

MATTHEW P. O'LOUGHLIN

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Mr. O'Loughlin is an expert in the application of economics and finance to complex commercial damages disputes, asset valuations, and regulatory matters that arise in energy markets. Mr. O'Loughlin has testified in US Federal and state courts and arbitration proceedings on the quantification of commercial damages in energy-related breach of contract, antitrust, shareholder, and indemnification disputes. He has extensive experience valuing energy companies, assets, and contracts in the context of litigation, bankruptcy, merger, and tax proceedings.

Mr. O'Loughlin also testifies frequently on natural gas and oil pipeline-related regulatory and rate matters before the U.S. Federal Energy Regulatory Commission, state public utility commissions, and the National Energy Board of Canada. His regulatory work has addressed cost of service items, rate design, price index formation, contract evaluation, prorationing, industry restructuring, new market entry, merger evaluation, and market manipulation.

Mr. O'Loughlin holds an M.A. in Finance from The Wharton School at the University of Pennsylvania and a B.A. in Economics and Business from Saint Anselm College. He also completed all of the course work and examination requirements towards a Ph.D. in Finance from the Wharton School, University of Pennsylvania. Mr. O'Loughlin previously served as Brattle's president and chief executive officer, chief operating officer, and energy practice area leader.

Areas of Expertise

- Commercial Damages in Energy Market Disputes
- Valuation of Energy Assets and Contracts
- Regulatory Policy and Ratemaking

Experience

Commercial Damages in Energy Market Disputes

- **Breach of Energy Supply Contract.** On behalf of International Paper, Mr. O'Loughlin estimated damages that resulted from the breach of an energy supply contract by the owner of a natural gas-fired electricity cogeneration plant. Under the contract, the price of steam to the paper company was based formulaically on the price of four fixed-price, fixed-escalation natural gas supply contracts entered into by the cogeneration facility. When one of these supply contracts was terminated, the cogeneration facility replaced it with contracts that were indexed to higher monthly market prices for natural gas, resulting in higher steam prices.
- **Energy Market Antitrust Settlement.** On behalf of the Settling Claimants (California electric and gas utilities, Western states, and California class consumers) in the \$1.6 billion natural gas antitrust settlement with El Paso Corporation and its subsidiaries, Mr. O'Loughlin quantified both the

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damages sustained and the settlement consideration to be allocated to each major settling claimant group. He developed a methodology to allocate the settlement consideration according to the relative damage incurred by each major claimant group from uncompetitive, increased natural gas prices at the California Border during the March 2000 - May 2001 period. In calculating damages, Mr. O'Loughlin took into account both the direct overpayment for natural gas and the indirect effect of higher natural gas costs on the market price of electricity. Mr. O'Loughlin also designed and processed the claims forms for the two dozen California municipal electric and gas utilities participating in the settlement. This entailed a careful review of their electricity and natural gas purchases and sales and the associated contractual agreements.

- **Lost Profits and Increased Replacement Costs.** On behalf of several shippers (including Southwest Airlines, United Airlines, Federal Express, UPS, HWRT, and others) on the Enterprise TE refined products pipeline, Mr. O'Loughlin quantified damages resulting from the pipeline's cancellation of distillate and jet fuel service in violation of a settlement agreement. The loss of service resulted in increased replacement costs for some shippers and lost profits from lost sales for others. Mr. O'Loughlin took into consideration the circumstances of each individual shipper in calculating both types of damages.
- **Valuation of Diluted Shareholdings.** Mr. O'Loughlin valued a privately-owned C-Corp that owned the general partner interest in Martin Midstream, L.P. as well as an equity interest in a natural gas storage joint venture and a wholesale petroleum operation. He calculated the reduction in market value of an equity investor's interest in the company (both as of a prior date of harm and at the time of trial) due to dilution resulting from certain decisions undertaken by the company's board.
- **Oil & Gas Lease – Shale.** On behalf of the defendant, Mr. O'Loughlin analyzed plaintiff's damage claims that allegedly related to a multi-year property dispute which prevented the plaintiff from leasing the mineral rights to an oil & gas exploration and production company. Mr. O'Loughlin evaluated the plaintiff's assumed pre-delay lease deal terms as well as its assessment of currently available lease terms, as these two components formed the foundation of the plaintiff's damage claim. Mr. O'Loughlin found the plaintiff's assumed pre-delay lease deal terms to be overstated and the plaintiff's assessment of currently available lease terms to be understated, thereby resulting in an overstatement of damages.
- **Derivative Action - Oil Pipeline Lease.** In a derivative action in Delaware Chancery Court brought by minority stockholder Chevron Pipeline against West Texas Gulf Pipeline's controlling stockholder, Sunoco Pipeline, Mr. O'Loughlin calculated the damages resulting from a pipeline capacity lease between West Texas Gulf and Sunoco Pipeline. Mr. O'Loughlin analyzed the demand for oil pipeline transportation services in Texas and the prices obtained for oil pipeline transportation service on new oil pipeline projects serving the Gulf Coast market. This analysis informed his opinion of a fair lease rate that could have been obtained by an independent owner of West Texas Gulf.
- **Pipeline Valuation in Right-of-First-Refusal Dispute.** In an AAA arbitration, Mr. O'Loughlin prepared a valuation of a natural gas pipeline that was the subject of a dispute involving a right-of-first-refusal (ROFR) clause to purchase the pipeline. In performing the valuation, Mr.

