff and leadership throughout the process. If selected as your partner through this RFQ, we are prepared to provide both design and implementation services under a single contract to satisfy the requirements of California Government Code Section 1090. As such, we will conduct the IGA completely at our risk without the need of entering into a Professional Services Agreement.

ENGIE Services U.S. is confident our team brings the highest value and lowest risk to the District due to our public sector experience, company balance sheet, stability, and ability to partner on a unique, customized community engagement program. Should you have any questions, please do not hesitate to reach out to Ashu Jain, Senior Program Development Manager, at (714) 473-7837 or [ashu.jain@engie.com](mailto:ashu.jain@engie.com).

Sincerely,



**Courtney Jenkins**

Vice President and General Manager  
Authorized to Sign on Behalf of  
ENGIE Services US Inc.

**Ashu Jain, PE**

Senior Program Development Manager  
714-473-7837  
[ashu.jain@engie.com](mailto:ashu.jain@engie.com)  
*Primary Point of Contact*

Local Office: 1420 Iowa Avenue, Suite 210 Riverside, CA 92507

Corporate HQ: 500 12<sup>th</sup> Street, Suite 300 Oakland, CA 94607



## C. Personnel



# C. Personnel

## C.1 Organizational Chart

ENGIE’s Project Team’s structure is shown in Figure 1 and details the roles, responsibilities, and relationships between team members. Staff resumes follow the organizational chart.

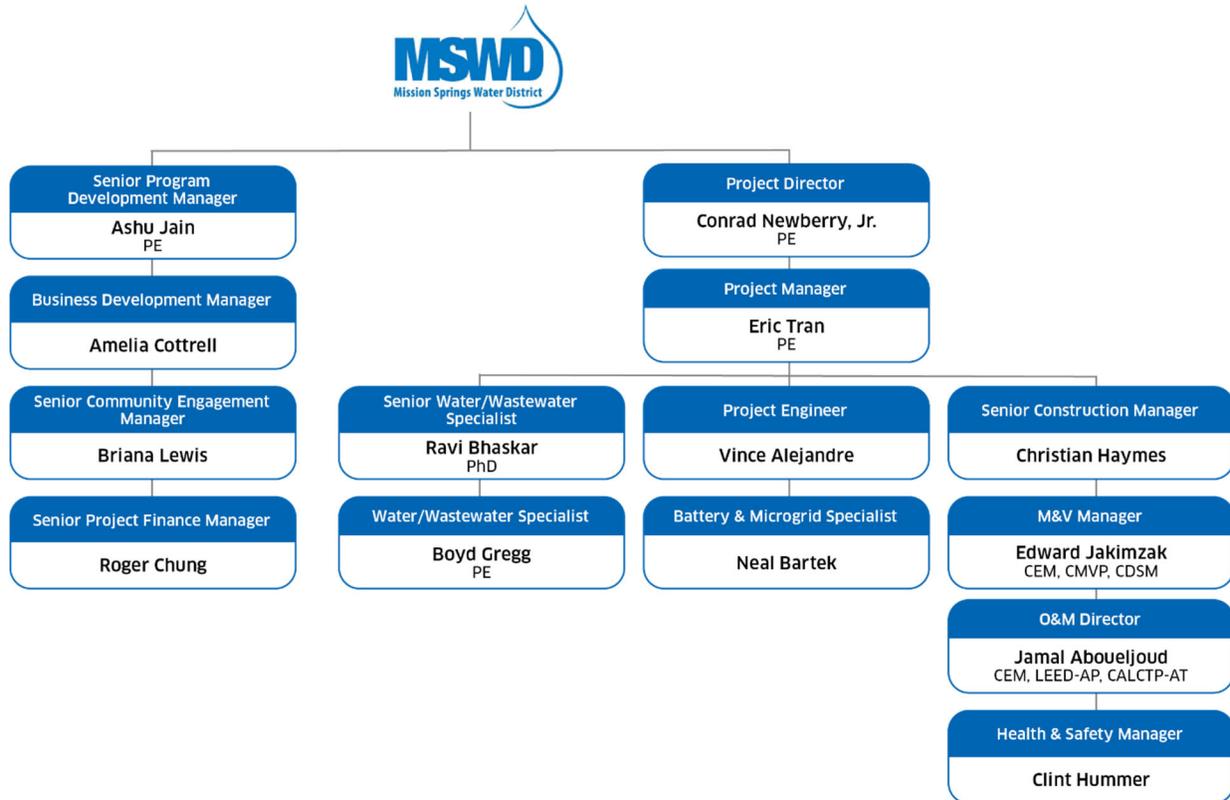


Figure 1. Organizational Chart

## C.2 Team Resumes



**Ashu Jain, PE**  
Senior Program Development Manager

**Role:** Ashu brings 40+ years of experience in solar, HVAC, and energy infrastructure project development to this project.

**Years of Experience:** 40 years

**Education:** MBA, University of California, Los Angeles

BS, Mechanical Engineering, Indian Institute of Technology, Kanpur, India

**License(s)/Registration(s):** Registered Professional Engineer – Mechanical, CA

**Relevant California Experience:**

- West County Wastewater District
- Yucaipa Valley Water District
- Selma Kingsburg Fowler County Sanitation District
- Indian Wells Valley Water District
- City of Palm Springs
- Victor Valley College
- Copper Mountain College



**Amelia Cottrell**

*Business  
Development  
Manager*

**Role:** Amelia develops and implements energy efficiency and renewable generation projects for public sector clients. She ensures that our programs positively impact our client's general fund, improves facility operations and efficiency, promotes clean renewable energy, and provides measurable improvements to customers' defined goals and objectives.

**Years of Experience:** 4 years

**Education:** BA, Finance, Michigan State University, Easting Lansing, MI

**Relevant California Experience:**

- West County Wastewater District
- Yucaipa Valley Water District
- Central USD
- Santa Barbara Unified School District
- City of Corcoran
- City of Buellton



**Conrad  
Newberry, Jr.,  
PE**

*Project Director*

**Role:** Conrad leads a team of experienced engineers, project managers, and construction personnel fulfilling project implementation.

**Years of Experience:** 34 years

**Education:** BS, Mechanical Engineering, California State Polytechnic University, Pomona, CA

**License(s)/Registration(s):**  
Registered Professional Engineer –  
Mechanical, CA

**Relevant California Experience:**

- Indian Wells Valley Water District
- Orange County USD – Multi-Phases
- Los Angeles CCD
- Santa Monica College – Multi-Phases
- Dinuba USD – Multi-Phases
- City of La Habra



**Eric Tran, PE**

*Project Manager*

**Role:** Eric identifies and develops scopes, costs, and savings that address customers' priorities and needs. He also maintains budgets and schedules and ensures stakeholder satisfaction.

**Years of Experience:** 10 years

**Education:** BS, Environmental Engineering, University of California, San Diego

**License(s)/Registration(s):**  
Registered Professional Engineer –  
Mechanical, CA

**Relevant California Experience:**

- Indian Wells Valley Water District
- Desert Sands USD
- City of Port Hueneme
- City of Santa Clarita
- City of Corcoran
- County of Tulare
- County of Kings



**Vince Alejandre**

*Project Engineer*

**Role:** Vince provides solar PV, energy storage, electrical and mechanical engineering, solar thermal, lighting, and construction services. He models and designs Battery Energy Storage Systems (BESS) projects and performs site usage audits and rate structure analysis to determine technology feasibility, design, and implementation techniques.

