10620 TREENA STREET,
SUITE 300 SAN DIEGO, CA 92131

CAPABILITY STATEMENT

COMPANY PROFILE

Incorporated in 1985, The Engineering Partners, Inc. (EPI) is an electrical engineering and design firm specializing in utility infrastructure projects and industrial power system projects. With a workforce of over 150 employees, our team provides owner's engineer services and engineering and design services with a demonstrated track record in ensuring the success of our client's programs.

CONTACT + DESIGNATIONS

The Engineering Partners, Inc.
10620 Treena Street, Suite 300
San Diego, California 92131
Phone: (858) 824-1761
FAX: (858) 824-1768

Lucy Labruzzo, President/CEO
lucy@engineeringpartners.com

Craig Schaeffer, COO
craig@engineeringpartners.com

Shaun Gahagan, VP of Project Delivery
sgahagan@engineeringpartners.com

Cage Code: 0DVZ3
DUNS Number: 148097637
CA DIR Number: 1000029547
DBE Certification: MBE, VON 4DS00017, CPUC
Date Established: March 1985

NAICS CODES

541330: Engineering Services
541340: Drafting Services
237130: Power
221122: Transmission & Distribution
SIC Code: 8711 Engineering Services

FIRM EXPERTISE

- Wildfire Mitigation and Electric System Hardening
- Electric Distribution Engineering and Design
- Substation Engineering and Design
- Electrification and Renewable Energy
- Battery Storage
- Industrial Engineering
- Waterfront Shore Power
- Water/Wastewater Power Systems
- Service and Switchboard Replacements and Upgrades

SERVICES

- Owner's Engineering
- Engineering and Design
- Data Management
- Utility Program and Project Consulting

DIFFERENTIATORS

- EPI is a California-based firm certified by the **California Public Utilities Commission (CPUC) as a Diverse Business Enterprise (DBE)**.
- As a principal and owner of EPI, Lucy Labruzzo is empowered to readily allocate personnel and other resources needed to deliver each task order on time and on budget. **The client can go directly to her without being encumbered by numerous levels of bureaucracy.** Lucy is not just a figurehead on an organization chart - **she is an engineer who will have hands-on involvement** with the development and delivery of each project.
- EPI has the benefit of **recent and relevant experience with utility projects.** Our team has the expertise to design in compliance with required standards, rules and regulations.
- Our firm is fortunate to employ individuals who are also former long-time electric utility employees. Our familiarity and experience with utility processes allows us to fully understand our clients challenges and quickly provide clients with cost-effective, high-quality designs and creative solutions to the issues they may face.

WILDFIRE MITIGATION + ELECTRIC SYSTEM HARDENING

SDG&E Fire Risk Mitigation Program (FiRM) Owner's Engineering Services

Since 2014, the EPI team has been providing owner's engineering services for SDG&E's numerous wildfire mitigation programs including FiRM, Cross-Arm Remediation, Private LTE as well as other overhead distribution projects. This includes program development services, engineering and design quality reviews and document control services. Our team has developed and documented processes, procedures, and performance metrics for engineering and design ensuring construction packages meet GO95, SDG&E standards, and program expectations for overhead, underground, and SCADA jobs.

EPI facilitates and manages the construction RFI process, coordinates with the utility's Electrical Design Engineering group to discuss standards updates and deviations, provides recommendations to SDG&E for program direction, provides technical direction and QA/QC for post construction true up and true up remediation processes, and develops explicit scope of work for contract designers.

The FiRM program was prompting the need for multiple easements which delayed the schedule and increased costs. EPI developed a process to review for and train designers on reducing the number of easements. This saved our client the cost and time of acquiring hundreds of easements per year.

SDG&E Strategic Undergrounding (SUG) Owner's Engineering Services

In 2020, SDG&E updated their Wildfire Mitigation Plan which includes initiatives in strategic undergrounding of overhead power lines. Our team has successfully developed and published technical program direction to ensure a consistent design product meeting the utility's technical and construction standards from five engineering and design firms. To date, our team has performed quality reviews of over 80 miles of conversion work. EPI has proposed and executed numerous initiatives resulting in significant schedule improvements and program costs reductions while maintaining safety and infrastructure reliability.

EPI worked with the client to develop cost savings measures which totaled over $100k per mile by reducing redundant survey scope.

ELECTRIC DISTRIBUTION ENGINEERING + DESIGN

Electric System Reliability

Since 2010, EPI has worked with SDG&E as part of their Reliability Team. EPI has completed the design of a variety of reliability projects including, but not limited to, cable replacements, new overhead and underground switch installations, DOE and SF6 switch replacements, Public Safety Power Shutoff (PSPS), overhead booster and ground bank removals, overhead to underground conversions.

