Exhibit No.:
Issue: Risk from Off-System Sales
Witness: David C. Coleman
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2012-0174
Date Testimony Prepared: October 8, 2012

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2012-0174

SURREBUTTAL TESTIMONY

OF

DAVID C. COLEMAN

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
October 2012

SURREBUTTAL TESTIMONY

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DAVID C. COLEMAN

Case No. ER-2012-0174

Q: Please state your name and business address.

A: My name is David C. Coleman. My business address is 30 Monument Square, Concord, Massachusetts 01742.

Q: By whom and in what capacity are you employed?

A: I am a Principal of the NorthBridge Group, Inc. ("NorthBridge"). NorthBridge is a consulting firm specializing in providing economic and strategic advice to the electric and natural gas industries.

Q: Please summarize your relevant professional background.

A: In 1997, I joined NorthBridge as an Analyst after graduating from Dartmouth College with an A.B. in Physics. I was promoted to Associate at NorthBridge before leaving to pursue graduate studies in the M.B.A. program at the Tuck School of Business at Dartmouth. Upon graduation in 2003, I returned to NorthBridge and was thereafter promoted to Principal in 2011. The primary focus of my professional practice at NorthBridge has been in asset valuation, market price forecasting, commodity risk management and strategic analysis for clients in both the electric and natural gas industries. I have also analytically supported the probabilistic modeling in each of the four prior Kansas City Power & Light Company ("KCP&L" or the "Company") cases in which Mr. Schnitzer has sponsored testimony: ER-2010-0355, ER-2009-0089, ER-2007-0291, and ER-2006-0314. I am the software developer of the Parameter Estimator™, the

Scenario Generator™, and a unit dispatch model of the KCP&L generation fleet (the "NorthBridge OSS Dispatch Model") all of which have been used to develop and support the probabilistic analysis underlying Mr. Schnitzer's testimony in this case. A copy of my resume is attached as Schedule DCC-1.

Q: Have you previously testified in a proceeding before the Public Service Commission of the State of Missouri ("Commission")?

A: No.

I. PURPOSE OF TESTIMONY AND CONCLUSIONS

Q: What is the purpose of your Surrebuttal Testimony?

A: The purpose of my testimony is to respond to the Rebuttal Testimony of V. William Harris, on behalf of the Staff of the Commission ("Staff"). Mr. Harris criticizes the probabilistic analysis supporting Mr. Schnitzer's Direct Testimony in this case and in the four prior cases.[1] Mr. Harris also notes that the Midwest Energy Consumers Group ("MIEC/MECG") is using the RealTime model to sponsor an alternative probability distribution of KCP&L's off-system sales margin ("Margin"), and that Staff will review the results of each respective model in determining the correct level of Margin for this proceeding.[2]

Q: Please summarize your conclusions.

A: First, Mr. Harris' criticism of Mr. Schnitzer's underlying analysis and Mr. Schnitzer's recommended level of Margin as a "moving target" that is "constantly fluctuating" misunderstands the nature of a forward looking estimate of Margin based on market prices. Margin is driven, in part, by market prices, and market price estimates do

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[1] Rebuttal Testimony of V. William Harris at p. 6.
[2] Rebuttal Testimony of V. William Harris at p. 8

fluctuate. This fluctuation represents real and usable information about the future. Therefore, it is appropriate that any estimate of Margin based on forward prices (as opposed to historical prices, which are known with certainty) should change to incorporate new information.