**Years of Experience:** 8 years

**Education:** BS, Mechanical Engineering, California State Polytechnic University, Pomona, CA

**Relevant California Experience:**

- Yucaipa Valley Water District
- County of Riverside
- City of Corcoran
- City of Moreno Valley
- City of San Jacinto
- Montebello USD
- Banning USD
- Burbank USD
- La Mesa Spring Valley USD
- Magnolia SD
- San Diego USD



**Briana Lewis**

*Senior Community Engagement Manager*

**Role:** Briana develops programs that compliment and build on the energy work. She collaborates with customers at every phase of a project, serving as an ongoing point of contact and resource for customers with our education and engagement programs.

**Years of Experience:** 22 years

**Education:** MPA, California State University, Dominguez Hills

BA, University of California, Santa Cruz

**Relevant California Experience:**

- West County Wastewater District
- Nuview USD
- Magnolia SD
- Helendale SD
- Mount Baldy SD
- Montebello USD
- Perris UHSD
- Moreno Valley USD



**Neal Bartek**

*Battery & Microgrid Specialist*

**Role:** Neal ensures that designs, procures, constructs, and microgrid projects meet our customers' requirements. His experience includes microgrids, BESS, distributed controls, and integrating renewable generation.

**Years of Experience:** 23 years

**Education:** BS, Operations Research & Industrial Engineering, Cornell University, Ithaca, NY

**Relevant California Experience:**

- Yucaipa Valley Water District
- Adventist Health Systems/West
- El Dorado UHSD
- Chula Vista ESD
- Santa Barbara USD
- City of Milpitas
- City of Menlo Park
- Solano County
- Sierra Southwest Cooperative: Anza Microgrid



**Ravi Bhaskar,**  
**PhD**

*Senior  
Water/Wastewater  
Specialist*

**Role:** Ravi specializes in energy and operational efficiency improvement measures in water and wastewater treatment plants. His projects include control systems design, aeration optimization, biological nutrient removal process retrofits, and biosolids process optimization.

**Years of Experience:** 33 years

**Education:** PhD, Chemical Engineering, University of Kansas

MS, Chemical Engineering, University of Kansas

MSc, Chemistry, University of Madras, Madras, India

BSc, Chemistry, Loyola College, Madras, India

**Relevant California Experience:**

- West County Water District
- U.S. Patent 8,221,331 for Aeration Basin Dissolved Oxygen control with off gas monitoring (Honeywell)
- U.S. Patent 4,513,034 for membrane with electrically controlled permeability (Merck)
- U.S. Patent 5,120,349 for Microcapsule with temperature sensitive release profile (Landec)



**Boyd Gregg,**  
**PE**

*Water/Wastewater  
Specialist*

**Role:** Boyd specializes in co-digestion, biosolids, waste-to-energy, and combined heat and power (CHP) systems. He works on many co-digestion, biosolids, waste-to-energy, and CHP projects as an engineer and project manager.

**Years of Experience:** 20 years

**Education:** MS, Civil Engineering – Applied Fluid Mechanics, Clemson, University, Clemson, SC

BS, Civil Engineering, Clemson, University, Clemson, SC

**License(s)/Registration(s):**

Registered Professional Engineer – Civil

**Relevant Experience:**

- Altoona Water Authority Biosolids Improvement, PA
- City of Oneida's Organics and Water Resource Recovery Center, NY
- Frederick-Winchester Service Authority, VA
- Middle Oconee Water Reclamation Facility (WRF) Expansion and Upgrade, GA
- Northwest Cobb WRF Expansion, GA



**Christian  
Haymes**

*Senior Construction  
Manager*

**Role:** Christian manages all facets of field requirements, including safety, customer interaction and communication, permit acquisition, subcontractor selection, pricing, and project coordination.

**Years of Experience:** 25 years

**Education:** OSHA-30 Training

**Relevant California Experience:**

- Los Angeles Community College District
- San Diego USD
- Orange USD
- Los Angeles USD
- Chula Vista Elementary USD
- Escondido USD
- East Los Angeles College



**Edward  
Jakimzak,**  
CEM, CMVP,  
CDSM  
*M&V Manager*

**Role:** Ed manages all ongoing services necessary to fulfill performance contracting responsibilities. He coordinates and performs all physical measurements and creates the reports in accordance with the International Performance M&V Protocol (IPMVP).

**Years of Experience:** 18 years

**Education:** MS, Energy Management, New York Institute of Technology, Old Westbury, NY  
BS, Electrical Engineering, California State University, Northridge, CA

**Certifications:** Certified Energy Manager (CEM) – Association of Energy Engineers (AEE)  
Certified Measurement & Verification Professional (CMVP) – AEE  
Certified Demand-Side Manager (CDSM) – AEE

**Relevant California Experience:**

- Yucaipa Valley Water District
- Selma-Kingsburg- Fowler County Sanitation District
- Indian Wells Water District
- West County Wastewater District
- County of Riverside
- County of Kings
- Adventist Health Systems/West
- Santa Barbara USD
- City of Palm Springs
- City of Garden Grove



**Jamal  
Aboueljoud,**  
CEM, LEED-AP,  
CALCTP-AT  
*O&M Director*

**Role:** Jamal directs all post-construction field commitments, including O&M and warranties.

**Years of Experience:** 23 years

**Education:** MS, Mechanical Engineering, Lawrence Technological University, Southfield, MI

BS, Mechanical Engineering, Lawrence Technological University, Southfield, MI

**License(s)/Registration(s):**

CEM – AEE

LEED AP – USGBC

California Advanced Lighting Controls Training Program (CALCTP-AT) – CEC

**Relevant California Experience:**

- Yucaipa Valley Water District
- Selma-Kingsburg- Fowler County Sanitation District
- Indian Wells Water District
- County of Riverside
- Adventist Health Systems/West
- Santa Barbara USD
- City of Palm Springs



**Roger Chung**  
*Senior Project  
Finance Manager*

**Role:** Roger has arranged more than \$400 million in paid from savings project financings in various structures. He is responsible for analyzing client needs/ concerns and then structuring and coordinating all project financing activities to assure the optimal form and cost of financing is obtained.

**Years of Experience:** 17 years

**Education:** BS, Management Science, University of California San Diego, CA

**Relevant California Experience:**

- Indian Wells Valley Water District
- West County Water District
- Santa Barbara USD
- City of Moreno Valley
- Kings County – Multi-Phases
- Adventist Health Systems/West



**Clint Hummer**

*Health & Safety  
Manager*

**Role:** Clint specializes in construction safety consulting, risk assessment, training, and regulatory compliance. He provides a broad spectrum of loss control, risk management, environmental and safety services.

**Years of Experience:** 16 years

**Education:** BA, Public Administration, Rutgers University, Camden, NJ

**Relevant California Experience:**

- Indian Wells Valley Water District
- West County Water District
- Santa Barbara USD
- City of Moreno Valley
- Kings County – Multi-Phases
- Adventist Health Systems/West



## D. Understanding of the Project



## D. Understanding of the Project

### D.1 Project Approach

#### D.1.1 Performing Site Assessments and Identifying Infrastructure Improvements

ENGIE offers true turn-key design-build general construction services specializing in energy and water conservation, water, and wastewater process upgrades, building system retrofits, and renewable generation and battery energy storage projects. ENGIE has the people, processes, technology, and delivery model to meet and exceed MSWD’s requirements and expectations.

