

L. Jan Reid

3185 Gross Road
Santa Cruz, California 95062, USA
Telephone 1 831-476-5700
janreid@coastecon.com

Education

M.S., Applied Economics and Finance, June 1998, University of California at Santa Cruz.

B.A., Economics, August 1997, University of California at Santa Cruz.

Work Experience

Consultant

Intervenor: California Public Utilities Commission, 2013-2022

Represented residential customers in procurement review groups, electricity and natural gas procurement, renewables procurement, and cost of capital proceedings before the California Public Utilities Commission.

Client: Aglet Consumer Alliance, 2005-2012

Represented Aglet in procurement review groups, electricity and natural gas procurement, renewables procurement, resource adequacy, cost of capital, general rate cases, and demand response proceedings before the California Public Utilities Commission.

Private Clients, 2008-2012

Managed \$2 million in assets for private clients. Client services included portfolio design, asset allocation, trade placement, and trade monitoring. Assets included common stock, preferred stock, options, and fixed-income investments.

Client: Strategy Integration, 2005-2009

Provided modeling services, training services, hedging analysis, risk analysis and litigation support for electric-utility procurement of supply-side and demand-side products.

Client: Comverge, 2008-2009

Licensed a proprietary spread option model, provided training services, and provided litigation support related to demand response proceedings before state and federal regulatory commissions.

Client: Bear Valley Electric Service, 2007-2009

Retained by Bear Valley Electric Service (BVES) to produce estimates of its 2009-2012 cost of capital; write and sponsor testimony; and advise on cost-of-capital issues.

Client: Government of Japan, 2006

Conducted a survey and wrote a report concerning the status of demand response programs in the United States.

**Public Utility
Regulatory Analyst
1998-2005**

California Public Utilities Commission (CPUC), San Francisco, California. Represented the Office of Ratepayer Advocates (ORA) in litigation involving energy and telecommunications issues pertaining to some of the nation's largest utility companies. Coordinated projects, analyzed market-power issues, performance incentive plans, performance-based ratemaking proposals, asset sales, asset valuations, and electricity commodity markets. Developed models to estimate the cost of capital, post-emergency electricity restoration time, elasticity of demand, and market-power effects. Wrote and reviewed testimony associated with regulatory proceedings, testified in proceedings, and made public presentations in seminars and workshops.

**Consultant
1990-1995**

Independent consultant in the computer industry. Provided hardware and software purchasing consulting, computer training, technical documentation, data-conversion services, and computer programming (including writing, testing, and marketing original programs). Clients included Hewlett-Packard (HP), IBM, Volt Technical Services, Syntex, Qume, Rolm, Zilog, Silvaco International, FMC, and Practice Management.

Procurement Review Groups

Served on the procurement review groups of Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Pacific Gas and Electric Company (PG&E). I reviewed utility transactions, addressed credit and collateral issues, helped design a hedging program, reviewed bids of electricity and gas suppliers, and made contract-selection recommendations.

CPUC Testimony

Proceeding A.19-12-009, "Direct Testimony of L. Jan Reid on PG&E's GRC Application," July 2019. Testimony addressed billing impacts, credit ratings, customer service offices, PG&E bankruptcy proceeding, PG&E's United States District Court probation, reasonable of proposed costs, and PG&E's safety performance.

Proceeding R.13-12-010, "Comments of L. Jan Reid on PG&E's Bundled Procurement Plan," November 2014. Testimony addressed forward prices, congestion revenue rights, pro-forma contracts, convergence bidding, swaps, options, the market heat rate, and operational flexibility.

Proceeding R.13-12-010, "Testimony of L. Jan Reid on Track IA Issues," September 2014. Testimony addressed computer models related to system requirements, capacity need, and resource adequacy standards.

Proceeding A.12-04-015 et seq., Sponsored "Testimony of Ron Knecht on PG&E's Cost of Capital," August 2012. Testimony addressed three Return on Common Equity Models (ROE) and PG&E's capital structure, cost of debt, and cost of preferred equity. The three ROE models were the Capital Asset Price Model, the Discounted Cash Flow Model, and the Risk Premium Model.

Proceeding R.10-05-006, "Long Term Procurement Plan, Track I and III Issues," August 2011. Testimony addressed renewable integration modeling, nuclear power plants, once through cooling plants, and the establishment of a procurement rulebook.

Proceeding R.10-05-006, "Long Term Procurement Plan, Bundled Procurement Plans," May 2011. Testimony addressed greenhouse gas costs, liquidity, hedging issues, and the duration of transactions.

