

# **Vote Solar Exhibit 2.1**

## **SUMMARY OF EXPERIENCE**

David W. DeRamus is a founding member of Bates White Economic Consulting and a Partner in the firm's Energy Practice. He specializes in economic and financial analysis, quantitative modeling, antitrust analysis, pricing analysis, damages analysis, and valuation. Dr. DeRamus has an extensive background in industrial organization, international economics, antitrust economics, microeconomics, finance, financial modeling, and statistical analysis.

## **SELECTED ENERGY REGULATORY AND LITIGATION EXPERIENCE**

- Submitted a declaration on behalf of plaintiffs in *Electric Power Supply Association et al. v. Anthony M. Starr et al.* in U.S. District Court for the Northern District of Illinois Eastern Division (Case No. 17-cv-01164). Analyzed the impact of the Illinois Zero Emissions Credits on wholesale electricity markets.
- Testified on behalf of the Energy Freedom Coalition of America before the Arizona Corporation Commission (Docket No. E-01933A-15-0239) regarding a proposal by Tucson Electric Power Company related to residential distributed generation (DG) and the Arizona Renewable Energy Standard and Tariff. Analyzed the impact of proposed tariff changes on customers and competitive residential DG solar providers.
- On behalf of the National Biodiesel Board, submitted comments to the U.S. Environmental Protection Agency in 2016 proceedings related to the Renewable Fuel Standards. Prepared report analyzing issues related to the transportation and distribution infrastructure used for biodiesel, ethanol, and petroleum products. In prior proceedings, analyzed the cost effectiveness of biodiesel in reducing U.S. CO<sub>2</sub> emissions.
- Served as testifying expert before the International Center for Settlement of Investment Disputes in a contract dispute involving a major natural gas extraction and LNG project in Latin America. The LNG produced from the project was exported to customers in Mexico, the U.S., and other global natural gas markets. Testified on behalf of a consortium of producers on issues related to the economics of the contract, industry practices, the impact on the parties of recent developments in global natural gas markets, the commercial causes and consequences of "re-exports" from certain global LNG terminals, the appropriate calculation of royalties, and damages.
- Testified on behalf of Florida Power & Light Company in proceedings before the Florida Public Service Commission regarding the potential impact on residential and commercial customers of a proposed base rate increase.

- Testified on behalf of the Maryland Public Service Commission Staff to assess potential market power issues associated with the proposed merger of Exelon Corporation and Constellation Energy Group Inc. Analyzed changes in market concentration as a result of the merger, the appropriate definition of relevant geographic markets, and the adequacy of the Applicants' proposed mitigation plan. Analyzed the economic viability of the coal-fired electric generation facilities selected for divestiture by the Applicants and evaluated their potential environmental compliance costs. Provided testimony on the Applicants' proposal to build additional renewable generation as a means of addressing market power concerns raised by the proposed merger.
- Submitted testimony and testified at hearing in *Jenkins v. Entergy Corp.* estimating damages to plaintiffs resulting from an alleged improper energy purchasing scheme; submitted testimony in class certification proceeding.
- Submitted testimony on behalf of Occidental Chemical Company in FERC proceedings (Docket No. ER10-396-000) related to the application by Tres Amigas, LLC, for authorization to sell transmission services at negotiated rates. Analyzed potential market power issues raised by the application.
- Submitted testimony on behalf of the NRG Companies in FERC proceedings (Docket No. ER08-1209-\_\_\_\_) related to the proposal by ISO New England Inc. and the New England Power Pool Participants Committee to compensate rejected Dynamic and Static De-List Bids in the ISO-NE Forward Capacity Auction.
- Submitted testimony on behalf of Milford Power Company, LLC, in FERC proceedings (Docket No. ER99-4102-\_\_\_\_) related to the Commission's generation market power screens as applicable to Milford's market-based rate authority.
- Testified on behalf of the New York Power Authority in FERC proceedings (Docket No. ER06-456-000, et al.) related to the proposal by PJM Interconnection to allocate cost responsibility for certain transmission network upgrades included in the baseline PJM Regional Transmission Expansion Plan to merchant transmission projects that interconnect with the PJM transmission network.
- Served as consulting expert on behalf of multiple defendants in several large cases related to the natural gas industry on class certification and damages issues. Alleged conduct involved misreporting of prices to publishers of natural gas price indices.
- Submitted testimony on behalf of Southaven Power and Kelson Energy III in FERC proceedings (Docket No. EC08-\_\_\_\_-000) related to potential market power issues arising from Kelson's proposed acquisition of the Southaven electric generation facility. Submitted testimony on behalf of Kelson Energy III in FERC Docket No. ER08-\_\_\_\_-000 related to the Commission's generation market power screens as applicable to Kelson's application for market-based rate authority.
- Submitted comments in proceedings before the Federal Energy Regulatory Commission (FERC) (Docket Nos. RM07-19-000 and AD07-7-000) related to "Wholesale Competition in Regions with Organized Electric Markets" (see "Comments of the Electric Power Supply Association"). Analyzed economic issues related to FERC's demand response proposals.

