



# Nate Miller

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## **ENERGY AND ENVIRONMENTAL ECONOMICS, INC.**

San Francisco, CA

*Director*

Nathan is a Director in E3's Asset Valuation practice, where he leads E3's market forecasting and advisory services across North America. He advises investors, developers, and utilities on asset valuation and due diligence, power project development and financing, and strategy across U.S. markets with a focus on the energy transition. Nathan has led E3's market advisory work for valuations of large front-of-meter storage, solar, wind, and gas generation in all major U.S. markets to support some of the largest individual projects, developers, and standalone storage platforms to-date. 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. 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 valued at ~\$9 billion. 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).

Selected projects at E3 include:

- Leads forecast development and modeling ecosystem for E3's market price forecasting services; managing team to produce price forecasts of all major traded products across U.S. markets (energy, ancillary services, capacity/resource adequacy, and RECs). Oversees E3 forecast ecosystem from production cost modeling (PLEXOS) to pre- and post-processing, forecasting of related products (e.g. capacity, RECs), and modeling framework for E3's energy storage revenue forecasts (RESTORE model).
- Market due diligence and price and revenue forecasts in support of developers and investors for the acquisition or development of solar, gas, wind, and energy storage assets in CAISO, WECC, ERCOT, SPP, MISO, PJM, NYISO, ISONE, and SERC.
  - Lead market advisor on M&A transactions for at least five multi-GW battery storage development platforms with merchant exposure in CAISO, ERCOT, and other U.S. markets.
  - Lead market advisor in some of the first offshore wind projects in the U.S. (NYISO + ISONE)
  - Lead market advisor for investors in multiple renewable development platforms spanning wholesale and regulated markets with operational and development assets totaling > 15 GW; supported successful multi-billion-dollar transactions.
  - Led market and revenue forecasts for successful debt, equity, and tax equity investments in standalone storage projects (pre- and post-Inflation Reduction Act) in CAISO and ERCOT.
- Due diligence for a large private investor for the acquisition of a 1 GW, multi-state portfolio of distributed solar PV assets; valuation support included analysis of retail utility tariffs, net metering programs, and solar renewable energy credits (SRECs).

- 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**

*Manager*

Chevy Chase, MD  
September 2014 – June 2019

- 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**

*Economic & Financial Analyst*

Washington, DC  
July 2013 – August 2014

- 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)**

*Graduate Intern, Fuels Program*

Washington, DC

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

Claremont, CA

2008