Proceeding R.07-05-025, "Phase III Direct Access Issues," February 2011. Testimony addressed the load cap, the power charge indifference amount, the competition transition charge, and the effect of direct access on residential ratepayers.

Proceeding A.09-12-020, "PG&E's 2011 General Rate Case," May 2010. Testimony addressed Information Technology (IT) issues and recommended disallowances of \$245 million in IT expenses (non-ratebased) and \$239 million in IT capital (ratebased).

Proceeding A.08-07-014, "PG&E's Request for a Limited Exemption from Affiliate Transaction Rule V.E," December 2008. Testimony addressed a Settlement Agreement signed by Reid and PG&E.

Proceeding A.08-06-034, "Bear Valley Electric Service General Rate Case," June 2008. Testimony addressed financial-modeling issues and legal issues and recommended an overall rate of return for Bear Valley Electric Service for 2009-2012.

Proceeding A.07-12-021, "Ruby Pipeline Application." Testimony addressed a proposed contract for pipeline capacity between PG&E and Ruby, LLC. (May 2008)

Proceeding A.07-05-003 et. al., "2008 Energy Cost of Capital Recommendations." Testimony addressed the market risk premium and the risk-free rate used in setting an authorized return on equity for Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison Company. (August 2007)

Proceeding R.06-02-013, "Long Term Procurement Plans." Testimony addressed the long-term procurement plans of California's three largest regulated utilities. The testimony included discussions of risk management, demand response, ratemaking treatment, and cost effectiveness. An optimal hedge ratio was calculated for different products (e.g., swaps and options) and different product percentages were recommended. (March 2007)

Proceeding A.06-04-012, "PG&E's Long-Term Request for Offers." Testimony addressed the standard of review, ratemaking, cost effectiveness, and the independent evaluator for the proposed contracts. An option valuation model was used to evaluate the cost effectiveness of the contracts. (August 2006)

Proceeding R.06-02-012, "RPS Contracting Issues." Testimony addressed contracting issues related to the California Renewable Portfolio Standard program. (May 2006)

Proceeding A.05-12-030, "The KRCC Contract." Testimony addressed issues related to a proposed contract between Southern California Edison Company and its affiliate, the Kern River Cogeneration Company. (March 2006)

Proceeding A.05-06-006 et. al., "Demand Response Issues." Testimony addressed demand response issues related to the 2006-2008 programs recommended by Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison Company. Option valuation and cost of carry models were used to evaluate demand response programs and to recommend changes to existing demand response programs. (September 2005)

Proceeding A.05-05-006 et. al., "2006 Energy Cost of Capital Recommendations." Testimony addressed debt equivalence issues raised by Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Edison Company. (August 2005)

Proceeding A.04-05-021, "2005 Energy Cost of Capital Recommendations." Testimony addressed interest rates movements and recommended a return on equity for Southern California Edison. (September 2004).

Rulemaking 01-10-024, "Report on San Diego Gas and Electric Company's New Electric Resource Contracts." Testimony addressed credit and cost-of-capital issues, successfully argued that these issues should be deferred until SDG&E's next cost-of-capital case, and pointed out that SDG&E's cost-of-capital proposals were not consistent with a settlement agreement between the ORA and SDG&E. (January 2004)

Investigation 02-04-026, "Proposed Settlement Agreement (PSA) between the CPUC's Energy Division and PG&E." Addressed credit issues, ratepayer costs under the PSA, Pollution Control Bonds, and PG&E's proposed interest rate hedges. (August 2003)

Rulemaking 01-10-024, "Procurement Mechanism." Testimony addressed credit and cost-of-capital issues, proposed a risk estimation and reporting system, specified an optimal hedge ratio for natural gas procurement, and proposed an overall process for utility procurement of electricity and related fuels. (July 2003)

Proceeding A.02-03-016, "SCE's Fuel Hedging Cost Recovery." Testimony addressed the reasonableness of a series of natural-gas call options purchased by Southern California Edison. (October 2002)

Consolidated Proceedings A.02-05-022, A.02-05-025, A.02-05-026, A.02-05-031; "2003 Energy Cost of Capital Recommendations." Testimony addressed financial modeling issues and legal issues and recommended an overall rate of return for four of California's energy utilities (Pacific Gas and Electric, Southern California Edison, San Diego Gas and Electric, and Sierra Pacific Power), August 2002.

