

Robert S. Mudge

Principal

Washington, DC

+1.202.955.5050

Bob.Mudge@brattle.com

Mr. Robert Mudge is an expert in corporate and project finance matters in the energy industry. He has advised energy clients on issues relating to corporate restructuring, contract terminations or amendments, special capital needs, and acquisitions and divestitures. He also has experience in analyzing contractual, regulatory, financing, and tax matters, and projecting effects on cash flows, earnings, and customer rates.

Mr. Mudge currently serves as Chief Operating Officer of The Brattle Group. Prior to joining The Brattle Group, Mr. Mudge was a Principal at CRA International, where he focused on financial restructuring initiatives for electric utility clients, and consulted on matters involving rate design, asset valuation, and project finance structuring and credit requirements. He has provided expert testimony in proceedings before the Federal Energy Regulatory Commission, utility regulatory authorities in Missouri, Michigan, Kentucky, and Alberta, the United States Tax Court, the Massachusetts Superior Court, and the Maine Department of Environmental Protection, as well as in connection with arbitration proceedings.

As a former investment and commercial banker at Rothschild, ABN AMRO, and Sanwa Bank, he played a central role in developing financeable contract structures for large public and private infrastructure projects, utility mergers and acquisitions, bankruptcy restructuring, and numerous power project financings. He has also served on the advisory board of a start-up venture focused on the acquisition, development, and operation of renewable fuel generation projects.

AREAS OF EXPERTISE

- Electric Power
- Financial Institutions
- Regulatory Finance and Accounting
- Utility Regulatory Practice and Ratemaking
- Valuation

EDUCATION

Mr. Mudge received an M.B.A. in Finance and Economics from the University of Chicago, Graduate School of Business, Chicago, IL, and a B.A. (*cum laude*) from Harvard College, Cambridge Massachusetts.

EXPERIENCE

- **For an investor owned utility company in a regulatory proceeding**, Mr. Mudge assessed the rationale for and impact of preferential “load-retention” tariff requested by major industrial customer.
- **For an investor owned utility company exploring strategic alternatives**, Mr. Mudge analyzed potential responses to distributed generation initiatives and associated adverse effects on load growth (including potential utility ownership of distributed generation and inclusion in rate base).
- **For an independent power developer seeking to sell power to an investor owned utility**, Mr. Mudge assessed the impact of the imputed debt treatment likely to be applied by rating agencies with respect to a power purchase agreement.
- **For an unsecured creditor in the bankruptcy of TerreStar Networks Inc.**, Mr. Mudge assessed potential payouts based on contingencies including the outcome of litigation concerning the validity of secured creditor liens and proposed early payouts to secured creditors.
- **For the Department of the Treasury**, Mr. Mudge assessed the structure and financing of a \$10 billion + cross border utility merger. The assignment included comparison of affiliate debt financing with comparable “arm’s length” financing visible in the marketplace in the relevant timeframe.
- **For a special litigation committee** established in connection with a shareholder lawsuit brought against a developer of renewable energy projects, Mr. Mudge assessed debt and equity financing options that could have been brought to bear to optimize shareholder returns.
- **For an investor owned electric utility**, Mr. Mudge developed financial analysis to assess potential capital initiatives to address transmission expansion and compliance with environmental regulations and renewables mandates, as well as accompanying rate structures.
- **For an electric cooperative**, Mr. Mudge managed financial analysis in connection with transformative restructuring of \$1.2 billion generation and transmission electric cooperative, reporting to the CEO, CFO, and transaction counsel. The restructuring included termination of complex power supply arrangements, lease unwind, acquisition of generating assets, acquisition of new customers, related financing arrangements and securing an investment grade credit rating. The restructuring also replaced a previously existing mortgage with the Rural Utilities Service with a new senior secured indenture.

Robert S. Mudge

- **In the formation of a renewable energy debt fund**, Mr. Mudge advised the managers on portfolio structuring, credit analysis and related protocols, and implementation.
- **In the process of a power plant sale**, Mr. Mudge managed a multi-disciplinary team in providing market analysis and financial modeling in support of a successful bid for a \$300 million generating plant asset.
- **For an LNG developer**, Mr. Mudge provided analysis and expert testimony before the state Board of Environmental Protection on project financial capacity to support environmental permitting and compliance.
- **Mr. Mudge completed a financeability analysis** relating to \$2.5 billion capital project proposed to operate under long term contract with the US Department of Energy (DOE).
- **Mr. Mudge provided analysis and expert testimony before arbitration panel** relating to costs incurred in delayed startup of 1,000 MW merchant power plant.
- **For project counsel**, Mr. Mudge developed a working finance plan and analysis to optimize construction costs for a \$1.2 billion new-build power project proposed to be owned by a consortium including IOUs, municipalities, and an electric cooperative.
- **Mr. Mudge evaluated diverse financing options for the Tennessee Valley Authority (TVA)** relating to nuclear repowering initiatives and investment in emissions control equipment, reporting to the CFO.
- **As a member of the advisory board for a start-up venture, Advanced Renewables, LLC**, Mr. Mudge advised on acquisition, development, and operation of renewable-fuel generation projects, consultation on structuring, acquisition prospects, and capitalization.
- **For a major contractor to US Department of Energy (DOE)**, Mr. Mudge provided assistance on project finance structuring and sourcing for privatized environmental projects, including creation of financeable contract structure and assembly of top-tier financing syndicate.
- **For US utility and independent energy clients**, Mr. Mudge identified and implemented asset and corporate acquisitions, including advice on valuation, due diligence, approach, and negotiations and assessment of key drivers.
- **With a major multi-lateral agency**, Mr. Mudge participated in the structuring of a debt and equity investment fund for emerging markets power projects.

