STEVE BAKIN, P.E.

Vice President

Summary

Steve is a professional engineer with 25 years of experience in building design and construction. His primary area of expertise is electrical engineering, supplemented by a good understanding of mechanical, civil and structural engineering, architecture, and lighting design. His understanding of other disciplines and roles within the construction industry including financial, scheduling, legal and contractual aspects of projects allows an integrated design approach. Steve has served as engineer of record for various project types, including many high-rise and multi-building campus projects. His experience includes design of generators, renewable energy, fuel cell, battery storage, utility power, elevator, central plant and fire pump systems as well as design of architectural lighting systems for landmark and historical buildings. He has also taught classes for architecture students at Woodbury University and USC and given several AIA-accredited presentations in the industry.

Areas of Technical Expertise

- Electrical Systems for Buildings
- Emergency Power Systems
- Renewable Energy Systems

Education

- M.Eng. Architectural, 1996, University of Leeds
- Architectural Engineering Exchange Program, 1995, Pennsylvania State University

Registrations

- Licensed Professional Electrical Engineer in AZ, CA, CO, DC, FL, NC, NV, SC, TN, TX, VA and WA

Professional Activities

- National Association of Fire Investigators, Member

Select Project Experience

Forensic Investigation

Altadena Vistas Wildire Damage, Altadena, CA. Performed investigation of damage caused by the LA wildfires in 2025 to a 22-unit multi-family residential complex in Altadena, CA. Investigation included studies of the electrical system for potential fire damage and survey of rooms to determine extent of damage and functionality of the electrical system. The study also included study of mechanical and structural systems.

Airbus Americas, Merrit Island, FL. Performed forensic failure analysis on the electrical system following a structural roof damage incident and related water leak. Investigation included analysis of the uninterruptible power supply to the satellite testing area, which included a flywheel system.

Fiberon Factory Explosion, New London, NC. Performed forensic investigation into an explosion that occurred causing major damage to multiple systems. The electrical system included multiple utility services to the site and was evaluated for damage and design of changes to facilitate future protection.

Avanath City View Apartments, Orlando, FL. Performed a review and analysis of electrical system damaged by flooding which occurred due to a HVAC unit leak. The investigation and report included review of all affected and unaffected systems for potential damage and code requirements.

Educational Facility Design

Environmental Nature Center, Newport Beach, CA * Electrical EOR for a pre-school completed in 2023. The school is certified LEED Platinum and was the third building in California to receive the Petal Certification by the Living Building Challenge. The building features net zero energy and water, bioswales and green walls. The building also features passive and active design in natural ventilation, solar, abundant daylighting, EV charging, radiant slab heating and is a monument to environmental education and sustainable design.

*Denotes work performed with previous employer.

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Capistrano Unified School District, Rancho Mission Viejo, CA * Electrical EOR for a new K-8 school, which completed construction and occupancy in 2024. Included multiple buildings totaling 79,000 square feet and electrical infrastructure master planning for future buildings at the site. The solar system allowed this project to achieve net zero energy usage.

Agnews Middle and High School, Santa Clara, CA * Electrical EOR for this 81-acre multi-building project with a construction cost exceeding $100M total. The project was built in 2022 and including three 480-Volt electrical services.

Civic Building Design

West Hollywood Park, Los Angeles, CA *Electrical EOR for a 5-story sports facility including basketball courts, rooftop swimming pool, fitness center and office areas. Included coordination of tight spaces in a populated city block leading to a vehicle road through the building at ground level. Included a stacked parking system generator and indoor utility vault.

Orange County Civic Center. Santa Ana, CA *EOR for two high-rise buildings with medium voltage service to indoor unit substations. The construction was completed in 2024. Spaces within the building include offices, courtrooms and cafeteria. Electrical design included two diesel generators.

Multifamily Residential Design

1201 Connecticut Residences, Washington, DC *Electrical EOR for the conversion of a 13-floor, 217,000 gross square foot high-rise office building into a multifamily residential condominium. Scope included a complete renovation of the building's interior and the replacement of most of the existing electrical distribution system. Options for reuse was evaluated based on capacity, condition, and changes in electrical load. Additionally, the project included the installation of a new roof-mounted emergency and standby generator.

Overlake Square, Redmond, WA *Electrical EOR for a new 711,000-gross-square-foot apartment project consisting of two buildings. Building one has seven floors, while building two has two floors. Includes multiple electrical utility services and was permitted in 2024, with construction currently ongoing in 2025. Additional features of the project include retail spaces, interior and exterior amenity areas, and a 182,000-square-foot parking.

Texas Christian University Housing, Fort Worth, TX *Electrical EOR for a 613,000-gross-square-foot, 669 residential unit multi-building campus style project. The project was inherited during the design development phase and included an aggressive schedule of design completion during the first half of 2025.

Residences at Bal Harbour, Bal Harbour FL *Electrical Engineer of Record for this 24-story, 512,000 square foot high-rise condominium building is South Florida. The project was submitted for permit in late 2025. The building also includes a 122,000 square foot parking structure and a central plant.

Corporate and Lab Building Design

Edwards Lifesciences, Irvine, CA * Served as EOR for five buildings totaling approximately 1,000,000 square feet at this campus in Irvine, CA. Scope included outdoor spaces and site electrical distribution and utility coordination of multiple electrical services, generators, solar and power systems for each building. The buildings constructed in 2018 to 2024 and included office and laboratory spaces, a cafeteria building and a visitor center. Multiple emergency and standby generators were included, up to sizes of 2,500 kilowatts to ensure continuous operation of the laboratory functions.

Uber World Headquarters, San Francisco, CA * EOR for this 500,000 square foot project that included two high-rise buildings located in San Francisco, CA. The buildings were designed in 2015 to 2017 and construction completed in 2021. The electrical design included fuel cell systems which provide continuous power to the data center functions within the buildings, emergency generators and a solar system.

Litigation Support

Niles Bolton Associates v. Proficient Eng'g, worked with the defendant's legal team on a 149-unit multifamily residential project known as The Reserve at Fairhope, to evaluate a claim for design negligence and provide an expert witness report. The claim included evaluation of the design of the electrical distribution system, emergency power, elevator, and fire pump design.

Coach Homes v. Edmonson Electric, worked with the plaintiff's legal team to evaluate a claim for damages due to errors and omissions in the design. This case is currently ongoing and included detailed review of related engineering drawings and specifications and development of events sequence for expert witness testimony.

Trevi Isles Homeowners Ass'n v. 5 Star Developers v. Comet Electric, involving claims of negligent installation of systems by the general and electrical contractors, provided expert witness reporting based on our evaluation of the project documents and evidence. This is a multi-building residential condominium complex located in Palm Beach Gardens, FL.

CONTACT

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