Proceeding R.01-10-024, "Procurement Mechanism." Testimony proposed a rule-based system to determine the reasonableness of utility procurement of electricity and related fuels. (July 2002)

Proceeding A.00-10-008, "Block Forward Contracts." Testimony evaluated the regulatory authority granted to California's largest electric utilities and the subsequent use of the California Power Exchange's Block Forward market by these utilities. (March 2001)

Proceeding A.00-05-013, "2001 Energy Cost of Capital Recommendations for PG&E." Testimony recommended an overall rate of return for PG&E and proposed a capital adjustment mechanism that would set PG&E's return on equity between cost-of-capital cases. (October 2000)

Proceeding A.00-03-062, "2001 MICAM Recommendations." Testimony recommended changes to SDG&E's MICAM (Market Indexed Capital Adjustment Mechanism) that sets SDG&E's return on equity between cost-of-capital cases. (October 2000)

Proceeding A.99-11-003, "2000 Energy Cost of Capital Recommendations for PG&E." Testimony addressed financial modeling issues and recommended an overall rate of return for PG&E. (April 2000)

Proceeding R.96-11-004, "Emergency Response Standards." Testimony recommended minimum restoration standards that would be applied when over 10% of an electric utility's customers were without service due to a weather-related outage. (October 1999)

Published Papers

Reid L. (2022) A Study of Expected Demand and Aggregate Employment in the United States from 1948-2021. Athens Journal of Social Sciences, 10:1-24. Available at <https://www.athensjournals.gr/social/2022-4829-AJSS-ECO-Reid-05.pdf>.

The paper takes the work of Lucas and Muth on expectations theory and applies it to an analysis of the labor market. The author investigates the causes of changes in aggregate employment in the U.S.; to find whether theories exist that explain such changes; and attempt to develop an original approach that will accurately analyze and explain changes in U.S. aggregate employment.

Reid L. (2021) The Economic Effect of the COVID-19 Lockdown in the United States: Was the Cure Worse than the Disease? Athens Journal of Health and Medical Sciences, 9:1-21. Available at <https://www.athensjournals.gr/health/2021-4261-AJHMS-POL-Reid-05.pdf>.

The paper analyzed the economic effect of COVID-19 lockdowns in the United States using a Benefit/Cost Analysis (BCA) framework. The paper hypothesizes that the economic cost of the lockdowns exceeded the economic benefits.

The goal of the lockdowns was to reduce the number of COVID-19 deaths and to ensure that Intensive Care Unit (ICU) capacity was sufficient to treat patients in critical condition. The paper finds that the lockdowns saved lives, but that the economic cost of the lockdowns was up to ten times greater than the economic benefits of the lockdowns.

Reid L. (2019) Why Insurgent Campaigns Rarely Win the Democratic Presidential Primary in the United States. Athens Journal of Social Sciences, April 2019, 6:2:139-153. Available at <https://www.athensjournals.gr/social/2019-6-2-4-Reid.pdf>.

This paper analyzed presidential campaigns in the United States of America's (U.S.) Democratic Party for the period 1968-2016; reviewed books and academic literature; and made conclusions concerning the success and failure of insurgent campaigns.

The paper hypothesized that most insurgent campaigns have been unsuccessful due to announcing too late, lack of money, and inadequate field organization. The paper provided evidence to suggest that most insurgent campaigns are unsuccessful because of weaknesses in one or more of those three areas. For example, the 2016 Sanders campaign was fifth in the number of campaign days, third in fundraising relative to their competitors, and third in field organization as measured by caucus-state performance.

Finally, the paper recommends that insurgent campaigns should announce early, have adequate funds, build a strong field organization, and develop a strong social-media presence similar to the 2016 campaign of Senator Bernie Sanders.

Reid L. (2018) Has the Brexit Vote Affected the United Kingdom's Largest Trading Partners? Athens Journal of Social Sciences, July 2018, 5:3:291-312. Available at <http://www.athensjournals.gr/social/2018-5-3-4-Reid.pdf>.

I collected data on the United Kingdom (UK) and its ten largest trading partners to determine whether those eleven countries have been harmed by the Brexit vote. These countries are Belgium, China, France, Germany, Ireland, Italy, the Netherlands, Spain, the United Kingdom, and the United States. For each country, I estimated the effect of Brexit on exchange rates, GDP, unemployment, and other macroeconomic and political variables.

My short-term empirical analysis of data from eleven countries shows that Brexit has contributed to a decline in exchange rates and inflation, but has had only a slight effect on consumption, foreign direct investment, trade, and unemployment. My long-term empirical analysis estimates that Brexit will increase GDP in one country and will have no effect in ten countries.