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O'Loughlin examined current market conditions, including the business plans of the ROFR holder, and developed multiple cash flow scenarios relating to new pipeline interconnections and LNG supply developments.

- **NAESB Natural Gas Supply Contract Pricing.** In a dispute involving a Marcellus-area, long-term NAESB natural gas supply contract between Antero Resources and South Jersey Resources Group, Mr. O'Loughlin evaluated whether a Market Disruption Event had occurred. Mr. O'Loughlin reviewed the contract's specific criteria for such an Event and analyzed the contemporaneous evidence regarding the underlying transaction composition of published natural gas price indices. He also examined natural gas market conditions in the Marcellus and the contracting parties' pipeline transportation arrangements. Based on his analysis of the evidence, Mr. O'Loughlin concluded that a Market Disruption Event had not occurred.
- **Evaluation of Indemnification Claims.** Mr. O'Loughlin analyzed and evaluated indemnity claims on behalf of a major energy company defendant in an arbitration proceeding. In evaluating the appropriate magnitude of the plaintiff's various claims, Mr. O'Loughlin examined the specific circumstances of the plaintiff including the various business decisions it made following the indemnification event.

Valuation of Energy Assets and Contracts

- **Power Plant Valuation and Fuel Conversion.** Mr. O'Loughlin has valued several large, residual oil-fired generating stations, often to evaluate the possible conversion to natural gas or other fuels. In these analyses, the expected pre- and post-conversion station values were computed using a range of market electricity price and fuel cost conditions. Mr. O'Loughlin has also advised on the strategy to be followed by the station with regard to its post-conversion fuel supply and transportation arrangements.
- **Generating Asset Bankruptcy Valuation.** For the bondholders' committee of a project-financed independent power producer, Mr. O'Loughlin participated in the development of overall case strategy as well as the valuation of the debtor's single generating asset, the evaluation of the debtor's pre-petition power marketing efforts, and the investigation of DIP financing alternatives.
- **Property Tax Valuation of Natural Gas-fired Power Plant.** Mr. O'Loughlin prepared a discounted cash flow valuation of a large, steam-fired power plant utilizing market price evidence. Various market metrics were used to prepare the valuation. It was demonstrated that depreciated replacement cost did not provide a reasonable valuation in this instance.
- **Electric Utility Financial Model for Stranded Cost Evaluation.** For an electric utility evaluating stranded cost investigation alternatives, Mr. O'Loughlin directed the development of a detailed operational and financial model which calculated generating station revenue requirements and stranded costs, computed cost-recovery rates, balanced energy supply and demand, and projected the utility's financial performance. The model included the flexibility to analyze several different scenarios characterized by timing and extent of access, electricity market price, generating station performance, and regulatory recovery rules.