Second, the usefulness to the Commission of Mr. Schnitzer's forward looking probabilistic analysis is not simply that it provides an updated Median (or 25th percentile or 40th percentile) value of Margin resulting from new market price information when the analysis is rerun for an update or the True-Up. The true benefit is the rigorous statistical analysis that places a new Median value in the context of a range of possible Margin outcomes using a probability distribution. This probability distribution recognizes that forecasts of Margin (forward looking estimates calculated during the rate case) and Margin actually realized (during the first year of new rates) will both fluctuate with market prices and other key drivers. The distribution of Margin outcomes presented by Mr. Schnitzer is based on rigorous statistical analysis of historical volatility and correlations using the Parameter Estimator™. Potential outcomes for key drivers of Margin are simulated using the Scenario Generator™. The NorthBridge OSS Dispatch Model uses these scenarios of key drivers to simulate realized Margin outcomes and provide the Commission a statistical "measuring stick" to weigh the likely fluctuation in Margin, and, given this fluctuation, to fairly allocate risk between the Company and ratepayers.

Third, Mr. Harris' reference to MIEC/MECG using the RealTime model as an alternative to the NorthBridge models to "generate KCPL's projected level of OSS at various percentiles"[3] fails to recognize what the RealTime model and MIEC/MECG's analysis actually do. Mr. Schnitzer has produced the only forward looking analysis in this proceeding, while the MIEC/MECG approach is backward looking and historically based, not forward looking.

II. MOVING TARGETS AND FLUCTUATION OF MARKET PRICES

Q: How is Mr. Harris critical of Mr. Schnitzer's analysis?

A: Mr. Harris states in his Rebuttal Testimony at page 6 that Staff is concerned that the Margin estimates generated by Mr. Schnitzer's analyses have been "moving targets" in prior rate cases. He criticizes these estimates as "constantly fluctuating" and presents as evidence a table that shows how the forecasted 25th percentile of Margin has varied depending on the rate case and on the vintage of the forecast (i.e., Direct/Update/Final).

Q: What do Mr. Schnitzer's "constantly fluctuating" estimates of Margin, in fact, represent?

A: The forecasts prepared by Mr. Schnitzer are forward looking estimates of Margin for a specified future delivery period, based on inputs that reflect current expectations for uncertain key drivers for that future period, as of the time of the forecast.

Q: Why have forecasts of Margin in Mr. Schnitzer's Direct Testimony varied between rate cases?

A: Margin forecasts prepared for different rate cases can be expected to differ as they cover different future delivery periods and reflect different expectations about firm load obligations, generating portfolio composition, and market conditions. For example, the Margin forecast presented by Mr. Schnitzer in his Direct Testimony in Case No. ER-

[3] Rebuttal Testimony of V. William Harris at p. 8, lines 15-16.

2009-0089 reflected expectations for the delivery period July 2009 to June 2010,[4] during which Iatan 2 was still under construction and not available for economic dispatch. Mr. Schnitzer's Margin forecast presented in his Direct Testimony in Case No. ER-2010-0355, however, reflected expectations for the delivery period April 2011 to March 2012,[5] during which Iatan 2 was expected to be operational and available for economic dispatch. The analysis in each rate case incorporates substantially different expectations for a different future period about such fundamental drivers as generating capacity and load. It is both expected and appropriate to see variation in Margin forecasts between cases.

Q: Why do Margin estimates for rate cases often change following the initial (i.e., Direct Testimony) forecast, even when the delivery period remains the same?

A: The forecasts constructed by Mr. Schnitzer reflect expectations of variables provided by the Company for a future delivery period that are current as of the time of the forecast. Expectations of variables (e.g., market prices or load conditions) are not static, but rather change over time as new information becomes available. For example, Mr. Schnitzer has previously established that Margin is a direct consequence of the SPP-North market price conditions and the Company's ability to make off-system sales from excess economic capacity. As new information about future market conditions becomes available, expectations about SPP-North market prices for a future period may change. It is appropriate that forward looking estimates of Margin, such as those produced by Mr. Schnitzer, incorporate the new information, even if it means that the estimates will fluctuate over time. The off-system sales Margin calculation is not erratic or capricious,

[4] Direct Testimony of Michael M. Schnitzer in Case No. ER-2009-0089 at p. 2. The delivery period in that case was subsequently changed to August 2009 – July 2010.