The principal guideline ENGIE has adopted for delivery of a successful project is the concept that team members assigned to a project will remain with that project from conception through commissioning. This approach ensures continuity and the concepts that were derived in the audit are reflected in the engineering designs and installation at the facility.

Figure 2 shows our 7-Step Process of developing and managing a performance-based energy services project. We have been honing this process for more than 48 years. Many in the industry attempt to emulate this approach, but none can match the efficiency and success that only decades of experience can bring.



Figure 2. ENGIE’s 7-Step Project Development Process



#### STEP 1

**Feasibility Study:** The feasibility study is a preliminary engineering assessment of project feasibility yielding a budgetary savings and cost analysis. It is an early, quick overview of energy-saving potential and is typically conducted soon after selection.



#### STEP 2

**Investment Grade Audit:** The audit is an investment-grade, computer-modeled audit yielding energy savings and a detailed scope of work with an M&V plan. This audit will uncover more specific savings in lighting, mechanical and control equipment, building automation systems, energy storage, water and wastewater process upgrades, water conservation, and solar PV. The audit is a thorough and detailed accounting of your energy-consuming infrastructure right down to nameplate data.



#### STEP 3

**Engineering:** The engineering and design will include the preparation of specifications and submittals, including design and construction documents by our registered PEs. Sound, unbiased strategies from experienced professional energy engineers will provide you with a roadmap that is engineered in-house to ensure all customer requirements are fully met.



#### STEP 4

**Construction Management:** On-site construction management of your project, using seasoned ENGIE personnel, will ensure the project scope is constructed correctly. ENGIE uses an organized and time-tested process that minimizes disruption to the customer's operation and staff. The construction managers are responsible for construction scheduling, subcontractor and vendor coordination, safety programs, security issues, permits and licenses, and progress meetings with subcontractors and vendors. They inspect all work of the subcontractors for compliance to design and performance specifications. Complete as-built drawings are prepared for the customer at the conclusion of the construction phase.

During the implementation phase, our on-site construction manager will hold weekly or bi-weekly construction meetings with designated facilities maintenance staff and contractors. These meetings will consist of reviewing the previous week's construction progress, outstanding issues, and action items, and cover the anticipated schedule for the next few weeks. The construction manager will coordinate the anticipated installation/retrofit of equipment with MSWD's facilities maintenance staff.

In addition, we use proven construction methods to ensure ongoing operations are maintained to extent possible, including:

- Rigorously employ OSHA safety guidelines and practices for all workers and during material lifts to the roof as this work is especially hazardous
- Supervising contractor attendance and use of personal protective equipment at the work site
- Following an accelerated installation process to minimize our construction phase impact on local activities
- Employing security personnel as needed to monitor job sites overnight and help with traffic when construction necessitates changing regular traffic flow
- Scheduling installations with MSWD staff that may temporarily impact parking availability to assure limited disruption to the daily activities



#### STEP 5

**Commissioning:** This is the customer's quality assurance process. An experienced ENGIE team conducts point-to-point examinations of all installed equipment and systems affected to ensure 100% of all performance standards are met.



#### STEP 6

**Training:** We fully understand that training ensures the long-lasting success of a project. At the conclusion of construction and commissioning, we provide training that is tailored to address both the components of the equipment installed and the needs of the customer.



#### STEP 7

**Monitoring and Verification:** Customized monitoring and M&V designed to sustain energy savings over the long term, completes the cycle of exceeding customer expectations. Our committed in-house monitoring staff includes over 15 team members experienced in tracking, forecasting, and alarm notification of energy use and equipment functionality. Our M&V methodology employs the IPMVP, which NAESCO (National Association of Energy Services Companies) recognizes as the standard guideline of how savings resulting from energy conservation projects should be measured.

Our in-house energy management staff will conduct monitoring electronically to the extent possible. We will provide the District staff with monthly reports documenting utility savings to ensure that savings accrue as projected and create a customized program to meet the customer's needs. On-going monitoring also means that any problems that may occur with building operation will be discovered in a timely fashion, thereby helping to maximize the opportunity to correct problems quickly.

ENGIE stands behind its performance guarantee. If ENGIE does not achieve the promised savings, ENGIE will perform a failure analysis and will reconcile the difference with the District. Reconciliation can take the form of providing additional work or services or providing the District with a check that accounts for the difference between the guaranteed and realized savings.

## D.1.2 Funding for California Public Agency Infrastructure Needs and Sustainability Programs

ENGIE helps its customers with project finance by offering information and perspective based on our experience delivering hundreds of projects to a wide variety of customers, each with their own unique technical and economic circumstances and desired outcomes.



We do not act as financial advisor, but we can help facilitate the entire financial review and solicitation process. We have the in-house experience to help craft customized financing solutions for projects that provides optimal outcomes, reduces risk, and maximizes financial returns.

**ENGIE has helped facilitate financing of \$2.5 billion in paid from savings projects for our public sector clients throughout the US.** ENGIE maintains a dedicated project finance team staffed with experienced professionals who keep apprised of developments in energy project finance, financial markets, rebates, and utility incentives.

Our project finance department also maintains strong relationships with leading banks, financial advisors, and renewable energy financiers, which will ensure that the District has access to all available resources. We will review financing options with MSWD staff throughout the development cycle and help make the project viable by identifying the lowest-cost, highest-value funding instruments. **We do not charge any fee for facilitating the financing.**

### *Type of Instrument, Typical Term, and Frequency of Payments*

Based on the size and scope of a project for MSWD, we would investigate the following financing options as part of an overall financing plan:

- **Tax Exempt Lease Purchases (TELP) or Installment Purchase Agreement (IPA):** ENGIE can submit a request for proposal (RFP) for competitive financing proposals. This is 100% financed through capital lease using equipment as collateral, with longer terms available using real property as collateral. The interest rates are low tax-exempt, up to 20-year terms per statute, and with semi-annual or monthly payments.
- **Debt financing including lease-backed Certificates of Participation (COPs), Bonds (General Obligation, Revenue, Clean Renewable Energy Bonds, etc.):** ENGIE can work with MSWD's municipal advisor to structure the project for maximum savings utilizing low tax-exempt interest rates, 20- to 30-year terms, and with semi-annual payments.
- **Power Purchase Agreement (PPA):** ENGIE can provide an energy purchase contract for distributed generation components that utilizes tax benefits to enhance cost structure, 100% financing, and contract terms on 20 or longer year contracts with possible early buyout provisions, paid on a monthly basis.
- **State and Federal Grants:** ENGIE has worked with an array of public agencies throughout the state to identify state and federal grand funding opportunities to support the implementation efforts of this project.
- **Utility Rebates and Incentives:** ENGIE has extensive experience assisting public sector clients leverage multiple funding sources, including grants, rebates, incentives, utility, and maintenance budget savings. Our in-house finance team continually tracks financial markets, utility rebate and incentive programs, and other public and private grant and incentive opportunities. Over the past 5 years, ENGIE has helped to secure more than \$200 million in state and utility incentive or rebate funding on behalf of our customers in California.