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- **Tax Valuation of Shale Gas Leases.** For a natural gas exploration and production company, Mr. O'Loughlin analyzed the value of Marcellus-area shale gas leaseholdings in the context of a tax dispute. Key issues affecting the value related to minimum performance obligations under the contract, well production rates and decline curves, required capital investment in a pipeline to transport the gas to market, then-current market and financing conditions, and expected natural gas prices over the production horizon.
- **QF Contract Restructuring.** For an electric utility contemplating the buyout of an expensive wood-fired QF power supply contract, Mr. O'Loughlin quantified the value of the excess payments stemming from the contract being "above-market." A complex spreadsheet model was developed to simulate the uncertainty in both future market electricity prices (from underlying load growth and fuel cost uncertainty) and in the QF's future fuel and O&M costs. The model also took into account contract termination and conversion options held by the utility.
- **Contract Claim Valuation in Natural Gas Bankruptcy.** For a producer-creditor of Columbia Gas Transmission Corporation, Mr. O'Loughlin evaluated alternative claims valuation methodologies for rejected long-term gas supply contracts in the context of a court-appointed claims quantification proceeding

Regulatory Policy and Ratemaking

- **Pipeline Cost-of-Service Analysis.** Mr. O'Loughlin has extensive experience in preparing as well as evaluating natural gas and oil pipeline cost of service studies. He has testified in numerous proceedings regarding rate base derivation, appropriate operations and maintenance expense levels (including parent company overhead cost allocations), allowed return, test year billing determinants, and the appropriate treatment of discounts. He has also analyzed and addressed cost allocation procedures in testimony, including allocation between non-jurisdictional and jurisdictional activities as well as amongst separate jurisdictional systems. His work often involves testifying as to the appropriate rate design methodology.
- **Settlement Negotiations in Pipeline Rate Proceedings.** In the context of settlement negotiations, Mr. O'Loughlin has modeled the transportation rates of several gas pipelines and large local distribution companies including British Gas, El Paso Natural Gas, Gaz Metropolitan, Iroquois Gas Transmission, SoCalGas, and Tennessee Gas Pipeline. He has used these rate models to check the sensitivity of rates to alternative rate designs or alternative cost of service assumptions. For example, he has examined the rate effects of alternative depreciation schedules, zone pricing proposals, and capacity turn-back scenarios.
- **Five-Year Review of Oil Pipeline Index.** In rulemaking proceedings before the Federal Energy Regulatory Commission ("FERC"), Mr. O'Loughlin analyzed several years of cost of service and operational data for over two hundred FERC jurisdictional pipelines. The analysis formed the basis for his recommendations as to the appropriate level of "index differential" that should accompany continued use of the Producer Price Index for purposes of setting FERC's annual rate change index for oil pipelines. Mr. O'Loughlin based his analysis on FERC's page 700 data and explained why use of other data sources led to biased and erroneous results.

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- **Actual Utility Expenditures vs. Authorized Revenue Requirements.** On behalf of Pacific Gas & Electric Company, Mr. O'Loughlin prepared a multi-year comparison of its actual operating expenses and capital expenditures to its authorized revenue requirement for two different lines of business. In his analysis, he found that the businesses' actual expenditures equaled or exceeded the amounts contained in authorized revenue requirements for the periods at issue. Mr. O'Loughlin testified as to the results of his analysis in two separate regulatory proceedings.
- **Oil Pipeline Nomination Verification.** On behalf of BP and other shippers on the Enbridge Mainline, Mr. O'Loughlin participated in a FERC technical conference in which he supported Enbridge's downstream nomination verification proposal. As Mr. O'Loughlin explained at the technical conference, he supported Enbridge's proposal for downstream nomination verification because it was based on economic principles of equal access to new and existing markets, and provided equitable treatment of all shippers and appropriate incentives for infrastructure investment and market development. In contrast, the temporary procedure it was replacing was based on a frozen historical period that was no longer appropriate, or economically sensible, in light of changing market conditions.
- **Natural Gas Market Restructuring.** On behalf of Southern California Edison, Mr. O'Loughlin helped assess natural gas market conditions in California as part of a statewide restructuring proceeding. Mr. O'Loughlin analyzed competitive conditions in transmission, storage, and procurement, including the alternatives available to shippers in meeting transmission company balancing requirements. The study proposed several changes to increase competition and limit opportunities for anticompetitive behavior.
- **Grandfathered Oil Pipeline Rates.** For shippers of a large oil pipeline, Mr. O'Loughlin testified on the substantially changed circumstances test of the 1992 Energy Policy Act regarding grandfathered rates as well as on traditional cost of service issues. Mr. O'Loughlin's analysis covered cost allocation, rate base, operations and maintenance expense, return, and volume issues in the context of FERC's trended original cost methodology.

