

MATTHEW LEE

YEARS OF EXPERIENCE

28

EDUCATION

- > B.S., Mechanical Engineering, Colorado School of Mines, 1992

AREAS OF EXPERTISE

- > Project development
- > Due diligence
- > Contract review/negotiations
- > Feasibility analyses
- > Contract compliance
- > Technical valuation assistance
- > Financial modeling
- > Construction monitoring
- > Performance testing

AFFILIATIONS

- > American Economic Association
- > American Society of Mechanical Engineers (ASME)

PUBLICATIONS

- > "Municipal Environmental Compliance Manual," 1995, collaborative author.
- > American Public Power Association's "Environmental Compliance Manual," annual regulatory updates.
- > White Paper, "The Equator Principles," 2003.

EMPLOYMENT HISTORY

- > Consultant, Filsinger Energy Partners 2015-Present
- > Vice President, Galena Advisors (POWER Engineers), 2011-2014
- > Chief Operating Officer, Refined Energy Holdings, LLC, 2005-2011
- > Principal, Energy Development Group, 1999-2003
- > Managing Director, E3 Consulting 1999-2006
- > Project Manager, R.W. Beck 1993-1999

EXPERIENCE SUMMARY

Matt Lee is a mechanical engineer with extensive business expertise. He has managed the development, design, permitting, and financing of power, petrochemical, and infrastructure projects. He has provided consulting services for private debt and equity placements, project financings, public offerings, purchasers and sellers of energy assets, and municipalities. His experience includes traditional and renewable forms of generation, gas and electric distribution, plant performance testing, economic modeling, operational reviews, technical due diligence, and valuations. He has been responsible for contract negotiations and has held key roles in negotiations with NGOs and state and federal regulatory officials.

Mr. Lee has served in leadership positions in development companies and consultancies. Mr. Lee served as the Chief Operating Officer of Refined Energy Holdings, a gasification and alternative energy company. REH's flagship project, the Power County Advanced Energy Center, was a fully permitted coal gasification to nitrogen fertilizer complex to be located in Power County, Idaho. It is one of the few successfully permitted coal-based projects in the United States and had received the endorsement of the Sierra Club as well as the Idaho Conservation League. Matt assisted with the sale of the Project's development rights in 2013 to a New York based private equity group. During his tenure at REH, Matt led the technology review, design, and permitting for the Project, and was responsible for negotiations with concerned NGO's and state and federal regulatory officials.

Mr. Lee was a founder and a principal with the Energy Development Group, where he provided both technical and commercial expertise for over 3,400 MW of permitted combined cycle generation, and preliminary design support for an additional 1,100 MW.

Mr. Lee began his career with the U.S. Environmental Protection Agency reviewing major petrochemical plants throughout the United States. From there, he moved to R.W. Beck and E3 Consulting where he provided advisory services for energy and infrastructure projects to energy industry lenders, power plant developers, electric utilities, municipalities, and other industries.

Project Feasibility Studies:

Mr. Lee has been involved with energy-related project evaluations and feasibility analyses as a consultant with Filsinger Energy Partners, POWER Engineers (Galena Advisors), R.W. Beck, and E3 Consulting, and energy development companies Refined Energy Holdings and Energy Development Group. The following is a sampling of project feasibility analyses with which he was involved:

- Confidential Geothermal Projects Chile - Mr. Lee was part of a team engaged to perform feasibility and financial due diligence studies for multiple geothermal development projects in Chile. The Study was

supported by the Clean Technology Fund through the Inter-American Development Bank.