[5] Direct Testimony of Michael M. Schnitzer in Case No. ER-2010-0355 at p. 2. The delivery period in that case was subsequently changed to May 2011 – April 2012.

but is instead an accurate and straightforward reflection of the then-current state of the underlying fundamental drivers, such as the market price forecast.

Q: Is this variability reflected in Mr. Schnitzer's forecasts?

A: Yes. The forecasts provided by Mr. Schnitzer are actually distributions of outcomes, not point estimates and reflect the empirical observation that expectations of key drivers of Margin change over time. These forecasts reflect the knowledge that realized outcomes can and will vary, sometimes considerably, from current expectations. Mr. Schnitzer's forward looking analyses have reflected the wide range of potential future outcomes that might have resulted from future price and load conditions differing from expectations as of the time of the forecasts.

III. USEFULNESS OF PROBABILITY DISTRIBUTIONS

Q: Are point estimates for a future outcome, such as those referenced by Mr. Harris, at page 6, line 9 of his Rebuttal Testimony, the best representation of a forecast?

A: No, the most meaningful forecast for a future period is a probability distribution. For a variable such as Margin, which is the result of multiple uncertain drivers, a precise value for a future period cannot be known with certainty today, even with the best available information and most sophisticated models. Estimating that future outcome is not simply a matter of arithmetic. Opportunities to make off-system sales and the prices at which those sales may take place will result from future events that are presently unknowable with certainty.

Q: Does any other witness suggest that off-system sales Margin is better represented as a distribution than as a single point estimate?

A: Yes. Mr. Phillips,[6] on behalf of MIEC/MECG, appears to recognize that Margin is best reflected as a distribution of outcomes, some of which are more likely than others.

Q: Does variability of potential future outcomes reduce the value of a forecast?

A: Not at all. We know that future values such as Margin are a direct consequence of key drivers such as SPP-North energy prices, the Company's generating capacity, firm load obligations, and other factors. To the extent that those key drivers are uncertain, Margin will also be uncertain. Even though we may not know the precise values that those drivers will take on in the future period (i.e., realized values), we can make estimates today of what we think those values will be in the future, along with an estimate of how much the realized values may differ from today's forecast. The existence of this intrinsic uncertainty should be reflected in the forecast by representing future Margin as a distribution of outcomes, some of which are more likely than others. The knowledge that some degree of uncertainty is unavoidable provides valuable guidance to the Commission.

Q: Could the uncertainty surrounding Margin be eliminated by using better forecasts for key fundamental drivers?

A: No. There is substantial uncertainty in forward looking Margin estimates because future outcomes will be driven by information and events that are simply unknowable today. Even the most complete and comprehensive forecasts will often be wrong, and

[6] Direct Testimony of Nicholas L. Phillips at p. 17.

sometimes considerably wrong, because of the influence of events which could not have been anticipated. The variability between forecasts and realized outcomes is easily illustrated in Henry Hub natural gas prices. Table 1 shows forward prices for Henry Hub natural gas for delivery years 1991 through 2011. The forward prices are quotes as of the last trading day of the year preceding delivery. Each forward price is compared to the annual average realized spot price for Henry Hub natural gas for that year and the percentage variation between the two prices is calculated.

Table 1

Delivery Year	Forward Price[7] ($ / MMBtu)	Realized Spot Price[8] ($ / MMBtu)	Percentage Variation[9] (%)
1991	$1.72	$1.47	-16.0%
1992	$1.43	$1.76	20.8%
1993	$1.72	$2.11	20.8%
1994	$1.97	$1.91	-3.5%
1995	$1.67	$1.71	2.5%
1996	$2.04	$2.67	27.1%
1997	$2.67	$2.48	-7.3%
1998	$2.26	$2.09	-8.0%
1999	$1.92	$2.27	16.9%
2000	$2.42	$4.31	57.9%
2001	$6.36	$3.96	-47.4%
2002	$2.79	$3.38	18.9%
2003	$4.67	$5.47	15.8%
2004	$5.42	$5.89	8.4%
2005	$6.34	$8.69	31.5%
2006	$10.82	$6.73	-47.4%
2007	$6.76	$6.97	3.0%
2008	$7.57	$8.86	15.7%
2009	$6.42	$3.94	-48.8%
2010	$6.01	$4.37	-31.9%
2011	$4.44	$4.00	-10.6%

