

PROFESSIONAL SUMMARY

Electricity sector professional with over 25 years of experience. Expert witness. Rate design (net energy metering, electric vehicles, renewable energy integration, energy conservation). Utility cost of service studies. Utility business models. Power project development, project finance, PPA structuring, negotiations. Generation asset valuation. Distributed energy resource economics. Vehicle electrification. International projects in Egypt, Oman, Saudi Arabia, South Africa, India, Mongolia, Mexico, Europe. Adjunct Professor.

CHAIT ANALYTICS CORP.

2020-Present

President

San Rafael, CA

- Evaluation of Island utility business models under high levels of distributed energy resources for Lawrence Berkeley National Laboratory. Developed & delivered knowledge transfer workshops.
- Supported U.S. Department of Energy (DOE) to structure and implement DOE's Puerto Rico Energy Resilience Fund. Conducted due diligence on financial proposals. Supported term sheet structuring & negotiations.
- Developed retail rate forecast component of the Puerto Rico Grid Resilience and Transitions to 100% Renewable Energy Study (<https://pr100.gov/>).
- Expert witness on behalf of TURN in California's NEM 3.0 net energy metering successor tariff proceeding (CPUC R. 20-08-020). Quantified cost-benefit metrics. Delivered direct & rebuttal testimony on behalf of TURN. Testified at evidentiary hearings.
- Consultant to The World Bank. Electricity sector international best practices topics including electric rate design, renewable energy, vehicle electrification, demand response. Contributed to MENA Electric Mobility Chapeau Report (<https://openknowledge.worldbank.org/server/api/core/bitstreams/008816d4-71f6-4d49-bc65-98b4c8895130/content>).
- Delivered expert testimony on behalf of the New York City Mayor's Office of Climate and Sustainability in ConEd 2023 electric, gas and steam rate cases (22-E-0064, 22-G-0065, 22-S-0659) and KEDNY/KEDLI gas rate cases (23-G-0225, 23-G-0226).
- Engaged by National Renewable Energy Laboratory (NREL) to vet updates to its System Advisor Model (SAM).
- Furnished economic analysis and procurement support to University of California Irvine Health in conjunction with a new behind-the-meter parking structure mounted solar array.
- Expert Witness for Starwood Energy Group's Greenleaf Energy Unit 2 CAISO 2020 RMR contract FERC filing. Participated in RMR contract negotiations (FERC, PG&E, CPUC, & CAISO).
- Pursuant to eminent domain actions, expert witness on the economic feasibility of developing solar photovoltaic facilities on relevant properties. Testified at jury trial.
- Expert witness regarding the value of a solar installation impacted by California High-Speed Rail.
- Adjunct Professor - Renewable Energy Finance course in University of San Francisco's Energy Systems Management Master of Science program.

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. (E3)

2006-2019

Director

San Francisco, CA

Select Projects: Utility Rate Design, Cost of Service Studies, Cost of Capital Determination

- Engaged by California Transit Association to design revenue neutral electricity rate structures promoting the widespread electrification of transit buses under managed and un-managed charging scenarios.
- Project manager for BC Hydro's large and medium general service rate design proceeding.

- Presented at Ontario (Canada) Energy Board Technical Conference regarding the appropriate cost of capital.

Select Projects: Finance and Asset Valuation

- Developed and delivered four-day World Bank-funded training program in Mongolia. Recommended changes to Mongolia's renewable generation procurement processes. Created renewable energy power purchase agreement template and excel-based PPA pricing model.
- Advisor to private equity firm in the successful acquisition of nearly 1 GW of wind generation.
- Supported developer in financial modeling and strategy for a 2 GW Wyoming wind development.

Select Projects: Large Users of Electricity

- Successfully negotiated SCE Schedule ME providing electric rate discounts estimated at over \$300 million, and installation of major electric infrastructure at no cost, for the Port of Long Beach or its tenants. Discounts support electrification and improved regional air quality. Obtained change to SCE's Rule 18 enabling master-metered customer to submeter cold-ironing load, greatly reducing Port tenant demand charges.
- Developed electricity cost reduction strategies for Los Angeles Metropolitan Transportation Authority (LA Metro), the second largest public transit system in the country.
- Advised University of California on economics of renewables and paired storage bids & optimal portfolios.
- Analyzed the economic and contractual risks and benefits of a Kentucky municipal utility's participation in Kentucky Municipal Energy Agency (KyMEA). Recommended contract modifications to support cost procurement and improve Agency accountability to Members. Presented findings to utility Board.
- Evaluated potential impacts of new large loads in a PUD's service territory. Analyzed existing contracts and utility regulatory/policy framework. Weighed potential outcomes under future regulatory and economic scenarios. Key issues included institutional risk from future load departures, allocation of costs and margin across customer classes, and credit/security requirements. Presented findings to PUD Board of Directors.
- Developed IRPs for several California CCAs. Developed load, cost, emissions and curtailment projections.

Select Projects: Distributed Energy Resource Economics and Regulatory Strategies

- Advised the Authority for Electricity Regulation in Oman on regulatory changes necessary to enable penetration of light-duty electric vehicles in the Sultanate. Review included international best practices in regulation, rate design, V1G communication, technical standards, licensing, safety, and EVSP operations.
- Created excel calculator tool for the U.S. EPA's National Action Plan for Energy Efficiency (NAPEE).

CALPINE CORPORATION

2003-2006

- Led, structured and closed \$100 million non-recourse financing for 600 MW power plant. First single-asset, merchant project financing in California post energy crisis.

INTERGEN

1998-2002

- Power project development – Middle East and Europe. Member of development team for Egypt's first independent power project - Sidi Krir BOOT. Project Finance Middle East Power Deal of the Year.

ENRON INTERNATIONAL

Summer 1997

- Summer Associate in Middle East region power asset development.

Education

University of Chicago Graduate School of Business (Booth)

M.B.A., concentrations in finance and economics; *LEAD IX Facilitator*

University of California at Berkeley

B.A., Mathematics and Middle Eastern Studies; *Foreign Language and Area Studies (FLAS) Fellowship*