Our team has also worked directly with the utility's Construction Standards Team to implement and install more than 13 new types of equipment to meet their changing needs. New equipment includes innovative switch gear, programable relay switches, SCADA submersible switches, MVI's and 200A/600A 12kV terminating cabinets. As part of the Reliability Team, we continue to support a resilient and reliable electrical grid for SDG&E.

New Business

EPI has worked with SDG&E's Planning Department in support of New Business projects. Our team has collaborated with Builders, Land Developers, and various City and County Agencies on behalf of their projects. EPI has provided management, utility coordination and applicant design services for housing and development communities in San Diego and Orange County. **This includes over 50,000 residential lots/units and approximately 1 million square feet of commercial and retail space.**

Performing new business projects for over a decade, EPI provides superior services in dry utility design, coordination, and project management. Our team is a leader in effectively bringing a project from the entitlement stage through build-out while collaborating with developers, builders, consultants, city officials, and utility companies. Our team's skills have been put to practice on thousands of projects which include life science, master-planned communities, single-family and multi-family subdivisions, affordable and senior housing, school district sites, commercial and retail developments, as well as City and County redevelopment projects. We are confident in our ability to provide our clients with the project management, design, support, and representation needed for a sucessful project!

Overhead to Underground Conversion

EPI has designed numerous Overhead to Underground Conversions. EPI provides the engineering, design and development of construction package for bid including coordination with all stakeholders (all impacted customers, communication companies, and utility). The construction bid set typically includes the conversion package, communication joint trench work, City designed streetlights, City designed ADA sidewalk curb ramps, and street resurfacing improvements. As an example, for the City of San Diego Block 4Y project, our team provided electrical design services for the Dry Utilities Undergrounding Program. This was a "20SD Conversion" which is a negotiated agreement between SDG&E and the City and approved by the CPUC. This project involved the replacement of overhead electric facilities with new underground electrical services for the conversion of 405 residences, one apartment complex and one commercial mall in the Block 4Y area (San Diego Skyline Area).

INDUSTRIAL ENGINEERING

Our EPI team is responsible for the preparation of construction plans, specifications, and cost estimates for various customer side of the meter electrical distribution projects. These projects include new distribution pole lines and undergrounding, service and switchboard upgrades and replacements, central cooling and heating plants, 10-2500 kW generators, OH to UG 15 kV conversions, 15 to 160 MVA, and 69-12kV substations, water/ waste water power and P&NID systems, 600 volt and medium voltage variable frequency drives, waterfront shore power, airfield lighting and landing systems, short circuit, coordination and load flow studies and much more.

NASA Advanced Supercomputer Facility N258 Electrical Supply Reliability Improvement Project Phase IB & Phase II

NASA Moffett Field was in need of an uninterruptible source of power for their supercomputer facility. This project modified the existing infrastructure and provided three-diesel generator driven Rotary type Uninterruptable Power Supply (RUPS), complete with full system switchgear and auxiliary systems in an outdoor enclosure. Equipment arrangement fully capable of accommodating an additional RUPS unit operating in parallel for a total plant capacity 8MW/10MVA.

Metropolitan Water District (MWD) Colorado River Aqueduct Switchyard and Head Gates

EPI was the lead design firm and engineer of record for the design build project led by Southern Contracting for the Metropolitan Water District (MWD). This project included electrical system upgrades at Intake, Gene, Iron Mountain, Eagle, and Hinds Colorado Aqueduct Pumping Plants which furnish the majority of water to Southern California from the Colorado River. Our team provided design drawings and specifications for the replacement of high voltage, 230 kV and 69 kV circuit breakers, AC and DC circuit breaker control wiring, CT wiring, replacement of a 1MVA, 34.5 kV-2400 volt Peddler Substation at Gene Pumping Plant, modification of ATS controls in the Gene pump station, replacement of 300 current transformers, replacement of low voltage (600 volt) power distribution system for all five head gates at each outfall, and P&ID drawings for head gates. Each head gate (3 per plant) is controlled by two motors with one variable frequency drive. The existing cables were extensively studied and surveyed, and the outages were coordinated so that the existing conduits could be used where existing cables will be removed in the same sequence of work.

SUBSTATION ENGINEERING + DESIGN

For nearly 20 years, EPI's professional engineers have provided electrical engineering design for substations for entities such as the U.S. Navy, UCSD, and the City of Riverside.

Naval Base San Diego South Cummings Substation Upgrade

The project scope included reconfiguration and expansion of South Cummings Substation at Naval Base San Diego to meet the growing electrical demand. Our Team was the Engineer of Record as well as provided project engineering and technical support through the construction phase. The project included reconfiguration of the utility interconnections, each with single circuit breakers to a six element 2000-amp rigid bus in a ring configuration. Secondaries of each new transformer were connected to a reactor in parallel with a Current Limiting Protector (CLiP) to limit the flow of fault currents to levels acceptable for existing equipment downstream of the substation. A 3000A 15 kV busduct was connected to a 15kV indoor type switchgear in "Main-tie-Main" split bus configuration, with a total of 10 feeder breakers and underground outgoing feeders on both sides.