- Testified on behalf of Tenaska and Coral Power in proceedings before the Public Utility Commission of Texas (PUC Docket No. 33687) related to the application by Entergy Gulf States, Inc., of its “Transition to Competition Plan.” Analyzed issues related to Entergy’s business strategy, cost-benefit analysis, cost allocation, cross-subsidization, and potential harm to competition.
- Submitted testimony on behalf of Occidental Chemical Company in FERC proceedings (Docket No. EC07-70-000) evaluating the proposed acquisition of jurisdictional assets of Calcasieu Power, LLC, by Entergy Gulf States, Inc. Analyzed issues related to the impact of the acquisition on market concentration and the ability of the applicant to exercise market power.
- Testified on behalf of Shell Trading Gas and Power Company and Calpine Corp. in FERC proceedings (Docket Nos. ER97-4166-015, EL04-124-000, et al.) related to the application by the Southern Companies (Southern Company Energy Marketing, Inc., and Southern Company Services, Inc.) for market based rate authority. Analyzed issues related to the appropriate implementation of the Commission’s Delivered Price Test, generation market power, Southern Companies’ transmission network, barriers to entry, and affiliate preferences.
- Submitted testimony on behalf of Constellation Energy Commodities Group, Inc., in a complaint proceeding before FERC (Docket No. EL07-47-000) brought by the Illinois Attorney General against various participants in the Illinois Auction for electric power supplies held in September 2006. Analyzed issues related to the competitiveness of the auction structure, market concentration, the ability of the participants to exercise market power, and allegations of collusion.
- Testified on behalf of the Texas Industrial Energy Consumers in proceedings before the Public Utility Commission of Texas (SOAH Docket No. 473-06-2536 and PUC Docket No. 32766) related to the retail electric power rates charged by Southwestern Public Service Company. Analyzed issues associated with the appropriate allocation of average system fuel costs and cross-subsidization.
- Testified on behalf of BP Canada Energy Marketing Corp. and IGI Resources, Corp., in FERC proceedings (Docket No. RP06-407) related to the application by Gas Transmission Northwest Corporation for market-based rate authority and flexible services rates for certain transportation services provided by the GTN natural gas pipeline.
- Testified on behalf of Occidental Permian Ltd. and Occidental Power Marketing, L.P., in FERC proceedings (Docket No. EL05-19-002 and ER05-168-001) related to the wholesale electric power rates charged by Southwestern Public Service Company. Analyzed issues associated with the appropriate allocation of average system fuel costs and cross-subsidization.
- Submitted testimony on behalf of Occidental Permian Ltd. and Occidental Power Marketing, L.P., in FERC proceedings (Docket No. ER01-205-009, et al.) related to the application by Southwestern Public Service Company for market-based rate authority. Analyzed issues related to generation market power and affiliate abuse.