7 Forward quote as of the last trading day preceding the delivery year where all twelve monthly quotes were available. For example, the forward price shown for delivery year 1991 was quoted on 12/19/1990.
8 Annual average realized spot price calculated for each trading day in the calendar year.
9 Compounded continuously. Percentage variation = Ln (Spot Price / Forward Price).

		Average Variation	0.9%
		Standard Deviation of Variations	28%

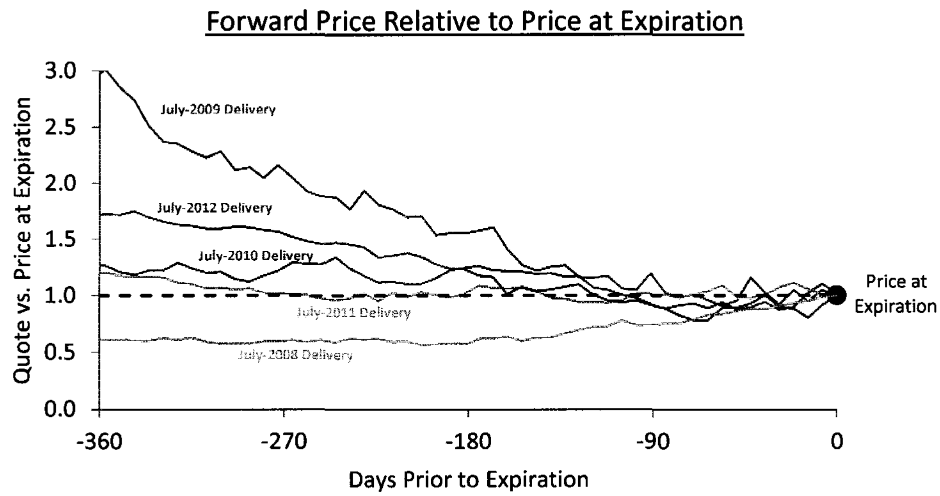
Q: What does this historical comparison tell us about the relationship between forward and spot prices?

A: There are three observations I would make based on Table 1. First, forward prices have tended to be an unbiased predictor of realized spot prices. In other words, when market participants buy or sell natural gas forward contracts, there is no evidence to suggest that the prices they paid or the revenue they received was too high or too low. Second, forward prices, even if unbiased, do not and cannot perfectly predict the realized spot price. Between the time the forecast is made (i.e., the forward price is observed) and the time the realized spot price is known, new information about supply and demand becomes known that did not exist at the time the forecast was made. Market participants incorporate new information as it arrives and prices adjust accordingly. Third, forecasts for different delivery periods made at different times will also demonstrate substantial variation.

Q: Once a forecast is made, does it tend to remain stable as the delivery period approaches?

A: No. Just as realized spot prices can vary considerably from a forecast due to the incorporation of new information, so can the forecasts themselves change over time. Figure 1, below, shows forecasts for Henry Hub natural gas (i.e., forward prices) changing up to the final contract trading date for the delivery period. The forward prices for Henry Hub natural gas for delivery in July for years 2008-2012 are shown relative to the price at expiration. As shown in Figure 1, forward prices can fluctuate considerably during the time leading up to the delivery period. So, even participants with a strong financial interest in identifying the "right" price must invariably revise their estimates over time, as new information becomes available.