My analysis of public opinion polls indicates that Brexit has increased support for nationalist political parties in two countries and decreased support in one country; and that economic forecasts may have contributed to the decline in voter support for nationalist parties in five countries.

Finally, I showed that pre-Brexit economic forecasts were erroneous because they failed to account for either consumer expectations or the future actions of the Bank of England.

Reid L. (2017) Did the Euro Harm the Greek Economy? Special Topics in Economics and Management, 2017, ISBN: 978-960-598-103-7, pp. 99-109. Athens Institute for Education and Research, Athens, Greece. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2655923.

1990-2013 data was used to determine whether the Greek economy was harmed by its adoption of the Euro currency. I defined the conditional exchange rate for the Drachma as the rate that would have prevailed if Greece had not adopted the Euro. I then accounted for economic adjustment, and calculated values of several Greek economic variables for the period 1990-2012: the conditional exchange rate of the Drachma, the debt-to-GDP ratio, the growth rate of real GDP, prevailing interest rates, and other relevant macroeconomic variables.

I found no evidence to suggest that Greece's adoption of the Euro harmed the Greek economy. I found that a Drachma currency regime would have resulted in a higher debt/GDP ratio, a lower GDP growth rate, a slightly lower unemployment rate, and a 35-basis point reduction in the yield on 10-year government bonds. The Euro currency regime resulted in lower interest rates, higher GDP, and a higher bond rating than would have prevailed otherwise.

Reid L. (2016) The Political Segregation of the United States. Athens Journal of Social Sciences, April 2016, 3:2:85-98. Available at <http://www.athensjournals.gr/social/2016-3-2-1-Reid.pdf>.

I show that dysfunctional government in the U.S. is a byproduct of "political segregation": a phenomenon in which liberals tend to relocate to live in areas where liberal voters are in the majority, and conservatives tend to relocate to live in areas where conservative voters are in the majority.

I analyzed U.S. presidential election data by state from 1824-2012 and discussed the psychological literature related to voting behavior. I showed that a shift occurred in voting behavior for key American states after 1976 and I explored some of the reasons for these political trends.

I hypothesized that individual U.S. federal legislators are following the wishes of most voters in their districts, and that dysfunctional government is a byproduct of political segregation and is not simply a function of the intransigence of individual legislators. Finally, I discussed my results and offered some suggestions for reducing political dysfunction in the United States.

Working Papers

The Effect of American and European Sanctions on Russia.

Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3439207.

(Cited by Bagherzadeh F. (2021) Unilateral Economic Sanctions and Protecting U.S. National Security. *Hastings International and Cooperative Law Review* 44:2.)

The paper examines economic and political sanctions against Russia and attempts to determine their effect on political and macroeconomic variables such as election results, exchange rates, trade, unemployment rates, and economic growth; and whether sanctions have been effective in meeting their goals.

The paper hypothesizes that American and European sanctions imposed on Russia have been ineffective. This hypothesis is tested empirically by analyzing the effect of sanctions on Russian political and macroeconomic variables such as election results, exchange rates, trade, unemployment rates, and economic growth.

The paper found that Russian president Vladimir Putin has increased his level of electoral support and that the sanctions have had no significant impact on the Russian economy other than reducing Russian imports; thereby increasing net exports and GDP.

Has A High Value Added Tax Harmed the European Economy?

Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2822998.

(Cited in Diamond P. and Saez E. (2011) The Case for a Progressive Tax: From Basic Research to Policy Recommendations. *Journal of Economic Perspectives* 25:4.

In this paper, I determined the effect of the Value Added Tax on GDP, on the unemployment rate, and on social welfare.

Is the Discounted Cash Flow (DCF) Model a Biased Estimator of Stock Returns? (with Ron Knecht) Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2656393.

Data from 2001-2011 was used to compare stock returns of seventy electric, natural gas, and water utilities. Expected return was calculated using four models: the single-stage DCF model, the three-stage DCF model, the Capital Asset Pricing Model (CAPM), and a CAPM method based on market losses. Topics covered included a review of the relevant literature on the models, CAPM bias, and DCF bias.

Why Did the American Recovery and Reinvestment Act (ARRA) Fail, or Did It?

Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2655957.