Prior Experience

Prior to joining The Brattle Group and its predecessor, Incentives Research Inc., Mr. O'Loughlin was with Putnam, Hayes & Bartlett, Inc. Mr. O'Loughlin also worked as the assistant to the Vice President of Engineering & Planning for a natural gas distribution subsidiary of EnergyNorth, Inc. There, his responsibilities included preparing the company's fuel cost adjustment filing and assisting in the preparation and analysis of the annual operating and capital budgets. Earlier, Mr. O'Loughlin worked for the New Hampshire Governor's Council on Energy in the hydropower and resource recovery programs.

Testimony—Commercial Damages

Extraction Oil & Gas, Inc. v. Grand Mesa Pipeline, LLC,

Expert report submitted, deposition, declaration, and trial testimony provided, 2020
United States Bankruptcy Court – District of Delaware, Adv. Proc. No. 20-50816

Plains Gas Solutions, LLC v. Columbia Gulf Transmission Company,

Deposition provided, 2019
District Court of Harris County, Texas, Cause No. 2018-55771

Adrian Dieckman v. Regency GP LP and Regency GP LLC

Opening expert report submitted, deposition and trial testimony provided, 2019
Court of Chancery of the State of Delaware, C.A. No. 11130-CB

Pontchartrain Natural Gas System, K/D/S Promix, L.L.C. and Acadian Gas Pipeline System v. Texas Brine Company, LLC,

Expert report submitted, deposition provided, 2019
23rd Judicial District Court, Parish of Assumption, State of Louisiana, No. 34265 Division “B”

Judy Mesirov, derivatively v. Enbridge Energy Company Inc., et al.,

Opening expert report submitted (with Matthew Aharonian), 2018
Court of Chancery of the State of Delaware, C.A. No. 11314-VCS

Mediation regarding the pricing provisions in a long-term energy sales agreement,
Expert declarations submitted, 2018

Antero Resources Corporation v. South Jersey Resources Group LLC and South Jersey Gas Company,

Opening and rebuttal expert reports submitted, deposition provided, 2016-17
United States District Court - District of Colorado, C. A. No. 1:15-cv-00656-REB-MEH

Arbitration proceeding regarding the pricing provisions in a long-term natural gas supply contract,
Expert report submitted, deposition provided, 2016

CHS Inc., Federal Express Corporation, GROWMARK, Inc., HWRT Oil Company LLC, MFA Oil Company, Southwest Airline Co., United Airlines, Inc. and UPS Fuel Services, Inc. v. Enterprise TE Products Pipeline Company, LLC

Expert direct and rebuttal testimony submitted, 2015
Federal Energy Regulatory Commission, Docket No. OR13-25-002

Unocal Pipeline Company v. BP Pipelines (Alaska) Inc., et al.,

Affidavit submitted, 2015
District Court of Harris County, Texas, Cause No. 2013-06244

Chevron Pipe Line Company derivatively on behalf of West Texas Gulf Pipe Line Company v. Sunoco Pipeline, L.P., et al.,

Opening and rebuttal expert reports submitted, deposition provided, 2014
Court of Chancery of the State of Delaware, C.A. No. 8573-VCL

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Scott D. Martin, et al. vs. Martin Resource Management Corporation, et al.,
Expert report submitted, deposition provided, 2011-12
District Court of Harris County, Texas, Cause No. 2008-53948

Valero Marketing and Supply Company v. Longhorn Partners Pipeline, L.P. and Flying J, Inc.,
Expert direct testimony submitted, 2008
Federal Energy Regulatory Commission, Docket No. OR08-4-000

United States of America vs. James Patrick Phillips, Wesley C. Walton and James Brooks, Defendants,
Expert report submitted, trial testimony provided, 2007-08
United States District Court - Southern District of Texas, Houston Div., Crim. Action No. H-04-512-S

United States of America vs. Greg Singleton, Defendant,
Expert report submitted, trial testimony provided, 2006
United States District Court - Southern District of Texas, Houston Div., Crim. Action No. H-06-80

United States of America vs. Michelle Valencia, Defendant,
Expert report submitted, trial testimony provided, 2006
United States District Court - Southern District of Texas, Houston Div., Crim. Action No. H-04-514