F-35 Joint Strike Fighter Simulator Facility and Electrical Upgrades

F-35 Joint Strike Fighter Program caused the need for significant electrical upgrades throughout Naval Air Station (NAS), Lemoore. EPI provided engineering and design as well as project engineering and technical support through the construction phase. The project scope included the expansion, repair, and renovation of the high to medium voltage (69kV-12kV) OPS Substation. Scope of this project included the construction a new 70kV PG&E metering station, 3.5 miles of new 70 KV overhead and underground transmission line, modification Navy owned overhead 70 KV transmission line, expansion, and reconfiguration of a 70kV switchyard and equipment, construction of 15kV medium voltage switchgear and CMU building and reconfiguration of the 12.47 KV distribution circuits. Scope included a complete SCADA/Utility Control System for remote monitoring and control of all major substation components including building subsystems (cooling, fire alarm, battery monitoring, etc.), fiber optic communication infrastructure.

Olivenhain Hodges Pumped Storage Project

As part of San Diego County Water Authority's (SDCWA) Emergency Storage Project, our team provided electrical engineering and design for a substation with 69kV switchyard, two 28MVA 69-12kV transformers, and 12 kV switchgear connected to two 23 MW, 12 kV pump/generator units. Our scope included grounding, arc flash study, protective device coordination study, time current curves, short circuit and coordination analysis and preparation of interconnect wiring schedules for hundreds of power/control/instrumentation cables and cable tray systems.

ELECTRIFICATION + RENEWABLE ENERGY

The EPI team has provided designs for both ground mount and rooftop photovoltaic systems, ensuring compliance with utility regulations, as well as thousands of electric vehicle charging stations at hundreds of sites, PRP Fleet Electrification projects, and Medium Duty/Heavy Duty EV Charging Infrastructure projects.

SDG&E Power Your Drive

This program is designed to increase adoption of electrical vehicles and integrate electric vehicle charging with the grid throughout SDG&E's service territory with the goal of reducing greenhouse gases. EPI has provided the engineering design and preparation of complete construction packages for the construction of Power your Drive facilities, including utility plans. Projects include: **Aladdin Parking Garage Green Shuttle** which included installation of DC Fast Chargers in the parking garage to support new Lightning Electric Ford E-450 shuttle buses. The package also included **Amazon Priority Review Project Fleet Electrification** project. EPI provided electrical engineering design for the installation of (16) units of 14.56kW Level 2 charging stations in the parking lot to support new fleet of Amazon electric delivery vans.

Cajon Valley Union School District – Vehicle to Grid (V2G) Pilot

EPI led this pilot project as a collaboration project between SDG&E, the Cajon Valley Union School District (CVUSD), and Nuvve (charging station manufacturer) for the installation of six 60kW bi-directional DC fast chargers at CVUSD Transportation Department. The charging stations have V2G capabilities and intend to operate the vehicle batteries as a battery energy storage system to discharge surplus energy to the utility grid during peak demand hours. Our engineering design included coordination with the EV charger manufacturer regarding wiring requirements and RGS conduit to prevent communication lines interference.

Department of the Navy, Install Electric Vehicle Infrastructure – Phase 1

EPI teamed with Synergy Electric (general contractor) for the design-build project to construct 14 new dual-port pedestal mounted Level 2 electric vehicle charging stations in 10 sites throughout Marine Corps Base (MCB) Camp Pendleton. EPI performed site investigations, engineering design, calculations, and preparation of specifications. Design includes providing pole-top transformers and connect to existing overhead 12kV lines to power the EV stations. Each EV charging station has radio frequency interface device (RFID) capability to activate the equipment.

Eckhoff Street Orange Grid Storage Solution Implementation

This pilot project included the installation of a fully integrated Grid Storage Solution (GSS) in Orange, CA. Partnered with Baker Electric, the EPC contractor, the EPI Team provided engineering and design of the GSS, which included PV system, 2.5MW/3.9MWh battery system, power conversion equipment, a transformer, and switchgear various components and systems. The project was coordinated and integrated with NEC (the manufacturer) and Southern California Edison (SCE), who were responsible for providing additional systems and materials.

Naval Weapons Station, China Lake

EPI provided design of a ground mounted, photovoltaic (PV) system with a peak power generation capacity of 200 KW, paralleled with generator and battery storage in a conditioned building at Naval Weapons Station, China Lake. The system operates independently from the utility grid. In addition, EPI provided electrical engineering and design serves for rooftop PV systems at multiple military locations including but not limited to: Twentynine Palms (97KW), Naval Base Coronado (200 KW).