In this paper, I analyzed both the results of the ARRA program and the criticisms of ARRA. I used a macroeconomic model to forecast the results of alternative stimulus programs and found that every alternative was inferior to the ARRA program. Topics covered included: the size of the stimulus, the effect of a monetary stimulus, fiscal relief to state and local governments, and a comparison of economic recoveries since 1948.

Contemporary Evidence from California: Who Gains When Evidentiary Hearings Are Held? Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2656526.

Traditionally, evidentiary hearings were held during most of the energy rate-making proceedings of the California Public Utilities Commission (CPUC). This is often referred to as the "litigation model of regulation." In recent years, the CPUC has often used a "collaborative model," in which proceedings are dominated by workshops and by several rounds of comments from practitioners (representatives of parties). My paper reviewed several CPUC energy regulatory proceedings and compared the results of litigation proceedings with the results of collaborative proceedings.

Did the American Recovery and Reinvestment Act Fund an Optimal Mix of Tax Reductions and Direct Government Spending?

Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2656465.

Once the Emergency Economic Stabilization Act (EESA) was introduced, the economic debate centered on the optimal mix of tax reductions and direct government spending. I reviewed the economic literature and discussed the economic arguments of both sides. My paper accounted for economic adjustment and calculated the optimal mix of tax reductions and direct government spending using three different standards: effect on Gross Domestic Product, effect on the stock market, and effect on the U.S. unemployment rate.

Is the CAPM a Biased Estimator of Market Risk?

Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2656519.

Presented a paper in which 1997-2001 data was used to compare a market basket of one hundred separate portfolios. Market risk was evaluated based on two separate criteria: the Capital Asset Pricing Model (CAPM) and a method based on market losses. Topics included a review of the relevant literature on risk, CAPM bias, assumptions of normality, and econometric modeling methods such as Ordinary Least Squares (OLS); Ridge Regression; and Exponential Generalized Autoregressive Conditional Heteroskedasticity (EGARCH).

Presentations

A Study of Expected Demand and Aggregate Employment in the United States from 1948-2021. 10th UECE Conference on Economic and Financial Adjustments, Lisbon, Portugal, July 2022.

A Study of Expected Demand and Aggregate Employment in the United States from 1948-2021. 17th Annual International Symposium on Economic Theory, Policy, and Applications. Athens Institute for Education and Research, Athens, Greece, June 2022.

The Effect of American and European Sanctions on Russia. Fifth International Scientific Conference, Cracow University of Economics, Cracow, Poland, September 2021.

The Effect of American and European Sanctions on Russia. 17th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2019.

Why Insurgent Campaigns Rarely Win the Democratic Presidential Primary in the United States? 16th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2018.

Has the Brexit Vote Affected the United Kingdom's Largest Trading Partners? 15th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2017.

Has A High Value Added Tax Harmed the European Economy? 14th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2016.

The Political Segregation of the United States. 13th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2015.

Did the Euro Harm the Greek Economy? 11th Annual International Conference on Politics and International Affairs, Athens Institute for Education and Research, Athens, Greece, June 2013.

Utility Performance Incentive Programs. November 2012. Presented an analysis of California incentive programs to a group of regulators from the Republic of Ghana. Topics covered included: utility regulation in Ghana, regulatory challenges, CPUC electric utility regulation, the risk-reward principle, incentive standards, energy efficiency incentives, natural gas incentives, capital adjustment mechanisms, and incentive-based regulation.

Is the Discounted Cash Flow (DCF) Model a Biased Estimator of Stock Returns? *Reid and Knecht*. 25th Annual Western Conference of Rutgers University's Center for Research in Regulated Industries (CRRI), June 2012.

Why Did the American Recovery and Reinvestment Act (ARRA) Fail, or Did It? International Academy of Business and Economics, 2012 Summer Conference, June 2012.

Contemporary Evidence from California: Who Gains When Evidentiary Hearings Are Held? 24th Annual Western Conference of Rutgers University's Center for Research in Regulated Industries, June 2011.

Why are RPS Contracts Labeled Top Secret? Featured speaker, Silicon Valley Roundtable of the National Association of Business Economics (NABE), April 2011. Topics covered included California Renewables Portfolio Standard (RPS) contract data, RPS Costs, and RPS Benefits.

Did the American Recovery and Reinvestment Act Fund an Optimal Mix of Tax Reductions and Direct Government Spending? Fourth International Conference on Social Science Research, December 2009.

Aglet Consumer Alliance's Physical Call Options Market Proposal. California Public Utilities Commission Workshop, August 2007. Recommended that regulators establish a call-options market overseen by a third-party vendor in which generators could sell capacity and associated energy to load-serving entities.