United States of America vs. Jerry Alfred Futch, Jr., Defendant,
Expert report submitted, 2006
United States District Court - Southern District of Texas, Houston Div., Crim. Action No. H-04-511

Arbitration proceeding regarding the value of indemnity claims in an energy company transaction,
Expert declaration submitted, deposition and arbitration testimony provided, 2004

Arbitration proceeding regarding the fair market value of a natural gas pipeline,
Expert declaration submitted, 2004

NATURAL GAS ANTITRUST CASES I, II, III, & IV
Multiple expert declarations submitted, 2003-2004
Superior Court of the State of California, J.C.C.P. Nos. 4221, 4224, 4226 & 4228

International Paper Company v. Androscoggin Energy LLC,
Expert report submitted, deposition and trial testimony provided, 2003.
United States District Court - Northern District of Illinois, Eastern Div., Case No. 00C 6215

Olympic Pipe Line Company v. Washington Utilities and Transportation Commission,
Expert declaration submitted, 2002
Superior Court for the State of Washington - County of Thurston, Case No. 02-2-018707

Testimony before the State of California Senate Select Committee to Investigate Price Manipulation of the Wholesale Energy Market, November 2002.

Public Utilities Commission of the State of California v. El Paso Natural Gas Company, El Paso Merchant Energy – Gas, L.P., El Paso Merchant Energy Company

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Affidavit and expert testimony submitted, hearing testimony provided, 2000-01
Federal Energy Regulatory Commission, Docket No. RP00-241-000

Testimony before the California Assembly, Subcommittee on Energy Oversight, April 2001, in an investigative hearing regarding the California Public Utilities Commission's allegations against El Paso Natural Gas and its merchant energy affiliates' exercise of market power.

Testimony—Regulatory Policy and Ratemaking

Testimony before the Federal Energy Regulatory Commission on behalf of ConocoPhillips Alaska, Inc., Exxon Mobil Corporation, Hilcorp Alaska, LLC, and The Standard Oil Company regarding the Trans-Alaska Pipeline System's Quality Bank Methodology, Docket No. OR14-6-003, March and April 2021.

Declaration and accompanying Report (latter with Michael R. Tolleth) before the Federal Energy Regulatory Commission on behalf of Airlines for America, Chevron Products Company, National Propane Gas Association, and Valero Marketing and Supply Company regarding the Five Year Review of the Oil Pipeline Index, Docket No. RM20-14-000, September 2020.

Declaration and accompanying Report (latter with Michael R. Tolleth) before the Federal Energy Regulatory Commission on behalf of HollyFrontier Refining & Marketing LLC, Southwest Airlines Co., Valero Marketing and Supply Company, Chevron Products Company, and American Airlines, Inc. relating to Docket Nos. OR14-35-003, OR14-36-003, and OR19-21-000 challenging SFPP, L.P.'s ("SFPP") index rate increases implemented for the 2012, 2013, and 2018 index years and Docket No. AD20-10-000 initiating the Commission's Notice of Inquiry about its procedure for investigating index-based rate challenges, June 2020.

Testimony before the Regulatory Commission of Alaska on behalf of Colville, Inc. evaluating the reasonableness of North Slope Borough's proposed rates and rate design, Docket No. U-18-095, March 2019.

Affidavit before the Federal Energy Regulatory Commission on behalf of Chevron Products Company and Phillips 66 Company evaluating both the reasonableness of SFPP's North and Oregon Line interstate pipeline rates as well as whether there is evidence of substantial change in the economic circumstances which were the basis for the grandfathered portion of those rates, Docket Nos. OR11-13 and OR11-16, August 2018.

Affidavit before the Federal Energy Regulatory Commission on behalf of American Airlines, Inc., Delta Air Lines, Inc., Southwest Airlines Co., United Airlines, Inc., BP West Coast Products LLC, Chevron Products Company, Phillips 66 Company, ExxonMobil Oil Corporation, and Valero Marketing and Supply Company evaluating SFPP, L.P.'s Opinion No. 511-C Compliance Filing, Docket No. IS08-390, June 2018, August 2018.

