

44 Montgomery Street, Suite 1500, San Francisco, CA 94104 nathan.miller@ethree.com

415.391.5100

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Senior Consultant

Mr. Miller joined E3's Asset Valuation team in 2019. An experienced economics and finance professional, he is skilled in financial modeling, energy market analysis, investor due diligence, risk analysis, resource contracting, and project financing. Prior to joining E3, Mr. Miller spent six years in Washington, DC as an advisor to investors, developers, utilities, and policymakers on power project planning, development, and financing. He has advised on over 10 GW of generation assets in 16 countries covering a range of technologies, including oil and gas, geothermal, solar, wind, biomass, and energy storage. In the U.S., Mr. Miller has advised developers and investors on electricity market prices and valuations for transmission, renewables, and energy storage assets. He was also a core member of E3's transaction advisory team for the solicitation, evaluation, and negotiation of competitive bids to reform or sell Santee Cooper, a publicly-owned electric utility in South Carolina. Mr. Miller holds a B.A. with honors in International Relations and Economics from Pomona College and a M.A. with honors in Energy and International Finance from the John Hopkins University School of Advanced International Studies (SAIS).

- Transaction advisory support for the proposed reform, sale, or management of Santee Cooper, a state-owned electric utility in South Carolina. Work included: development of revenue requirement model with projected average rates by customer class and integration with dynamic dispatch forecast; due diligence, Q&A, and data room population; bid evaluation and bidder negotiations; recommendation of preferred bidders in the sale and management categories; and public presentation and testimony to state legislators.
- Support for expert testimony for Public Service Commission's review of a utility's standard PPAs for solar generators under PURPA framework in South Carolina.
- Advised private equity investor on due diligence of a transmission asset in NY; analyzed NY market prices and power flows through 2030 from E3 modeling tools, resulting in a successful acquisition.
- Analysis of prevailing international standards, certifications, warranties, and financing requirements for utility-scale battery storage equipment in support of prospective South African battery manufacturers.

K&M ADVISORS

Chevy Chase, MD September 2014 – June 2019

Manager

- Led due diligence, financial modeling, contract negotiation support, and/or market analysis for over 20 power projects in more than 16 countries (> 3,250 MW of solar PV, wind, hydro, geothermal, natural gas, liquids).
- Project manager for 140 MW geothermal IPP in Kenya; led feasibility study (technology options, cost-benefit analysis, demand, tariff, commercial structure, and environmental/social impact); resulting in board-level approval for project implementation.

- Led financial due diligence for a private equity fund on LNG and merchant solar projects in Chile (> \$1 billion); reviewed sponsor's financial models and spot market pricing; performed risk analysis of DSCRs and cash flows.
- Led development of a DCF valuation model and due diligence for > \$100 million binding offer from private investors to acquire four power plants (244 MW) in Central America & the Caribbean.
- Modeled dispatch and system generation costs for a 100 MW capacity addition in Aruba under various solar and wind scenarios, resulting in \$100 million investment decision. Advised on LNG procurement strategy.
- Led tariff structuring and financial modeling for 40 MW solar PV project in Kenya; presented to utility senior management team; project was approved for capital raising and implementation.
- Modeled load profile, generation mix, and unit costs of power supply options (solar, wind, gas, storage, and grid interconnections) for major port operator in Colombia; assessed regulations and risks to identify preferred option for development.

CASTALIA STRATEGIC ADVISORS

Washington, DC July 2013 – August 2014

Economic & Financial Analyst

- Advised electricity regulator in the Philippines on the design of new performance incentives and revisions to the rate base valuation methodology for distribution utilities.
- Led analysis of carbon financing mechanisms for renewable energy in SE Asia for the World Bank.
- Led multi-sector assessment of opportunities and investment barriers for Public-Private Partnerships in the Caribbean, which supported the creation of a new PPP Unit at the Caribbean Development Bank.

INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION (ICCT)

Washington, DC

Graduate Intern, Fuels Program

Summer 2012

 Conducted original research on commercialization policies for advanced biofuels; co-authored ICCT white paper, Measuring and Addressing Investment Risk in the Second-Generation Biofuels Industry.

Education

The Johns Hopkins University,
School of Advanced International Studies (SAIS)
M.A., Energy & Finance (Honors)

Washington, DC

2013

Pomona College

Claremont, CA

B.A., International Relations & Economics (Cum Laude)

2008

Citizenship

United States