Aglet Consumer Alliance's Energy Auction Proposal. California Public Utilities Commission Workshop, December 2006. Recommended that regulators establish an energy auction overseen by a third-party vendor in which regulated utilities would auction excess energy to other load-serving entities.

The California Electric Crisis and the Rediscovery of Risk. Risk Advisory 2005 Regulatory Summit, November 2005. Presentation included a history of risk management at the CPUC and recommended that regulators establish an alternative process for determining the reasonableness of the procurement activities of regulated utilities.

Risk Management Training, Office of Ratepayer Advocates, April 2005. Led a one-day training course on the application of risk management in a regulatory environment. Topics included computer modeling, expectations theory, the efficient market hypothesis, estimating correlation and volatility, the optimal hedge ratio, basic utility contracts, the Black model, and Value at Risk (VaR).

Value at Risk (VaR), California Public Utilities Commission Workshop, April 2003. Presented an overview of the linear and quadratic VAR models, discussed correlation and volatility, and explained how probability distributions can be created when the actual probability distribution is non-normal.

The ORA's Incentive Mechanism for the Procurement of Electricity and Related Fuels, California Public Utilities Commission Workshop, February and March 2003. Presented an incentive mechanism in which utilities would be given rewards and assessed penalties based on a comparison of actual procurement costs to a set of benchmark prices.

"Is the CAPM a Biased Estimator of Market Risk?" 15th Annual Western Conference of Rutgers University's Center for Research in Regulated Industries (CRRI), June 2002.

Risk Management Issues, Problems and Applications, California Public Utilities Commission (CPUC), April 2002. Taught a one-day course on risk management with an emphasis on the procurement of electricity by regulated utilities. Topics covered included an overview of risk management, valuation models, contract valuation, advanced hedging, and portfolio valuation models.

Cost of Capital for Attorneys, Judges, and Staff, California Public Utilities Commission (CPUC), October 2001. Taught a one-day course on determining the appropriate cost of capital for a regulated utility. Topics included cost of capital and ratemaking, United States Supreme Court decisions, CPUC decisions, and financial models used to determine the cost of capital.

The Failure of Deregulation in California. Guest speaker at a master's-level investment class, University of California at Santa Cruz, March 2001. Identified and discussed the seven major factors that caused the increase in the average wholesale electricity price in California from \$24.66/MW in 1999 to \$233.94/MW in 2000.

The ORA's OSS Performance Incentives Plan, California Public Utilities Commission, February 2001. Presented a proposed system of incentive payments designed to improve the quality of telecommunications services to Competitive Local Exchange Carriers.

Risk: What Is It, How Do We Measure it, and Why Do We Care? California Public Utilities Commission, San Francisco, CA, October 2000. 1993-1997 weekly data was used to compare a market basket of one hundred separate portfolios. Market risk is evaluated based on two separate criteria: the Capital Asset Pricing Model (CAPM) standard and a method based on market losses.

The ORA's OSS Performance Standards Plan, California Public Utilities Commission, March 2000. Developed and presented a performance measurement system in which standards evolve over time.

What is the Proper Inflation Escalator for Southern California Edison's (SCE's) PBR? California Public Utilities Commission, San Francisco, CA, June 1999. Showed that the actual inflation faced by SCE was significantly less than either the consumer price index (CPI) or the producer's price index (PPI), used U.S. Department of Energy data to calculate a utility-specific index (USI), and compared the USI to the CPI and PPI for the period 1973-1998.

The Office of Ratepayer Advocates Emergency Restoration Standard Proposal, Pacific Gas and Electric Company, San Ramon, CA, May 1999. I presented an econometrically based standard for the restoration of electric service to retail customers following an emergency in which at least 10% of a utility's customers were without power.

Affiliations and Certifications

Member, Athens Institute for Education and Research, 2016-2023.

Member, Athens Institute for Education and Research, Business, Economics, and Law Division, 2016-2023.

Eviews Advanced Econometrics Certification, 2014.

Member, Energy Bar Association, 2014-2017.

Member, Energy Bar Association Legislative Committee, 2014-2015.

Forecaster, National Association of Business Economics' Outlook Forecast (NABE), 2008-2023.

Commentator on Macroeconomic Policy, Energy, and Financial Markets; National Association of Business Economics (NABE), 2000-2023.

Member, National Association of Business Economics (NABE), 1997-2023.

Alumni Association, University of California, Santa Cruz, 1998-2023.