Affidavit before the Federal Energy Regulatory Commission on behalf of American Airlines, Inc., Southwest Airlines Co., Chevron Products Company, HollyFrontier Refining & Marketing LLC, Valero

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Marketing and Supply Company, and Western Refining Company, L.P. evaluating SFPP, L.P.'s Opinion No. 522-B Compliance Filing, Docket No. IS09-437, June 2018, August 2018.

Declaration and accompanying Report (latter with Daniel S. Arthur and Michael R. Tolleth) before the Federal Energy Regulatory Commission on behalf of United Airlines, Inc., American Airlines, Inc., Delta Air Lines, Inc., Southwest Airlines Co., BP West Coast Products LLC, ExxonMobil Oil Corporation, Chevron Products Company, HollyFrontier Refining & Marketing LLC, Valero Marketing and Supply Company, Airlines for America, and the National Propane Gas Association relating to the Commission's Inquiry Regarding the Effect of the Tax Cuts and Jobs Act on Commission-Jurisdictional Rates, Docket No. RM18-12-000, May 2018.

Declaration and accompanying Report (latter with Daniel S. Arthur and Michael R. Tolleth) before the Federal Energy Regulatory Commission on behalf of United Airlines, Inc., American Airlines, Inc., Delta Air Lines, Inc., Southwest Airlines Co., BP West Coast Products LLC, ExxonMobil Oil Corporation, Chevron Products Company, HollyFrontier Refining & Marketing LLC, Valero Marketing and Supply Company, Western Refining Company, L.P., Airlines for America, and the National Propane Gas Association relating to the Commission's Inquiry Regarding Its Policy for Recovery of Income Tax Costs, Docket No. PL17-1-000, April 2017.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, HollyFrontier Refining & Marketing LLC, American Airlines, Inc., Valero Marketing and Supply Company, and Western Refining Company, L.P. evaluating the reasonableness of SFPP's East Line rates, Docket No. OR16-6-000, June and November 2016.

Testimony before the Maine Public Utilities Commission on behalf of the Maine Office of the Public Advocate regarding Comments on LEI's June 2015 Report and Recommendations for a Regional Analysis, Docket No. 2014-00071, Written Evidence of Samuel A. Newell and Matthew P. O'Loughlin, November 2015.

Testimony before the Federal Energy Regulatory Commission on behalf of Airlines for America, National Propane Gas Association, and Valero Marketing and Supply Company regarding the Five Year Review of the Oil Pipeline Index, Docket No. RM15-20-000, August, September, and October 2015.

Testimony before the Federal Energy Regulatory Commission on behalf of Delta Air Lines, Inc., Continental Airlines, Inc., JetBlue Airways Corporation, United Air Lines, Inc., and US Airways, Inc. evaluating the reasonableness of Buckeye Pipe Line Company, L.P.'s rates, Docket No. OR12-28-001, August 2014 and January 2015.

Declaration before the California Public Utilities Commission on behalf of Pacific Gas & Electric Company regarding an evaluation of ratepayer effects resulting from a change in the timing of a rate change in Docket No. A.13-12-012, December 2014.

Testimony before the Maine Public Utilities Commission on behalf of the Maine Office of the Public Advocate regarding Analysis of the Maine Energy Cost Reduction Act in New England Gas and Electricity Markets, Docket No. 2014-00071, Written Evidence of Samuel A. Newell and Matthew P. O'Loughlin, July 2014.

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Before the National Energy Board of Canada on behalf of BP Canada Energy Group ULC, Docket No. RHW-001-2013, *Trans Mountain Pipeline ULC Application for Tariff Amendments regarding Verification Procedures*, Written Evidence and Reply Evidence of Steven H. Levine and Matthew P. O'Loughlin, April and August 2014.

Testimony before the California Public Utilities Commission on behalf of Pacific Gas & Electric Company regarding its Gas Distribution business' actual and imputed adopted operations & maintenance expenditures and capital expenditures during the 1999-2010 period in Docket No. A.12-11-009, June 2013.

Testimony before the California Public Utilities Commission on behalf of Chevron Products Company, Phillips 66 Company, Southwest Airlines Company, Ultramar Inc., and Valero Marketing & Supply Company regarding the reasonableness of SFPP's proposed rates, Application No. 12-01-015, November 2012, February 2013, April 2013.