- **On-bill financing (OBF):** OBF is a utility program that provides funding for qualified energy efficiency improvements that uses the utility bill as the repayment vehicle. OBF is a no fee, 0% loan with terms and maximum loan amounts that vary depending on type of applicant. Payments are calculated to be “bill neutral” based on savings achieved by the project.
- **Any combination of self-funding (capital contribution)** in combination with other financing options above.

## D.2 Savings

### D.2.1 Approach to Projecting and Proving Utility Savings

#### *Projecting and Proving Energy Savings*

ENGIE uses many proven engineering methods to estimate energy savings, including computer modeling, graphical analysis, sub-metering and testing of facilities, spreadsheet analysis, and field M&V. Our goal is to select an M&V approach that is straightforward and can be easily verified by the customer and/or their third-party reviewer.



ENGIE guarantees performance by establishing a baseline energy use, predicting the savings reduction by using industry established building modeling and calculations, and monitoring and verifying the energy reduction throughout the guarantee.

#### *Establishing the Baselines Energy Use and Projecting Savings*

Energy consumption savings are calculated by establishing a baseline (an equation that describes the energy that would be consumed if no energy efficiency measures were installed) and subtracting from that baseline the actual post-installation energy consumption. This procedure applies to all forms of energy, including electric, natural gas, steam, and even water consumption. Dollar savings are calculated by applying the appropriate consumption unit charges to the calculated consumption savings and summing overall forms of energy.

The energy consumption or usage attributable to a given ECM is determined as the product of its rate of consumption and the duration of that consumption. Quantifying the pre- and post-installation energy consumption may be a straightforward matter (e.g. change in light fixture wattage) or a complex procedure, depending on the variability of consumption rates and duration.

Electrical demand savings are based on maximum demand reduction. In general, post-installation demand during the peak demand month is subtracted from base-period demand for the same month and adjusted for miscellaneous changes in equipment. Dollar savings depend on local utility rate structures. The best method for calculating savings of a given measure may include using modeling software such as DOE-2/eQuest or Trace 600, or may involve spreadsheet analysis or other accepted, standard engineering procedures. Calculations will follow the methodology of ASHRAE or other nationally recognized authority and will be based on sound engineering principles.

The savings are proved by an M&V process as described further starting on the next page.

### D.2.2 Methodology and Formulas Utilized for Reporting of Savings

For any energy services performance contracting program, the selection of an appropriate M&V plan is key to the success of the contract. To assure confidence in these processes, ENGIE

follows the IPMVP. NAESCO recognizes this protocol as the standard guideline of how savings resulting from energy conservation projects should be measured.

The IPMVP defines 4 broad options for M&V of energy savings. Each option is applicable to specific situations, and oftentimes, more than one option is possible. Multiple options are frequently implemented on a single project. Due to the variables and dynamics that are unique to each performance contract, and often to each facility within a performance contract, an individual M&V plan must be developed for each situation. While the specifics may vary, the general method employed will always follow one of the techniques outlined in the IPMVP Guidelines, which are categorized in Figure 3 below.

|                            | Option A  | Option B   | Option C   | Option D   |
|----------------------------|---|--|--|--|
| <b>Savings Calculation</b> | <b>Engineering Calculations:</b><br>Short-term or continuous post-retrofit measurements | <b>Engineering Calculations:</b><br>Short-term or continuous measurements  | <b>Analysis of Whole Facility:</b><br>Utility meter/sub-meter data   | <b>Energy Use Simulation:</b><br>Calibrated with hourly or monthly utility billing data of end-use metering  |
| <b>Example Application</b> | Measure power draw periodically for a lighting retrofit.                                | Apply controls to vary the load on a constant speed pump using a variable speed drive. A kWh meter is installed to measure actual energy use of the drive. | Multifaceted energy management program affecting many systems in a building. Measure energy use via gas and electric utility meters for a 12 month base-year period and throughout the post-retrofit period. | Multifaceted energy management program affecting many systems in a building, but where no base year data is available. Measure post-retrofit energy use by utility meters and base year energy use is determined by simulation using a calibrated model. |

Figure 3. IPMVP Options

There are various formulas used in the calculation of the energy savings. These formulas depend on the specific ECM. If ENGIE is selected by the District, we will provide a detailed writeup and calculations on the energy savings of the ECMs we develop.

### D.2.3 Monitoring Services After Implementation

For measuring savings after construction is complete, ENGIE has one of the largest, most experienced M&V teams in the industry. A professional engineer, Certified M&V Professional (CMVP), with more than 25 years in performance contracting leads a team of full-time committed staff, with 7 staff members in California, and an average time in performance contracting of over 15 years each.

The team has overseen hundreds of guarantees and currently has more than 250 clients with ongoing guarantees. In 2021, ENGIE reconciled \$105 million in at-risk energy guarantees. **The team has one of the highest success rates in the industry — 5-year average of 108% — for achieving our guaranteed performance on projects.** If project performance does not meet or exceed our guaranteed performance, ENGIE writes the customer a check for the difference, without delay or legal hassle.

The exact scope of monitoring required for the District is determined during the design phase and tailored to the energy measures to be implemented. For example, monitoring savings from more efficient lighting would probably not be required, while real-time monitoring for solar PV production is an important part of continued savings. ENGIE uses a proprietary web-based system, Utilityvision™, to monitor data acquired from our energy projects.

ENGIE created a robust web-based energy management platform to manage our diverse portfolio of renewable and energy efficiency projects. We branded this platform Utilityvision. Utilityvision is not only a powerful solar monitoring and data reporting tool, but it can also provide site, building, or individual ECM level diagnostics, trends, and energy consumption profiles depending on the project and our customer needs. ENGIE currently receives about three million data records per day from active renewable energy and energy efficiency customers.

As a standard, we provide monthly value reports from Utilityvision that we can customize based on project and customer needs. Administrative personnel can also use Utilityvision to create summary reports while facilities managers can set alarms and run trend analysis diagrams with the click of a button. **The result is energy intelligence.**

Utilityvision enables our customers to make energy decisions from a place of confidence and assuredness and provides the following:

- **Find anomalies in energy data** in real-time via 15-minute interval data instead of waiting until you get your monthly energy bill
- **Visualize the data** in ways that make sense for a variety of stakeholders from senior administrative leadership to facilities managers and custodial staff – all of whom play an important role in energy conservation
- **Monitor performance of ECMs** so that staff leadership can report on the successes of the programs in which you have invested
- **Identify trends** over time to spot recurring issues and resolve them quickly
- **Track guaranteed performance** to ensure that the investment is performing as hoped
- **Provides alarming capabilities** to alert personnel to excessive energy consumption immediately to reduce lost savings

There are several analytical tools with the Utilityvision platform that assist in the above tasks. Staff will be trained to use the analysis tools to run a variety of reports such as load profiles, trend analysis, and diagnosis, and will also have access to the responsive customer service and support provided by the ENGIE team.

#### D.2.4 Expected Annual Saving for the District

Based on the knowledge of our team, and our review of publicly available information, we believe there is an excellent opportunity for a financially attractive project for MSWD. However, without having access to your facilities, drawings, and electrical data, all the potential ECMs mentioned below remain to be confirmed. We would like to evaluate the following ECMs, if we are selected by MSWD:



- **Wastewater Facility Operations:** The entire operation of Horton, including all the processes and equipment will be evaluated for upgrades and improvements. Sewer lift stations will be evaluated for upgrades, including high efficiency pump motors.
- **HVAC Replacements:** We will evaluate for all MSWD facilities.
- **Interior and Exterior Lighting:** We will evaluate LED lighting for all MSWD facilities. This will include installation of solar lighting for underlit areas.
- **Solar Installations:** We will evaluate solar installations for the Horton, New Regional Water Reclamation Facility, District Office, and well pumps.