- Submitted testimony on behalf of Calpine Corp. in FERC proceedings (Docket No. ER05-1065-000) and testified in Louisiana Public Service Commission proceedings (Docket No. U-28155) related to the application by Entergy to establish an Independent Coordinator of Transmission in the Entergy control area. Analyzed issues related to the functions to be performed by the ICT, Entergy's transmission pricing proposal, and its Weekly Procurement Process proposal.
- Submitted testimony on behalf of Calpine Corp. in proceedings before the Louisiana Public Service Commission (Docket No. U-27836) related to the application by Entergy Louisiana, Inc., and Entergy Gulf States, Inc., for approval of the purchase of the Perryville, La., electric generating facility. Analyzed issues of market power and calculated the extent to which the proposed transaction increased market concentration.
- Submitted testimony on behalf of Calpine Corp. and Occidental Chemical Corp. in FERC proceedings (Docket No. ER91-569-023) related to the application by Entergy Services, Inc. for market based rate authority. Analyzed issues of generation market power, transmission market power, barriers to entry, and affiliate abuse in the Entergy control area. Implemented a model of the Entergy control area transmission constraints in performing the generation market power analysis.
- Submitted testimony on behalf of Calpine Corp. in FERC proceedings (Docket No. ER96-2495-018, et al.) related to the application by AEP Power Marketing, Inc., et al. for market based rate authority. Analyzed issues of generation market power, transmission market power, barriers to entry, and affiliate abuse in the AEP-SPP control area.
- Testified in Delaware Chancery Court in *Frontier Oil Corp. v. Holly Corp.*, a merger-related dispute in the energy industry. Testimony involved the valuation of a potential environmental liability/toxic tort arising from oil and gas operations, including an assessment of the materiality of the liability to the proposed merger.
- Submitted expert testimony on behalf of Duke Energy in FERC proceedings (Docket Nos. EL00-95-075 and EL00-98-063) related to the California power markets during 2000–2001 and allegations of improper bidding behavior. Analyzed detailed data on individual bids and plant-level generation, performed statistical analysis of “physical” and “economic” capacity withholding, analyzed financial market data, examined alleged evidence of manipulative trading strategies, and assessed evidence of coordinated behavior.
- Submitted expert testimony on behalf of Duke Energy in response to a FERC Show Cause Order (Docket No. EL03-152-000) relating to alleged “gaming” behavior in the California power markets.
- Submitted expert testimony on behalf of InterGen in FERC proceedings (Docket No. EC03-131-000) related to Oklahoma Gas & Electric's proposed acquisition of NRG McClain. Analyzed issues of horizontal and vertical market power in a hearing regarding appropriate mitigation measures.

- Submitted expert testimony on behalf of the Independent Energy Producers Association on vertical market power in FERC proceedings (Docket No. ER04-316-000) related to Southern California Edison's proposed acquisition of a Mountainview, California, electricity generating facility and a subsequent interaffiliate Power Purchase Agreement.
- Analyzed economic issues on behalf of the Electric Power Supply Association with respect to demand response programs and price caps in organized electric markets in FERC Docket Nos. RM07-19-000 and AD07-7-000 ("Wholesale Competition in Regions with Organized Electric Markets").
- Prepared a quantitative analysis of the benefits of competitive electric wholesale markets on behalf of an energy company.
- Prepared a whitepaper on the use of competitive procurements as a means of reducing market power in wholesale electric markets on behalf of an energy company.
- Submitted a report on behalf of the Independent Energy Producers Association regarding the proposed market price referent methodology for California Renewables Portfolio Standards power solicitations in proceedings before the California Public Utilities Commission (Docket OIR 01-10-024).
- Provided economic analyses related to antitrust issues involving the electric utility industry. Analyzed prices, load patterns, capacity issues, outages, bidding patterns, and allegations of anticompetitive behavior.

#### **SELECTED OTHER LITIGATION EXPERIENCE**

- Served as a Technical Expert in a contract dispute between two petrochemical companies in administered expert proceedings before the International Chamber of Commerce (ICC)/International Centre for ADR. The scope of the assignment was to determine an appropriate reference price to be used for the remaining period of a long-term supply contract.
- Served as testifying expert in *XY, LLC v. Trans Ova Genetics LLC v. Inguran LLC*, a patent infringement and antitrust dispute in the livestock reproductive services industry. Testified on behalf of Counterclaim Plaintiff Trans Ova Genetics on issues related to relevant market definition, monopoly power, anticompetitive conduct, and damages.
- Submitted a declaration in *Allure Energy, Inc. v. Nest Labs, Inc.* on behalf of defendant Nest Labs. Performed economic analysis of the four *eBay* factors to assess whether a preliminary injunction against Nest Labs should be granted for alleged patent infringement. Plaintiff's request for a preliminary injunction was denied.