Testimony before the Federal Energy Regulatory Commission on behalf of Suncor Energy Marketing, Inc. and Canadian Natural Resources Limited regarding the reasonableness of Seaway Crude Pipeline Company LLC's proposed rates, Docket No. IS12-226-000, October 2012.

Testimony before the Federal Energy Regulatory Commission on behalf of The Propane Group and The Refined Products Group regarding the reasonableness of Enterprise TE Products Pipeline LLC's proposed rates and rate design, Docket No. IS12-203-000, October 2012.

Testimony before the California Public Utilities Commission on behalf of Chevron Products Company, Tesoro Refining and Marketing Company, and Valero Marketing and Supply Company regarding the calculation of rate refunds as it relates to San Pablo Bay Pipeline Company LLC, Application No. 08-09-024, July 2012, August 2012.

Testimony before the California Public Utilities Commission on behalf of Pacific Gas & Electric Company regarding its Gas Transmission & Storage business' actual and imputed adopted operations & maintenance expenditures and capital expenditures during the 1997-2010 period in Docket No. I.12-01-007, June 2012.

Declaration before the California Public Utilities Commission on behalf of Chevron Products Company, ConocoPhillips Company, Valero Marketing and Supply Company, Ultramar Inc., and Southwest Airlines Co. evaluating the cost of service and revenue information and reasonableness of the proposed rates as it relates to SFPP, Application No. 12-01-015, March 2012.

Declaration before the California Public Utilities Commission on behalf of Chevron Products Company, ConocoPhillips Company, Valero Marketing and Supply Company, Ultramar Inc., Southwest Airlines Co., and Air Transport Association of America, Inc. d/b/a Airlines for America to evaluate SFPP's Proposed Test Year 2009 rate base and cost of service in Application 09-05-014, January 2012.

Declaration before the California Public Utilities Commission on behalf of BP West Coast Products LLC, Chevron Products Company, ConocoPhillips Company, ExxonMobil Oil Corporation, Southwest Airlines Co., Tesoro Refining and Marketing Company, Ultramar Inc., and Valero Marketing and Supply Company evaluating SFPP's August 26, 2011 Compliance Filing entitled Advice Letter No.27 in Case 97-

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04-025 and Related Proceedings, including Application 03-02-027, in response to the Commission's Decision 11-05-045, October 2011.

Reply Evidence before the National Energy Board of Canada on behalf of BP Canada Energy Company evaluating the toll-related evidence regarding Enbridge Southern Lights pipeline in RH-1-2011, September 2011.

Affidavit before the Federal Energy Regulatory Commission on behalf of Chevron Products Company evaluating whether there is evidence of substantial change in the economic circumstances which were the basis for SFPP's North and Oregon Line grandfathered interstate pipeline rates, Docket No. OR11-16-000, June 2011.

Affidavit before the Federal Energy Regulatory Commission on behalf of ConocoPhillips Company evaluating whether there is evidence of substantial change in the economic circumstances which were the basis for SFPP's North and Oregon Line grandfathered interstate pipeline rates, Docket No. OR11-13-000, June 2011.

Testimony before the Federal Energy Regulatory Commission on behalf of Southern California Edison evaluating the reasonableness of El Paso Natural Gas Company's proposed rate design, Docket No. RP10-1398-000, June 2011, August 2011, September 2011.

Testimony before the Federal Energy Regulatory Commission on behalf of Southern California Edison Company evaluating the changes to El Paso Natural Gas Company's fuel charge rate design proposed by Texas Gas Services and Commission Staff. Docket No. RP10-951-000, March 2011.

Affidavit before the Federal Energy Regulatory Commission on behalf of Valero Marketing and Supply Company analyzing and recommending the appropriate index for annual changes to oil pipeline rate ceilings in the Commission's Five Year Review of Oil Pipeline Pricing Index, Docket No. RM10-25-000, August 2010, September 2010, October 2010.

Affidavit before the Federal Energy Regulatory Commission on behalf of BP Products North America Inc. evaluating the reasonableness of the rates for Enbridge Pipelines' Southern Lights project, Docket No. IS10-399-000, June 2010.