- **Battery Energy Storage Systems:** BESS will be evaluated for the Horton, New Regional Water Reclamation Facility, and well pumps. As Southern California Edison (SCE) has run out of incentive funding for battery storage, it is likely that this technology will not be financially viable. We will, however, do the analysis upon selection.
- **Water Conservation Measures:** These will be evaluated for all facilities
- **Building Automation System (BAS):** BAS and SCADA systems will be evaluated for all facilities for upgrades.
- **Pumped Storage Hydropower:** This technology achieves the same goal of energy storage as BESS, but could be financially more attractive. We will evaluate this ECM, if selected.
- **VFD Upgrades:** All pumps will be evaluated to see if variable frequency drives (VFDs) can help reduce the operating cost.

Please note that we will evaluate all the ECMs mentioned above, including pumped storage, if we are selected. However, we are presenting below some potential ECMs that we can estimate using publicly available information to demonstrate our capability and experience as well as to provide MSWD with approximate savings possible from this project. Obviously, without doing detailed analysis, these ECMS, along with the capital costs and savings, are very conceptual in nature.

|  |   |
|--|---|
| <p><b>ECM 1 – Oxidation Ditch Sequenced Aeration at Horton</b></p>       | <p>Install control systems to regulate oxidation ditch operation to reduce nutrients in the effluent. Potentially run the rotors for a long time to complete nitrification, then turn them off with large bubble mixing to allow denitrification.</p> <p>Mission Springs is under heavy pressure to reduce nutrients in the discharge and the Horton plant has no nutrient removal. Install ammonia and nitrate sensors to determine when full nitrification has been achieved. At full nitrification, the surface aerators would be turned off and the large bubble mixing system would be turned on for mixing.</p> <p>An oxidation reduction potential probe would be installed to monitor for proper anoxic conditions and to ensure the system doesn't become anaerobic. After denitrification has occurred, the surface aerators would be turned back on and the cycle would repeat.</p> <p><b>Capital Cost:</b> \$1,000,000. <b>Energy Savings:</b> \$45,000 per year.</p> |
| <p><b>ECM 2 – Install VFDs on Oxidation Ditch Aerators at Horton</b></p> | <p>The motors for the oxidation ditch aerators appear to be two-speed. Installing VFDs to control the speed of these motors would allow reduced energy usage. Dissolved Oxygen probes would be installed as well. The motor aerator speed would be adjusted to meet a dissolved oxygen setpoint as read by the dissolved oxygen probes.</p> <p><b>Capital Cost:</b> \$500,000. <b>Energy Savings:</b> \$60,000 per year.</p>  |
| <p><b>ECM 3 – Solar Installation for Horton</b></p>                      | <p>We understand that MSWD has a 1 MW solar project that is using SCE's RES-BCT (Renewable Energy Self Generation Bill Credit Transfer) rate schedule for cost avoidance at various MSWD accounts. We are guessing that Horton is one of the benefitting accounts for the solar project.</p> <p>RES-BCT rate schedule is very unattractive compared to having solar on site and using SCE's Net Energy Metering rate schedule. We would like to evaluate removing Horton as a benefitting account for the current solar project and installing a 300 kW solar project on site.</p> <p><b>Capital Cost:</b> \$900,000. <b>Energy Savings:</b> \$80,000 per year.</p>   |

|  |  |
|--|--|
| <p><b>ECM 4 – Solar Installation for New Regional Water Reclamation Facility</b></p> | <p>Currently MSWD has a 1 MW solar project that is using SCE’s RES-BCT rate schedule for cost avoidance at various MSWD accounts. This solar project is located next to this facility.</p> <p>As we mentioned above, the RES-BCT rate schedule is very unattractive compared to having solar on site and using SCE’s Net Energy Metering rate schedule. It will be financially very attractive to have the current solar project be directly connected to the electric meter for this new facility and change it from RES-BCT to NEM rate schedule. We will work with SCE to make this happen.</p> <p><b>Capital Cost:</b> \$500,000. <b>Energy Savings:</b> \$120,000 per year.</p>   |
| <p><b>ECM 5 – Mixing in the Storage Tanks to Reduce Disinfectant Use</b></p>         | <p>The MSWD website mentions 24 storage tanks in service. Mixing in finished water storage will allow for better distribution of disinfectant, often resulting in lower dosing. Mixers can be powered by either compressed air or solar.</p> <p><b>Capital Cost:</b> \$300,000. <b>Chemical Cost Savings:</b> \$25,000 per year.</p>   |
| <p><b>ECM 6 – Pump Upgrades</b></p>  | <p>Determine the wire to water efficiency on all the well pumps and implement one of the following measures to improve efficiency. The well pumps could be operating outside of the best efficiency point.</p> <p>If operating in this regime, the pumps could experience excess vibration, cavitation, and/or heat generation. These could all lead to excessive energy usage, and excessive wear and tear on the pumps, resulting in further degradation of pumping performance. Depending on the outcomes of the evaluation, the prescriptive solution could be to replace the pump, replace the impeller in the pump, or install a VFD.</p> <p>We used Figure 4 on the next page (showing one of two for illustrative purposes) and cataloged the well pumps in the system. We developed a list of the pumps and their installed horsepower based on calculating the differential pressure and flow rates. The average pump size is approximately 100 hp.</p> <p><b>Capital Cost:</b> \$2,200,000. <b>Energy Savings:</b> \$250,000 per year.</p> <div data-bbox="581 1194 1317 1671" data-label="Diagram"> </div> |

Figure 4. Process for Determining Pump Size

For the project as outlined on the previous page, the **Total Estimated Capital Cost** works out to **\$5,400,000** and the **Total Annual Savings** are **\$580,000** annually.

To demonstrate the benefit of this project over its life, we have included a project cash flow below with industry standard assumptions on interest rates, finance term, electricity escalation, and

operation costs. As the cash flow shows, this project could be very attractive for MSWD with almost **\$0.5 million in net savings annually** and almost **\$15 million over the life of the project**.