- Testified at trial in *ZF Meritor LLC v. Eaton Corp.*, a monopolization case involving certain heavy-duty truck components. On behalf of plaintiffs, submitted testimony defining the relevant antitrust market, assessing whether a market participant had monopoly power, and evaluating the harm to competition from certain contracts and the performance of those contracts; also submitted testimony estimating damages. Jury verdict on liability in favor of client, upheld on appeal (*ZF Meritor v. Eaton Corp.*, 696 F.3d 254 (3d Cir. 2012), cert denied, 133 S.Ct. 2025 (2013)). Prior to the damages phase of trial, the parties agreed to a \$500 million settlement.
- Submitted expert testimony on behalf of Arkema in a contract dispute in the chemical industry. Testified in proceedings before the American Arbitration Association on the economics of the contract, the value to the parties of the contract, the impact of foreign exchange rate changes on the value of the contract, the competitive alternatives available to the parties, and damages.
- Testified in proceedings before the American Arbitration Association in a contract dispute between defense contractors. Testified on issues related to the materiality of the failure to disclose a government investigation, the economic analysis of a subcontract and alleged joint venture agreement, and damages.
- Submitted expert testimony in *T.E. Security Consultants v. DynCorp Int'l*, a contract dispute between defense contractors. Testified on issues of the financial ability of one of the parties to perform on a contract, a party's ability to obtain financing, the economic analysis of an alleged subcontract, the value of alleged trade secrets, and damages.
- Submitted various expert reports in international tax disputes before the Mexican tax authority (Servicio de Administración Tributaria) related to transfer pricing. These reports evaluated whether various related-party transactions were consistent with the arm's-length standard under OECD and Mexican transfer pricing guidelines.
- Submitted expert testimony in *In re Methionine Antitrust Litigation*, a major price-fixing case involving feed additives on behalf of direct action opt-out plaintiffs. Issues included establishment of liability, estimation of damages, analysis of industry structure, analysis of financial performance, and other pricing-related issues.
- Submitted expert testimony on behalf of indirect purchaser plaintiffs in class certification proceedings in *J&R Ventures, Inc. v. Rhone-Poulenc SA*, a price-fixing case involving feed additives.
- Served as consulting expert for the US Department of Justice in a major government contract dispute. Assessed the economics of a development contract with defense aerospace companies. Analyzed the contractors' financial performance and viability, bankruptcy risks, potential financing sources, project cash-flows, and the impact of contract termination.
- Served as consulting expert in international arbitration proceedings (International Chamber of Commerce) related to a dispute in the pharmaceutical industry. Estimated damages associated with the alleged breach of contract.

- Served as consulting expert on antitrust, pricing, and exclusionary conduct issues related to biotechnology and agricultural products. Analyzed potential anticompetitive harm resulting from a proposed acquisition.
- Served as consulting expert on behalf of plaintiffs for monopolization cases involving the computer software industry. Assisted with the development of overall case strategy and preparation of economic analysis used in legal filings, analyzed pricing issues, investigated and reviewed allegations of anticompetitive behavior, prepared damages estimates, submitted damages reports to clients, and assisted with settlement negotiations.
- Submitted expert testimony in government procurement litigation matter involving office productivity software. Analyzed financial costs and benefits of software standardization initiative, reviewed product comparisons, analyzed data on software installation and use, evaluated claims regarding alleged product integration and standardization advantages, and analyzed anticompetitive consequences of government procurement decisions.
- Developed a state-of-the-art microsimulation model for estimating the future liability of former asbestos manufacturers from personal injury lawsuits. Developed several financial cash-flow models to determine long-term viability of product liability settlement trusts.
- Conducted several valuation studies related to potential future product liability and potential future litigation recoveries. Valuation reports prepared and submitted as part of the acquisition process for due diligence and tax reporting purposes.
- Assessed reliability of statistical study related to pricing accuracy for a large retailer. Analyzed issues related to overall study methodology, sampling bias, and quantification of harm to consumers.
- Submitted expert testimony assessing the damages resulting from defamation in the travel retail industry.
- Provided project oversight for estimation of damages in patent infringement case in the financial services industry. Damages estimated based on a reasonable royalty methodology.
- Conducted a valuation of a plaintiff's legal claims related to several ongoing major litigation matters. Valuation report submitted for tax reporting purposes.
- Analyzed the impact of a private-label credit card on a large retailer's sales and profits in a major tax dispute. Developed a robust statistical model using the company's point-of-sale data, credit card data, and customer demographic information. Tax dispute resolved in favor of the client based on this analysis.
- Conducted an antidumping study to estimate exposure to tariffs in the petrochemical industry.
- Conducted market and industry analyses for various due diligence, breach of contract, bankruptcy, and product liability engagements in the areas of insurance, general aviation, commercial property, electronic funds transfer, restaurant franchising, and construction.