Testimony before the California Public Utilities Commission on behalf of Chevron Products Company, in a matter evaluating the reasonableness of San Pablo Bay Pipeline Company LLC's proposed Commission-jurisdictional rates for its SJV Pipeline, Application No. 08-09-024, December 2009, April 2010.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, ConocoPhillips Company, Southwest Airlines Co., and Valero Marketing and Supply Company, evaluating the reasonableness of SFPP's proposed Commission-jurisdictional rates for its interstate movements on SFPP's East Line, Docket No. IS09-437-000, March 2010.

Testimony before the California Public Utilities Commission on behalf of Chevron Products Company, ConocoPhillips Company, and Southwest Airlines Co. evaluating the reasonableness of SFPP's proposed

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justification of its intrastate rates in A.08-06-008 as well as SFPP's request for a rate increase in A.09-05-014, December 2009.

Affidavit before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, ConocoPhillips Company, Southwest Airlines Co., and Valero Marketing and Supply Co. evaluating the justification of SFPP's East Line rate increase, Docket No. IS09-437-000, August 2009.

Testimony before the Federal Energy Regulatory Commission on behalf of Southern California Edison evaluating the reasonableness of El Paso Natural Gas Company's proposed rate design, Docket No. RP08-426-000, May 2009, August 2009.

Testimony before the Federal Energy Regulatory Commission on behalf of Continental Airlines, Inc., Northwest Airlines, Inc., Southwest Airlines Co., US Airways, Inc., Chevron Products Company, ConocoPhillips Company, and Valero Marketing and Supply Company evaluating the reasonableness of SFPP's West Line interstate Commission-jurisdictional rates, Docket No. IS08-390-002, January 2009.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company and ConocoPhillips Company evaluating the reasonableness of SFPP's interstate Commission-jurisdictional rates, Docket No. OR03-5, et al., December 2007, April 2008, June 2008, October 2008.

Affidavit before the Federal Energy Regulatory Commission on behalf of America West Airlines, Inc. and US Airways, Inc., Chevron Products Company, ConocoPhillips Company, Continental Airlines, Inc., Northwest Airlines, Inc., Southwest Airlines Co., and Valero Marketing and Supply Co. evaluating the reasonableness of Calnev Pipe Line L.L.C.'s interstate pipeline rates, Docket No. OR07-18-000, *et al.*, August 2007, February 2008, April 2008.

Affidavit before the Federal Energy Regulatory Commission on behalf of Chevron USA, Inc., ConocoPhillips Company, and Valero Marketing and Supply Co. evaluating the reasonableness of SFPP's East Line Phase II Expansion rates, Docket No. IS08-28-000, November 2007.

Testimony before the Federal Energy Regulatory Commission on behalf of National Propane Gas Association, AmeriGas Propane, L.P., CHS Inc., ConocoPhillips Company, Ferrellgas, L.P., and Targa Liquids Marketing and Trade evaluating the reasonableness of Mid-America Pipeline Company, LLC's proposed Commission-jurisdictional rates, Docket Nos. IS05-216-003, *et al.*, March 2007.

Affidavit before the Federal Energy Regulatory Commission on behalf of Chevron USA, Inc., ConocoPhillips Company, and Valero Marketing and Supply Co. evaluating the reasonableness of SFPP's East Line Phase I Expansion rates, Docket No. IS06-283-000, May 2006.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, ConocoPhillips Company, Tosco Corporation, and Ultramar Inc. and Valero Marketing and Supply Company, evaluating SFPP's March 7, 2006 Compliance Filings in Docket Nos. OR92-8, *et al.* and OR96-2, *et al.*, April 2006.

Testimony before the California Public Utilities Commission on behalf of Southern California Edison, Docket No. I.02-11-040, November 2005, in *Order Instituting Investigation into the Gas Market Activities of Southern California Gas Company, San Diego Gas and Electric, Southwest Gas, Pacific Gas*

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and Electric, and Southern California Edison and their Impact on the Gas Price Spike Experience at the California Border from March 2000 through May 2001.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, ConocoPhillips Company, and Valero Marketing and Supply Company evaluating the reasonableness of SFPP's proposed Commission-jurisdictional rate for its interstate movements on SFPP's North Line Docket No. IS05-230-000, November 2005.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, ConocoPhillips Company, Tosco Corporation, Ultramar Inc., and Valero Marketing and Supply Company evaluating the reasonableness of SFPP's Commission-jurisdictional rate for its Watson drain dry facilities in Docket No. OR92-8-025, October 2005.

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