Figure 1



Q: **Is it possible to determine how the uncertainty in fundamental drivers, such as energy prices, translates into uncertainty in Margin?**

A: Yes. It is possible to quantify the uncertainty surrounding forecasts by using a mathematical model that simulates future outcomes by reproducing the nature and degree of uncertainty we have observed historically. Such a model must be sufficiently complex to accurately reflect the statistical characteristics of observed historical data and must be calibrated so that the simulations of future outcomes it produces are statistically consistent with observed history.

Q: Are you aware of any modeling tools capable of simulating the complex dynamics of off-system sales?

A: Yes. NorthBridge has developed two software tools designed specifically to measure and simulate the uncertainty in market prices (e.g., both energy and fuel prices) and load conditions. These tools measure the variability we have observed historically in key drivers, calibrate a mathematical model based on those observations, and then simulate future outcomes for variables such as price and load that are relevant to Margin using the mathematical model. The first two tasks (i.e., measure and calibrate) are implemented in the Parameter Estimator™ and the third task (i.e., simulate future outcomes) is implemented in the Scenario Generator™. Both the Parameter Estimator™ and the Scenario Generator™ are based on a mathematical model known as the Ornstein–Uhlenbeck[10] model. This model or framework is widely used for modeling commodity price uncertainty and is well-suited for simulating energy prices or system load.

Q: How is the output of the Scenario Generator™ used to simulate Margin outcomes?

A: NorthBridge has developed the NorthBridge OSS Dispatch Model, which works in conjunction with the Scenario Generator™. This model uses forecasts for key fundamental drivers provided by the Company. It simulates the economic operation of the Company's generating units and identifies opportunities for the Company to make off-system sales in each of the one thousand scenarios produced by the Scenario

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[10] *See* G.E. Uhlenbeck and L.S. Ornstein, *On the Theory of the Brownian Motion*, 36 Physical Review, 823-41 (1930). *See also* E.S. Schwartz, *The Stochastic Behavior of Commodity Prices: Implications for Valuation and Hedging*, 52 The Journal of Finance, 923-73 (1997); R.S. Pindyck, *The Dynamics of Commodity Spot and Futures Markets: A Primer*, 22 The Energy Journal, 1-29 (2001); R.S. Pindyck, *Volatility and Commodity Price Dynamics*, 24 The Journal of Futures Markets, 1029-47 (2004).

Generator™. The resulting scenarios of Margin provide the basis for estimating the range and likelihood of Margin for a future period.

IV. ONLY NORTHBRIDGE MODELS ARE TRULY FORWARD LOOKING

Q: Is Mr. Harris correct in stating at page 8 of his Rebuttal Testimony that MIEC/MECG has also conducted an analysis of projected Margin?

A: No. MIEC/MECG has used the RealTime model and the NorthBridge OSS Dispatch Model to calculate hypothetical Margin values. However, the results calculated by MIEC/MECG using the models rely on inputs that do not reflect current expectations of any specific future period. MIEC/MECG uses historical, normalized test year SPP-North energy prices, which are derived from market conditions in 2011, as the basis for its Margin calculations in both models. By referring to the MIEC/MECG calculations as "another model" that "is being used to generate KCPL's projected levels of OSS [off-system sales] at various percentiles," Mr. Harris fails to recognize what MIEC/MECG has done in its analysis and what it actually represents. The MIEC/MECG approach is not an alternative to the NorthBridge projection.

Q: What is wrong with the MIEC/MECG approach?

A: Although MIEC/MECG can mechanically use normalized SPP-North market prices based on 2011 as inputs to RealTime or the NorthBridge OSS Dispatch Model, it is inappropriate to describe the resulting Margin values as "projected." A calculation based on backward looking prices may, by happenstance, be consistent with a projected for forward looking estimate, but such consistency would be by chance only. The energy price assumptions used by MIEC/MECG are not intended to be forward looking and are grossly inconsistent with current market expectations, as already described by Mr.

Schnitzer.[11] Since MIEC/MECG's input assumptions do not reflect forward looking estimates of key drivers, the result (i.e., the Margin calculation) does not reflect a forward looking estimate. The Margin calculations performed by MIEC/MECG are therefore not "projections."