- Korean Taean Power Plant Upgrade Analysis – Evaluated two potential upgrade options for two coal-fired units at the Taean Power Plant in Korea. Mr. Lee was responsible for the development of a comparative financial model for the upgrade contractor, Doosan.
- Power County Advanced Energy Center – Fully permitted coal-based gasification to nitrogen fertilizer project located in Power County, Idaho. Mr. Lee was responsible for technology selections, design, and permitting of the project. In addition, he established strategic teaming relationships with key technology providers, led negotiations with NGOs and government officials, and worked with the leadership team to structure and execute key commercial agreements. Development rights to the project were sold to a private equity group in 2013.
- Tangkuban Perahu Geothermal Plant – Mr. Lee was part of a team engaged to perform a feasibility study of a 110 MW flash geothermal power plant in West Java, Indonesia. The Study was supported by a grant from the US Trade and Development Agency (USTDA). Mr. Lee was responsible for developing a financial model to evaluate the financial and economic performance of the plant.
- Kern Oil and Refining Company – Provided acquisition review and an expansion feasibility assessment of an independent oil, refining, and marketing company located in Bakersfield, California. Kern Oil and Refining Company investigated the sale of their assets in Bakersfield. Mr. Lee led the technical and contractual review of the project. Ultimately, the refinery was acquired by NTR Energy.
- Jebro Refinery Wyoming – Mr. Lee Provided an energy audit and a regulatory and financial feasibility assessment for a proposed combined heat and power project at an asphalt refinery in Cheyenne, Wyoming.
- Olkaria 1 Geothermal Power Plant – Mr. Lee was part of a team engaged to perform a feasibility study for the 45 MW Olkaria 1 power plant, located at the Olkaria geothermal field in the Rift Valley, Africa. The plant had experienced normal wear and tear over the 32 years of operation. Mr. Lee developed a financial model to evaluate the financial and economic performance of the project's alternatives.
- CF Industries Donaldsonville Expansion – REH was selected by CF Industries to be a 50 percent partner in the Donaldsonville expansion. The expansion contemplated the retrofit of 50 percent of their ammonia production capacity to petroleum coke gasification-based production. Mr. Lee led the technical coordination and feasibility assessment work with the CF joint venture team.
- South Maui Renewable Resources – Mr. Lee was responsible for assisting SMRR with power purchase agreement negotiations, ancillary service value estimates, and performing a financial feasibility assessment for a proposed firm-PV solar project on the Island of Maui. The PV project was designed to be firm using micro turbines, and he created a project pro forma with specific characteristics of the solar energy resource to predict the dispatch of the micro-turbines.
- African Transmission Line Feasibility Assessment – Mr. Lee is part of a team engaged by GRIDCo, Ghana's Electrical Transmission Provider, to perform a feasibility study pursuant to a USTDA grant. The purpose of the feasibility study is to assist GRIDCo in determining the technical and economic viability of a new 330 kilovolt (kV) double-circuit power transmission line between Aboadze, Domunli and Prestea, Ghana.

- Resort Energy Ventures - Project Manager responsible for a feasibility study for a combined heat and power (CHP) project at the Grand Wailea Resort on the Island of Maui. His team conducted an assessment of the resort's energy needs and developed a CHP system that would decrease its dependence on the local electric utility and realize substantial near-term cost savings. The team provided the resort with preliminary engineering and cost estimates for the CHP system as well as a bid package to allow the resort to move forward with final design and installation of the project through an EPC contract.
- TDX North Slope Generating, LLC - Project Manager for a study to validate the resource plan being developed for the system providing power to the Alaska's North Slope oil fields at Prudhoe Bay. TDX owns gas- and diesel-fired generation and the distribution system serving the oil drilling operations, oil pumping system, and worker housing along the coastal plain of the Arctic Ocean at the mouth of the Sagavanirktok River.
- Blue Mesa Energy – Feasibility assessments for five wind energy developments in New Mexico, Nebraska, and Montana. Mr. Lee provided financial modeling and advisory services to the joint venture in support of project funding requirements.
- SR Solar, LLC – Mr. Lee performed feasibility studies for roof-top solar projects in the Northeastern region of the United States. SR Solar formed a strategic alliance with confidential cosmetic manufacturer to investigate multiple projects at manufacturing facilities in New Jersey and Kentucky.

Project Development Related Roles: Project Design, Teaming, and Acquisitions

Refined Energy Holdings:

Mr. Lee was the Chief Operating Officer of Refined Energy Holdings and led the company's project design function, coordinated with strategic partners, and led the technical review of potential acquisitions. His projects include the Power County Advanced Energy Center, a fully permitted coal-based gasification to nitrogen fertilizer project located in Power County, Idaho. Mr. Lee was responsible for technology selections, design, and permitting of the project. In addition, he established strategic teaming relationships with key technology providers, led negotiations with NGOs and government officials, and worked closely with the leadership team to structure and execute key commercial agreements. Other REH projects (described above) included the Kern Oil and Refining Company acquisition review, CF Industries Donaldsonville Expansion, and various renewable energy projects.