| Mission Springs Water District Comprehensive Energy Services Program |                      |                           |                       |                       |                    |                        |                     |                     |
|--|----------------------|---------------------------|-----------------------|-----------------------|--------------------|------------------------|---------------------|---------------------|
| Preliminary Cash Flow Analysis                                       |                      |                           |                       |                       |                    |                        |                     |                     |
| Project Cost   |                      |                           |                       |                       |                    |                        |                     | \$5,400,000         |
| District Contribution  |                      |                           |                       |                       |                    |                        |                     | \$0                 |
| Amount to be Financed  |                      |                           |                       |                       |                    |                        |                     | \$5,400,000         |
| Finance Term   |                      |                           |                       |                       |                    |                        |                     | 20                  |
| Annual Interest Rate   |                      |                           |                       |                       |                    |                        |                     | 3.75%               |
| Annual Escalation of Electricity Cost                                |                      |                           |                       |                       |                    |                        |                     | 5.00%               |
| Annual Escalation of O&M Cost  |                      |                           |                       |                       |                    |                        |                     | 3.00%               |
| Annual Degradation of Solar Panels                                   |                      |                           |                       |                       |                    |                        |                     | 0.5%                |
| Year   | Solar Energy Savings | Energy Efficiency Savings | Chemical Cost Savings | Total Program Savings | Lease Payment      | Solar Maintenance Cost | Total Program Costs | Net Savings         |
| Year 1   | \$200,000            | \$355,000                 | \$25,000              | \$580,000             | \$94,112           | \$26,000               | \$120,112           | \$459,888           |
| Year 2   | \$208,950            | \$372,750                 | \$25,750              | \$607,450             | \$120,782          | \$26,780               | \$147,562           | \$459,888           |
| Year 3   | \$218,301            | \$391,388                 | \$26,523              | \$636,211             | \$148,739          | \$27,583               | \$176,322           | \$459,888           |
| Year 4   | \$228,069            | \$410,957                 | \$27,318              | \$666,345             | \$178,045          | \$28,411               | \$206,456           | \$459,888           |
| Year 5   | \$238,276            | \$431,505                 | \$28,138              | \$697,918             | \$208,766          | \$29,263               | \$238,030           | \$459,888           |
| Year 6   | \$248,938            | \$453,080                 | \$28,982              | \$731,000             | \$240,971          | \$30,141               | \$271,112           | \$459,888           |
| Year 7   | \$260,078            | \$475,734                 | \$29,851              | \$765,664             | \$274,730          | \$31,045               | \$305,775           | \$459,888           |
| Year 8   | \$271,717            | \$499,521                 | \$30,747              | \$801,984             | \$310,119          | \$31,977               | \$342,096           | \$459,888           |
| Year 9   | \$283,876            | \$524,497                 | \$31,669              | \$840,042             | \$347,218          | \$32,936               | \$380,154           | \$459,888           |
| Year 10  | \$296,580            | \$550,722                 | \$32,619              | \$879,921             | \$386,108          | \$33,924               | \$420,032           | \$459,888           |
| Year 11  | \$309,852            | \$578,258                 | \$33,598              | \$921,707             | \$426,877          | \$34,942               | \$461,819           | \$459,888           |
| Year 12  | \$323,717            | \$607,170                 | \$34,606              | \$965,494             | \$469,615          | \$35,990               | \$505,605           | \$459,888           |
| Year 13  | \$338,204            | \$637,529                 | \$35,644              | \$1,011,377           | \$514,419          | \$37,070               | \$551,489           | \$459,888           |
| Year 14  | \$353,338            | \$669,405                 | \$36,713              | \$1,059,457           | \$561,387          | \$38,182               | \$599,569           | \$459,888           |
| Year 15  | \$369,150            | \$702,876                 | \$37,815              | \$1,109,841           | \$610,625          | \$39,327               | \$649,952           | \$459,888           |
| Year 16  | \$385,670            | \$738,020                 | \$38,949              | \$1,162,639           | \$662,243          | \$40,507               | \$702,750           | \$459,888           |
| Year 17  | \$402,929            | \$774,920                 | \$40,118              | \$1,217,967           | \$716,356          | \$41,722               | \$758,078           | \$459,888           |
| Year 18  | \$420,960            | \$813,667                 | \$41,321              | \$1,275,947           | \$773,085          | \$42,974               | \$816,059           | \$459,888           |
| Year 19  | \$439,798            | \$854,350                 | \$42,561              | \$1,336,708           | \$832,557          | \$44,263               | \$876,820           | \$459,888           |
| Year 20  | \$459,479            | \$897,067                 | \$43,838              | \$1,400,383           | \$894,904          | \$45,591               | \$940,495           | \$459,888           |
| Year 21  | \$480,040            | \$0                       | \$0                   | \$480,040             | \$0                | \$46,959               | \$46,959            | \$433,081           |
| Year 22  | \$501,522            | \$0                       | \$0                   | \$501,522             | \$0                | \$48,368               | \$48,368            | \$453,154           |
| Year 23  | \$523,965            | \$0                       | \$0                   | \$523,965             | \$0                | \$49,819               | \$49,819            | \$474,146           |
| Year 24  | \$547,413            | \$0                       | \$0                   | \$547,413             | \$0                | \$51,313               | \$51,313            | \$496,099           |
| Year 25  | \$571,909            | \$0                       | \$0                   | \$571,909             | \$0                | \$52,853               | \$52,853            | \$519,057           |
| Year 26  | \$597,502            | \$0                       | \$0                   | \$597,502             | \$0                | \$54,438               | \$54,438            | \$543,064           |
| Year 27  | \$624,240            | \$0                       | \$0                   | \$624,240             | \$0                | \$56,071               | \$56,071            | \$568,169           |
| Year 28  | \$652,175            | \$0                       | \$0                   | \$652,175             | \$0                | \$57,754               | \$57,754            | \$594,422           |
| Year 29  | \$681,360            | \$0                       | \$0                   | \$681,360             | \$0                | \$59,486               | \$59,486            | \$621,874           |
| Year 30  | \$571,909            | \$0                       | \$0                   | \$571,909             | \$0                | \$52,853               | \$52,853            | \$519,057           |
| <b>Totals</b>  | <b>\$12,149,859</b>  | <b>\$11,738,414</b>       | <b>\$671,759</b>      | <b>\$24,560,032</b>   | <b>\$8,771,658</b> | <b>\$1,236,961</b>     | <b>\$10,008,618</b> | <b>\$14,551,413</b> |



## E. References



# E. References

## Yucaipa Valley Water District Yucaipa, CA



1

### Project Size

\$25.9 million

### Total Project Net Savings

\$73 million

### Start / Completion Dates

2019 / Ongoing

### Contact

Joe Zoba  
909-797-5119  
zoba@yvwd.us

### Description of Services

- 7.4 MW of solar ground mount
- 3.3 MW/13 MWh battery energy storage system
- 3.2 MW of natural gas gensets and microgrid controllers

### Funding Sources

PPA, SGIP

### Benefits

- Keep rates stable while hedging against rising energy costs
- Improve the District's capacity to serve residents
- Meet the District's long-term resiliency goals
- Ensure safe, reliable power to the District's key facilities during public safety power shutoff (PSPS) events

*"Maintaining the reliability and resilience of our energy and water systems is the key to long-term sustainability and our overall success. The YVWD depends on uninterrupted power 24/7 to conduct mission critical operations. This project not only allows critical facilities to remain operational if there is a grid outage but also reduces our carbon footprint."*

YVWD General Manager Joseph Zoba

## Indian Wells Water District Ridgecrest, CA



2

### Project Size

\$6.9 million

### Total Project Net Savings

\$9 million

### Start / Completion Dates

2016 / 2018

### Contact

Don Zdeba  
(760) 384-5555  
don.zdeba@iwwwd.us

### Description of Services

- 2.08 MW of solar PV projects across five water well sites and the District Office
- LED lighting at the District Office
- Replace aging HVAC units at the District Office

### Funding Sources

TELP

### Benefits

- Expected to generate \$9.4 million in savings over the program life
- Expected to reduce District electricity spending by approximately 63%
- Offsets carbon emissions equivalent to removing 574 cars from highways annually