Robert S. Mudge

- As a **project finance banker**, Mr. Mudge conducted numerous transactions domestically and abroad in electric power generation, oil and gas pipelines, and other infrastructure.

REPORTS AND PRESENTATIONS

Distributed solar payback analysis in support of Reply Comments by Southern California Edison Company in connection with California Public Service Commission Rulemaking 12-11-005: Order Instituting Rulemaking Regarding Policies, Procedures and Rules for California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues (with M. Vilbert and J. Wharton). December 23, 2013.

“Overview of Rooftop Solar PV ‘Green Bank’ Financing Model,” sponsored by Connecticut Clean Energy Finance and Investment Authority and the Coalition for Green Capital. January 17, 2013.

“ERCOT Investment Incentives and Resource Adequacy,” report prepared for the Electric Reliability Council of Texas (with S. Newell, K. Spees, J. Pfeifenberger, M. DeLucia, and R. Carlton). June 1, 2012.

“MLPs for Renewables: Complement or Substitute for Tax Credits?,” presented at the EUCI Conference on Renewable Energy M&A Transactions, San Diego, CA, December 6, 2011.

“Optimizing Gas for Flexible Power,” presented at the Utility Scale Flexible Power Summit, Denver, CO, September 28, 2011.

TESTIMONY

Missouri Public Service Commission, Case No. ER-2014-0258. Rebuttal testimony on behalf of Ameren Missouri in the matter of Noranda Aluminum, Inc.’s request for revisions to Ameren Missouri’s Large Transmission Service Tariff to decrease its rate for electric service (as part of a general Ameren rate case). Analysis addressing Noranda’s claim of imminent liquidity crisis, potential alternative capital sourcing, and Noranda’s competitive position in U.S. aluminum industry. January 15, 2015.

International Centre for Settlement of Investment Disputes, Case No. ARB/13/18 (Enel Green Power S.p.A. (“Enel”) v. Republic of El Salvador). Expert report assessing the contingent value of Enel’s ownership stake in LaGeo S.A. de C.V. (“LaGeo”), a geothermal development and operating company with a portfolio of assets in El Salvador, associated with Enel’s rights under a shareholder agreement with the government of El Salvador. December 5, 2014.

Missouri Public Service Commission, Case No. EC-2014-0224. Rebuttal testimony on behalf of Ameren Missouri in the matter of Noranda Aluminum, Inc.’s request for revisions to Ameren Missouri’s Large Transmission Service Tariff to decrease its rate for electric service. Analysis addressing Noranda’s claim of imminent liquidity crisis, potential alternative capital sourcing, and Noranda’s competitive position in U.S. aluminum industry. May 9, 2014.

Robert S. Mudge

Federal Energy Regulatory Commission, Docket Nos. ER14-1050. Testimony responding to protests, comments and testimony submitted in ER14-1050 by the New England Power Pool Participants Committee (“NEPOOL”) and others suggesting that ISO-NE’s proposal to integrate stronger performance incentives—referred to as “Pay For Performance”—with the existing Forward Capacity Market would materially hinder debt and equity financing of new generation entering the ISO-NE market. March 3, 2014.

Michigan Public Service Commission, Case No. U-17429. Direct testimony in the matter of the application of Consumers Energy Company for approval of a Certificate of Necessity for the Thetford Generating Plant and for related accounting and ratemaking authorizations. Assessment of imputed debt impact and accompanying financial risks asserted by Consumers in connection with power purchase agreements. October 29, 2013.

Alberta Utilities Commission, Application No. 1607670, Proceeding ID 1449, Alberta Electric System Operator Competitive Process Application. Written testimony assessing AESO proposed evaluation methodology for the financing component of proponents’ RFP bids in connection with the Competitive Process for Critical Transmission Infrastructure (CTI). June 1, 2012.

“N.A. General Partnership v. Commissioner,” Expert Report in connection with testimony before the United States Tax Court in the matter of *NA General Partnership & Subsidiaries, Iberdrola Renewables Holdings, Inc. & Subsidiaries, Successor in Interest to NA General Partnership & Subsidiaries*, Docket 525-10. April 8, 2011.

“Assessment of Powerbank Transactions – Commercial Rationale and Consistency with Allocation of 2007 Sale Proceeds,” Expert Report in connection with forthcoming testimony in the matter of *Paul Bergeron, on behalf of Ridgewood Electric Power Trust V and Ridgewood Power Growth Trust v. Ridgewood Renewable Power, LLC*, C.A. No. 07-1205 BLS1. October 28, 2010.

Kentucky Public Service Commission, Case No. 2007-00455 on behalf of Big Rivers Electric Corporation, regarding the Applications of Big Rivers Electric Corporation for: (I) Approval of Wholesale Tariff Additions for Big Rivers Electric Corporation, (II) Approval of Transactions, (III) Approval to Issue Evidences of Indebtedness, and (IV) Approval of Amendments to Contracts; and of E.ON U.S., LLC, Western Kentucky Energy Corp., and LG&E Energy Marketing, Inc., for Approval of Transactions. 2007.

Testimony before the Maine Board of Environmental Protection in the matter of *Downeast LNG, Inc. and Downeast Pipeline LLC LNG Terminal and Pipeline, Robbinston, Calais, Baring PLT, Baileyville, and Princeton* L-23432-26-A-N, L-23432-TG-B-N, and A-000960-71-A-N. June 2007.

Testimony before American Arbitration Association Construction Industry Tribunal in the matter of the arbitration between *The Shaw Group/Stone & Webster, Inc. vs. New Harquahala Generating Company, LLC* Case No. 16 110Y00 242 04. 2005 and 2006.