Energy Development Group:

Mr. Lee was a principal with Energy Development Group and led technical development for the company. With colleagues at E3 Consulting, he provided preliminary design, electrical interconnection applications, air, water, and wastewater permitting, water rights appropriation, community involvement, and zoning support. He was involved in the following projects:

- Payette Energy Center – 300 MW combined cycle development project in Payette, Idaho.
- American Falls Energy Center – 600 MW combined cycle development project near American Falls, Idaho.
- Gallup Energy Center – 600 MW combined cycle development project near Gallup, New Mexico.
- Cambray Energy Center – 160 MW simple cycle combustion turbine project near Deming, New Mexico.

- Iberville Energy Center – 600 MW combined cycle development project in Iberville Parish, Louisiana.
- Caddo Parish Energy Center – 750 MW combined cycle development project in Caddo Parish near Shreveport, Louisiana.
- Pointe Coupee Energy Center – 750 MW combined cycle development project in New Roads, Louisiana.
- Barton Shoals Energy Center – 1,200 MW and 600 MW combined cycle development projects near Barton Shoals, Alabama.
- Linfield Energy Center – 600 MW combined cycle development project in Limerick, Pennsylvania.

Project Development Support Services:

Mr. Lee has been involved with energy-related project development as a consultant with POWER Engineers (Galena Advisors), R.W. Beck and E3 Consulting. His role varied from leading the permitting of new generation to advising debt and equity on project feasibility. The following is a sampling of projects with which he was involved:

- Buffalo Power Company – 1,100 MW IGCC project near Glenrock, Wyoming.
- SilvaGas Biomass Gasification – Technical support for multiple biomass gasification projects.
- Kinder Morgan Jackson Power Plant – Simple cycle and combined cycle power plant, Michigan.
- Haines Light & Power – Permitting assistance for five diesel-electric generating units utilized by Haines Light & Power, Haines, Alaska.
- Kodiak Electric Association – Permitting assistance for 13 diesel-electric generating units in Kodiak, Alaska.
- Guam Power Authority, Multiple Projects – Permitting assistance for combustion turbine generating units, medium-speed diesel generating units, large slow-speed diesel generating units, and heavy oil Rankine generating units.
- Alaska Electric Light & Power – Permitting assistance for two combustion turbine electrical generating units.
- Confidential Client – ERC review for non-attainment area permitting, California.
- Alcan Pot Line Expansion – Permitting assistance for a new aluminum pot line at a large aluminum smelter, Kentucky.
- Caribbean Utilities Company – Air dispersion modeling evaluation for new and existing medium speed diesel electric generating units, Grand Cayman.

Project Financing Support Services

While at POWER Engineers, R.W. Beck, E3 Consulting, and as an Independent Contractor, Mr. Lee provided engineering and business services to developers, financiers, purchasers, sellers, and investors of energy related projects. Generally, the purpose of the engagement was to support a transaction (debt or equity). The technical and business conclusions and recommendations would be used to qualify the technical risks of a project. The following is a representative sample of Projects with which Mr. Lee has been involved:

- sPower Solar Portfolio – Mr. Lee assisted with the contract reviews on behalf of AES Corporation in assessing the acquisition of sPower's utility

scale solar assets. The transaction support included the evaluation 1.3 GWs of operating and “under-construction” projects as well as an additional 5.0 GW in varying stages of development.. The buyer closed on the transaction in 2017.