## **SELECTED BUSINESS CONSULTING EXPERIENCE**

- Prepared numerous transfer pricing analyses on behalf of an international automotive manufacturer, used for documentation, planning, and audit on a global basis. Evaluated policies and pricing for related-party transactions with respect to the arm's length standard under US, Mexico, OECD, and other country guidelines. Analyzed transfer pricing issues related to finished vehicles, engines, transmissions, other components, royalties, and services. Developed cost-sharing arrangements; assisted in bringing consistency across documentation studies prepared for different tax jurisdictions; addressed issues related to Advance Pricing Agreements and Competent Authority proceedings; and in audit and controversy proceedings, rebutted the transfer pricing analyses of various tax authorities.
- Estimated value of automotive engine technology for large international automotive manufacturer. Study prepared for tax and financial reporting purposes.
- Authored a report on the US ethanol industry, quantifying the impact of the expiration of the Voluntary Ethanol Excise Tax Credit (VEETC) and a tariff on US ethanol imports.
- Conducted numerous transfer pricing studies for tax planning, documentation, and audits. Clients include large multinational companies involved in automotive manufacturing, medical products, computer software/hardware, industrial equipment, retail clothing, food products, tobacco, alcoholic and non-alcoholic beverages, oil drilling services, package delivery services, shipping, and industrial products.
- Designed, managed, and implemented intellectual property-related planning initiatives for large multinational clients in manufacturing, computer, telecommunications, and consumer product industries. Designed R&D cost sharing arrangements and prepared transfer pricing documentation for tax compliance.
- Managed the development of advanced data analytic software based on artificial neural networks for Internet-based financial services client. Responsible for identifying new product opportunities for client, evaluating feasibility of applications, performing cost-benefit analysis for new product investment, designing implementation plan, and managing the overall software development process.
- Estimated the future asbestos liability of several companies (public and private) for investment research firms and potential acquirers as due diligence. Analyzed the litigation risks faced by the companies, insurance coverage issues, potential consequences of other developments in the asbestos litigation environment, and financial reporting issues.
- Estimated value of liabilities for a remainder trust established for a former manufacturer of food products. Potential liabilities were related to environmental remediation costs associated with a "Superfund" site containing hazardous waste.
- Developed a financial simulation model for a major transportation consortium in contract negotiations with the US Department of Defense in order to determine the appropriate compensation for risk in a long-term supply contract.

- Managed and directed various business consulting projects requiring statistical analysis to guide pricing and marketing decisions.
- Provided strategy consulting to seed-stage start-up companies, including development of business strategy, competitive analysis, intellectual property assessment, development of revenue and cost projections, and formulation of business and financing plan.
- Conducted extensive empirical research on the impact of R&D and advertising on profitability; analyzed the impact of foreign exchange rate fluctuations on US prices.

## **PROFESSIONAL EXPERIENCE**

Dr. DeRamus was previously a Manager with A.T. Kearney and a Senior Manager with KPMG. In both positions, he had broad client responsibility including the management of complex litigation, transfer pricing, and business consulting engagements.

## **EDUCATION**

- PhD, Economics, University of Massachusetts at Amherst
- MA, Economics, University of Massachusetts at Amherst
- BA, Political Science (magna cum laude), Duke University

## **PROFESSIONAL ASSOCIATIONS**

- American Bar Association
- American Economic Association
- Energy Bar Association

## **RELATED ACTIVITIES AND HONORS**

- German Academic Exchange Service Grant (awarded)
- Council for European Studies Pre-Dissertation Fellowship (Columbia University)
- Dean's University Fellowship (University of Massachusetts)
- Herbert Lehman Fellowship (New York State)

## **LANGUAGES**

- French (fluent), German (fluent), and Spanish (intermediate)