## City of Palm Springs, CA



3

### Project Size

\$17.5 million

### Total Project Net Savings

\$4.2 million

### Start / Completion Dates

2013 / 2014

### Contact

Staci Schafer  
760-323-8167  
staci.schafer@palmspringsca.gov

### Description of Services

- Retrofitted Municipal Cogen Plant and converted Sunrise Cogen Plant to a new electric and cooling plant
- New utility metering and energy management systems and centralized irrigation control system
- LED lighting retrofits

### Funding Sources

Bond Funds, Certificates of Participation, TELP

### Benefits

- Saved 3.6 million kWh per year
- Saved more than 260,000 therms of gas and 108 million gallons of water annually
- Aligned with state-wide climate action goals
- Reduced annual greenhouse gas emission equivalent to removing 535 passenger vehicles off Palm Springs roadways each year

## City of Moreno Valley, CA



4

### Project Size

\$2.9 million

### Total Project Net Savings

\$13 million

### Start / Completion Dates

2017 / 2018

### Contact

Jeannette Olko  
951-413-3502  
jeannetteo@moval.org

### Description of Services

- Installed 611 kW of solar photovoltaic (PV) across nine structures at City Hall
- Installed 75 kW of energy storage capacity
- Integrated energy storage system with existing electric vehicle (EV) charging stations

### Funding Sources

Cash Contribution (GF, CIP, etc.)

### Benefits

- Expected to generate more than 1.05 million kWh in the first year of the program, the equivalent to powering 84 homes
- Provides an informational kiosk in City Hall displaying energy savings data to the public

*“We strive to engage as many citizens as possible in our transition to clean energy production and the City Hall solar array is our opportunity to make our efforts tangible for people. We couldn’t be more excited to provide this sustainable energy project to the public.”*

Mayor Yxstian A. Gutierrez

**West County  
Wastewater  
District**  
Richmond, CA



5

**Project Size**

\$62.4 million

**Total Project Net Savings**

\$83 million

**Start / Completion Dates**

2021 / Ongoing

**Contact**

Andrew Clough  
Deputy General Manager  
510-222-6700  
AClough@wcwd.org

**Description of Services**

- 1.1 MW Solar PV
- 450 kW Cogeneration System
- LED Lighting
- EV Chargers
- WWTP Upgrades: New Grit Separation System, Rotary Drum Thickeners, High Efficiency Aeration Blower, New Digesters, Sludge Dewatering System, Sludge Thermal Dryer System, and Equalization Basins
- Production of Class A Biosolids
- Community Engagement

**Funding Sources**

Certificates of Participation

**Benefits**

- \$83 million in net program life savings
- Expedite Capital Improvement Plan substantially
- Upgrade the wastewater treatment processes to increase efficiency  
4.2 million kWh energy use reduction guaranteed per year
- 93% reduction in greenhouse gas over the life of the program



## F. List of Representative Projects



## F. List of Representative Projects

In addition to the projects highlighted in Section E, a list of representative projects demonstrating our relevant experience in the last 3 years is provided in Table 1 below.

| Customer  | Contract Amount (Millions) | Wastewater | HVAC | Lighting | Solar | BESS | BAS | Water | Community Engagement |
|---|----------------------------|------------|------|----------|-------|------|-----|-------|----------------------|
| City of American Canyon                           | \$5.2                      |            |      |          |       |      |     |       |                      |
| City of Buellton                                  | \$4.6                      |            |      |          |       |      |     |       |                      |
| City of Corcoran                                  | \$10.8                     |            |      |          |       |      |     |       |                      |
| City of Escalon                                   | \$5.7                      |            |      |          |       |      |     |       |                      |
| City of Firebaugh                                 | \$4.5                      |            |      |          |       |      |     |       |                      |
| City of Hercules                                  | \$3.9                      |            |      |          |       |      |     |       |                      |
| City of Lakeport                                  | \$4.5                      |            |      |          |       |      |     |       |                      |
| City of Madera                                    | \$18.8                     |            |      |          |       |      |     |       |                      |
| City of Mendota                                   | \$3.9                      |            |      |          |       |      |     |       |                      |
| City of Milpitas                                  | \$33.9                     |            |      |          |       |      |     |       |                      |
| City of Pismo Beach                               | \$4.9                      |            |      |          |       |      |     |       |                      |
| City of Port Hueneme                              | \$3.7                      |            |      |          |       |      |     |       |                      |
| Contra Costa County Fire Protection District      | \$4.3                      |            |      |          |       |      |     |       |                      |
| County of Solano                                  | \$4.1                      |            |      |          |       |      |     |       |                      |
| County of Tulare – Multi-Phases                   | \$37.4                     |            |      |          |       |      |     |       |                      |
| Hayward USD                                       | \$32.6                     |            |      |          |       |      |     |       |                      |
| Jurupa USD  | \$4.1                      |            |      |          |       |      |     |       |                      |
| Lake Elsinore USD                                 | \$2.6                      |            |      |          |       |      |     |       |                      |
| Santa Barbara USD                                 | \$22.0                     |            |      |          |       |      |     |       |                      |
| Selma-Kingsburg-Fowler County Sanitation District | \$9.8                      |            |      |          |       |      |     |       |                      |

Table 1. ENGIE's Proven Track Record of Successful Relevant Projects



## G. Schedule



## G. Schedule

Table 2 below highlights ENGIE’s preliminary Timeline/Schedule to complete each task in the scope of services for this project. If selected for this project, this schedule will be finalized with the District’s input.

| ID | Task Name   | Duration in Days | Start    | Finish   |
|----|---|------------------|----------|----------|
| 1  | Notice of Selection for the Project   | 0                | 09-20-22 | 09-20-22 |
| 2  | Project Kick-Off Meeting  | 0                | 09-27-22 | 09-27-22 |
| 3  | Site Walk of all Included Facilities: <ul style="list-style-type: none"> <li>• Inventory of all energy consuming equipment</li> <li>• Identification of the major energy consuming equipment and processes</li> </ul> | 1                | 10-04-22 | 10-05-22 |
| 4  | Utility Bills Analysis: <ul style="list-style-type: none"> <li>• Analysis of at least one year of historical utility billing data</li> <li>• Develop energy rates and costs figures for all utilities</li> </ul>      | 4                | 10-10-22 | 10-14-22 |
| 5  | Feasibility Study: <ul style="list-style-type: none"> <li>• Analysis of opportunities for ECMs and their potential saving and payback periods</li> </ul>  | 18               | 10-10-22 | 10-28-22 |
| 6  | Meeting with District for identification of suitable retrofits and technology for these measures  | 0                | 10-31-22 | 10-31-22 |
| 7  | Investment Grade Audit: <ul style="list-style-type: none"> <li>• Develop final scope of work</li> <li>• Develop guaranteed savings for each ECM</li> <li>• Develop maximum guaranteed price of each ECM</li> </ul>    | 91               | 11-01-22 | 01-31-23 |
| 8  | Staff review and decision on final scope of work, savings, and pricing  | 27               | 02-01-23 | 02-28-23 |
| 9  | Approval of Energy Services Contract & Financing  | 30               | 03-01-23 | 03-31-23 |
| 10 | Engineering & Permitting  | 90               | 04-01-23 | 06-30-23 |
| 11 | Construction  | 214              | 07-01-23 | 01-31-24 |
| 12 | Commissioning   | 28               | 02-01-24 | 02-29-24 |
| 13 | Training  | 28               | 02-01-24 | 02-29-24 |
| 14 | Punch List & Final Completion   | 30               | 03-01-24 | 03-31-24 |
| 15 | M&V of Energy Savings   | 20 years         | 04-01-24 | 03-31-43 |

Table 2. Project Schedule



## H. Additional Services



## H. Additional Services

### H.1 Community Engagement

#### H.1.1 Our Approach

ENGIE believes in giving back to the communities who we partner with in the public sector. We provide this service at no-cost to the District. We believe that our construction projects drive opportunity for communities by maximizing the impact of installing renewables and implementing ECMs in your community that **create jobs, stimulate the local economy, and provide education resources**. With the District’s service area’s population flourishing and growing rapidly, we can provide a lot of value to your community. ENGIE’s comprised of community impact team former educators, nonprofit leaders, and outreach experts is committed to building custom comprehensive engagement programs that deliver valuable, high-quality, engagement and educational resources for communities.