- TerraForm Solar Portfolio – Mr. Lee assisted with the contract reviews on behalf of AES Corporation assessing the acquisition of TerraForm Power’s utility scale solar assets. The transaction support included the evaluation 910 MWs of solar power projects, nearly all of which were under long-term power purchase agreements.
- UPPCO Utility Acquisition – Mr. Lee led the Independent Engineering review of the UPPCO utility assets on behalf of equity and debt investors. He was responsible for a financial assessment of the utility’s assets and operations, preparation of a bankable assessment report, and developing a resource plan for the utility. The deal with Balfour Beatty Infrastructure Partners closed in 2014.
- Bottle Rock Power – Mr. Lee was responsible for the financial assessment to support the acquisition activities of a new binary geothermal power plant and its operational merger with an existing plant.
- AES Eastern Coal Fired Assets – Multiple pulverized coal projects located in up-state New York (Somerset, Greenidge, Cayuga, and Westover).
- Excel Energy’s Comanche 3 Project – 750 MW pulverized coal expansion project, Pueblo, Colorado.
- Confidential 49 MW Geothermal Plant (California) – Independent Engineering review of a new 49 MW geothermal plant.
- Batesville Generating Facility – 810 MW combined cycle plant near Batesville, Mississippi.
- Elwood Generating Station – 1,400 MW simple cycle plant near Chicago, Illinois.
- Cogentrix Richmond Plant and Rocky Mount Plant – 360 MW of Coal-fired stoker cogeneration plants near Richmond, Virginia, and Rocky Mount, North Carolina.
- Kiowa Project – 1200-MW combined cycle power plant project, Oklahoma.
- Baconton Generating Station – 190 MW simple cycle combustion turbine power plant in Baconton, Georgia.
- Lindsay Hill Project – 845 MW combined cycle power plant, Alabama.
- Rathdrum Power Project – 268 MW combined cycle power plant project near Rathdrum Idaho.
- Brookfield Renewable Power (Nevada) – Independent Engineering review for the potential purchaser of a geothermal power plant for a 15 MW geothermal plant in the northwest United States.
- Frontier Generating Station – 830 MW combined cycle power plant project, Texas.
- Gateway Generating Station – 845 MW combined cycle power plant in Texas.
- Gregory Power Plant – 401 MW cogeneration project, Texas.
- Sweeney Cogeneration – 330 MW cogeneration project in Texas.
- Aquila LDC Divestiture – three local distribution companies: Minnesota Gas, Michigan Gas Utilities, Missouri Gas Operations.
- Encana Gas Storage Divestiture – four gas storage projects including Suffield, Countess, Wild Goose, and Salt Plains (210 Bcf total storage).
- Pine Prairie Gas Storage – 24 BCF natural gas storage project, Louisiana.
- Iroquois Pipeline System – 375-mile, 24- and 30-inch natural gas pipeline project, New York and Connecticut.

- Baytown, Texas Brine Company, Texas – Salt crystallization and brine pipeline project on behalf of lenders.
- TQM Pipeline – 130-mile, 24-inch diameter natural gas pipeline, Quebec, Canada.
- Maritimes & Northeast Pipeline – 630-mile, 24- and 30-inch natural gas pipeline, Canada & United States.
- Mississauga, Canada – 100-MW combined cycle combustion turbine electrical generation.
- Ottawa Health Sciences Centre – 68 MW combined cycle combustion turbine electrical generation plant, Canada.
- Windsor-Essex, Canada – 62 MW combined cycle combustion turbine electrical generation unit.
- Kingston Cogeneration Project – 100 MW combined cycle combustion turbine electrical generation unit, Ontario, Canada.
- West Windsor Cogeneration Project – 102 MW combined cycle combustion turbine electrical generation unit, Ontario, Canada.
- West Java Power Project – 400 MW pulverized coal-fired facility in Indonesia.
- Clay County Power Project – 320 MW single-cycle power plant using General Electric Frame 7 EA technology, Illinois.
- De Pere Power Company – 170 MW simple cycle combustion turbine electrical generation unit, Wisconsin.
- Grayling Generating Station – 36 MW traveling grate stoker, wood-fired power plant that has supplemented its wood supply by combusting tire chips, Wisconsin.
- Genesee Power Station – 35 MW traveling grate stoker, wood-fired power plant, Michigan.

Asset Valuation and Restructuring Advisory Services

While at E3 Consulting, Mr. Lee provided asset valuation and restructuring services to debt holders. Notable projects include:

- Southaven Power, LLC – Mr. Lee managed E3 financial advisory services to the lending institutions of Southaven Power, LLC, which had defaulted on its loan when PG&E National Energy Group, the facility’s power off taker, declared bankruptcy in July 2003. E3 had been responsible for reviewing the business and power marketing function of Southaven Power, providing updated power market assessments, building an independent valuation model, and advising the lending institutions with regard to the project’s cash flow forecasts.
- Mirant Americas Generation, LLC – Mr. Lee assisted E3 Consulting with restructuring services to the Official Committee of Unsecured Creditors of Mirant Americas Generation, LLC (“MAGI”). MAGI was an affiliate of Mirant Corp, which filed for Chapter 11 Bankruptcy protection in July 2003. MAGI owned and operated about 10,000 MW of coal, oil, and natural gas generating assets in five regions of the United States. As the Committee’s Energy Consultant, E3’s primary role includes advising the Committee on various aspects of the Company’s business plans and current operations, and developing asset cash flow models based on an independent market assessment and plant-specific analyses.