The experience and creativity of the community impact team can support multiple departments within MSWD—such as Programs & Public Affairs, Customer Service, Operations, and Engineering—add value to both your energy project, your community, and your organization.

ENGIE works hard to listen to our partners, to understand their goals so that we can collaborate on programs to meet those unique needs. For example, **ENGIE could help support your ‘Student Drink Water Festival’ and ‘Groundwater Guardian Program.’**

Below are examples of various engagement scopes for water and energy programs we have designed and implemented in California.

#### West County Wastewater District

Looking to focus on workforce development and creating a pipeline of interested and qualified wastewater employees, ENGIE has partnered with the District to develop and implement:

|  |   |
|--|---|
|  <p>Full internship program for local community college students, including all necessary recruitment, training, assessment and feedback documents and processes.</p> |  <p>Communications support: social media posts, website optimization, guest speakers guide.</p>  |
|  <p>Multimedia projects including timelapse project video, interactive maps, and virtual tours.</p>   |  <p>Commitment to identifying and applying for grants and awards that will highlight the progressive view and actions around energy, climate, and overall sustainability measures.</p> |

#### City of American Canyon

Supporting their Marketing Department of one, and building an employee pipeline for their Wastewater Department by attracting local talent; ENGIE partnered with the City to deliver:

|  |   |
|--|---|
|  <p>Paid internships to support the City’s Wastewater and Marketing departments.</p>  |  <p>Communications support through City newsletter articles and project updates.</p> |
|  <p>Supporting City Earth Day events over multiple years with youth activities and hands-on materials, energy savings tips, and other handouts and giveaways.</p> |   |

**City of Milpitas**

With a water infrastructure program ranging from residential and business AMI to automated water testing and treatment, to secure web-based systems, ENGIE enhanced the project with:

|  |   |
|--|---|
|  <p>Successful application for an international Smart 50 award for the smart work done around wastewater, residential water, and overall energy and resiliency.</p>     |  <p>Creation of an online Sustainability Portal to share project initiatives, progress, and impacts.</p> |
|  <p>Development of an informational web page, 24-hour call center, and multi-lingual print outreach for the smart water meter roll out to residents and businesses.</p> |  <p>Support and creation of community outreach events: Earth Day and Sustainability Cycling Tour.</p>   |

Our community impact team will meet with key engagement leaders and stakeholders at MSWD to determine a unified vision for your engagement program. We look forward to understanding the unique values, goals, and initiatives of the District, and developing a program that will support and propel those forward. Below are elements of an engagement program that are flexible and can be shaped and refined once we are selected and learn more about your specific goals.

### H.1.2 Community Events

ENGIE would love to support community events, like the Student’s Drinking Water Festival, with a range of activities. From providing support, booths, and activities for existing events to creating a new custom outreach event for the District. As an example, the City of Milpitas has a strong cycling community and together we are developing a sustainability bike ride for residents to bike to several of the City’s green projects and learn about them from City staff.

### H.1.3 Communications

ENGIE can provide project updates, energy saving tips, and write ups on various topics to include on water bills or MSWD website. We can help to develop or refresh a sustainability or project hub on the District’s website. We can also provide presentations at Board meetings or community events, develop social media posts, and even videos to educate residents about the energy project.

### H.1.4 Education

ENGIE can enrich your existing Kid’s Corner on your website with new activities. We can support your Groundwater Guardian program and participating schools by creating a deeper engagement program with MSWD or in providing design challenges, hands-on materials, guest speakers, or site field trips to the existing programs. We can bring activities for preschool through high school students on a range of topics from water, energy, sustainability, climate change and resiliency, and engineering.

### H.1.5 Paid Internships

ENGIE has put considerable time and effort into developing an internship program that provides youth with real work experience; enriching and networking experiences with mentors; and exposure to and communication with interns nationwide. Interns can work onsite supporting MSWD.

### H.1.6 Civic Spark Fellow

ENGIE can leverage its partnership with CivicSpark, a resiliency focused division of AmeriCorps, to bring a full-time fellow to the District. CivicSpark Fellows, recruited from the country’s top sustainability-focused programs, spend 11 months with agencies to help build capacity for research, planning, and implementation. Projects focus on climate change, energy, wastewater, stormwater, and other environmental topics.

A quote from the Fellow’s supervisor at the City of Lakeport:

*“Alex has entered the past 4 years of lift station and wastewater plant data into a complex spreadsheet. This has allowed us to analyze the flow trends with dry weather conditions vs. storm events and how the flows correlate with rainfall and lake levels. This data has allowed us to determine the areas most affected by inflow & infiltration so we can begin to further investigate and plan mitigation efforts which will in turn lead to greater capacity.”*

### H.1.7 Award Identification and Application

ENGIE wants to share the leadership, initiative, and impacts of our partners with the broader community. Bringing attention to your sustainability work both inspires other communities and recognizes and rewards your dedication and work for your residents and stakeholders. ENGIE can research and identify award and grant opportunities for MSWD pertaining to our partnership’s sustainability and outreach programs. ENGIE can manage the writing, compilation, editing, submission, and follow-up process that comes with these opportunities.

### H.1.8 Local Business Outreach and Participation

ENGIE's efforts to build local supplier capacity and use local businesses are among the most important contributions ENGIE makes in the communities where we operate. Investing in these suppliers and contractors helps foster local economic development and meet business needs across the U.S. We are committed to creating local jobs for skilled men and women working in the region’s construction industries.

Examples of the job creation and economic impact from our projects are depicted below. We will prioritize the construction businesses within the District’s boundaries to help support the local economy and reinvest public funds in the community. Examples of new and/or local jobs that have been generated from our projects include:

|   |
|---|
| <b>City of Livermore</b> will <b>create 188 new jobs</b> over the life of the program   |
| <b>Selma-Kingsburg-Fowler County Sanitation</b> will <b>create the equivalent of 244 jobs</b> resulting from the economic multiplier effect |
| <b>Franklin McKinley School District</b> created <b>70 jobs</b>   |
| <b>East Side Union High School District</b> created <b>85 local jobs</b>  |
| <b>Salinas City Elementary School District</b> created more than <b>20 union construction jobs</b>  |

To implement projects, we prefer to use local subcontractors with outstanding track records. We use an extensive pre-qualification process to select local subcontractors and suppliers for our projects. This process is based on our experience identifying subcontractor quality that assures optimal contract completion and quality performance, service, and products. Figure 4 highlights the benefits of local hiring.



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