Q: Do you have any additional concerns with Mr. Harris' characterization of MIEC/MECG's calculation as a "projection?"

A: Yes. In addition to calculating a Margin value using the RealTime model, MIEC/MECG also uses the NorthBridge OSS Dispatch Model to calculate a "distribution" of Margin outcomes. Just as the single Margin value calculated using the RealTime model is not a projection, the "distribution" shown by MIEC/MECG[12] is not a projection and is not a meaningful or proper distribution of future outcomes. The NorthBridge OSS Dispatch Model is a forward looking model that integrates forward looking estimates of key drivers with scenarios that reflect uncertainty that accrues between the time of the forecast and the future period. The energy price inputs used by MIEC/MECG are backward looking and reflect historical experience that is known with certainty. MIEC/MECG has, in effect, suggested there is uncertainty surrounding a historical value, where there is none. MIEC/MECG has made no projection about outcomes in a future period. The probability distribution shown by Mr. Phillips cannot be construed as illustrating the likelihood of future events.

Q: Does this conclude your testimony?

A: Yes.

[11] Rebuttal Testimony of Michael. M. Schnitzer at p. 22- 23.
[12] Direct Testimony of Nicholas L. Phillips at p. 18.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service	)))	Case No. ER-2012-0174

AFFIDAVIT OF DAVID C. COLEMAN

COMMONWEALTH OF MASSACHUSETTS)
) **ss**
COUNTY OF MIDDLESEX)

David C. Coleman, being first duly sworn on his oath, states:

1. My name is David C. Coleman. I work in Concord, Massachusetts, and I am employed by The Northbridge Group, Inc. as a Principal.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Kansas City Power & Light Company consisting of thirteen (13) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

David C. Coleman

Subscribed and sworn before me this 8th day of October, 2012.

Notary Public

My commission expires: June 21, 2013

David Coleman joined the NorthBridge Group in 1997. Mr. Coleman's background is in asset valuation, market price forecasting, commodity risk management and strategic analysis for clients in both the electric and natural gas industries. His recent projects at NorthBridge include:

PRICE FORECASTING AND RISK MANAGEMENT

- Mr. Coleman developed a risk assessment tool which incorporates a stochastic mean-reverting model of commodity prices, inter-commodity correlations and stochastic volatility. The model has been used to illustrate potential spot price outcomes as well as potential forward curve movements for natural gas and electricity commodities in a variety of hedging valuation projects.
- For a large Midwestern utility, Mr. Coleman provided the principal analytical support for risk distributions of off-system wholesale energy margins. The analysis utilized a stochastic model of electricity and natural gas prices, load levels and unit outages in conjunction with an hourly dispatch model.
- Mr. Coleman utilized a stochastic model of natural gas prices to evaluate whether a large scale gas hedging program could adequately hedge system production costs for a gas-based electric utility. The analysis involved evaluating credit and mark-to-market requirements.
- For a large utility in Texas, Mr. Coleman replicated ERCOT's hourly balancing energy market model to evaluate and rebut accusations of market power abuse and claims of damages due to bid withholding. Mr. Coleman also illustrated the effects of voluntary mitigation policies on balancing energy prices through an ex-post replication of the balancing market with modified bidding practices.
- For a large utility in Texas, Mr. Coleman evaluated the ability of large nuclear operating companies to improve performance by reducing forced outages. Mr. Coleman conducted an analysis illustrating the 'long-tail' nature of nuclear forced outages and the replacement power cost risks associated with liquidated-damages contracts.
- Mr. Coleman developed mapping software to aid in visualizing market price gradients and visualizing the geographic boundaries of transmission constraints.

BUSINESS STRATEGY AND ASSET VALUATION

- For a large integrated utility in the Southeast, Mr. Coleman used a real-option framework to identify the optimal investment approach for a deferrable nuclear investment. Mr. Coleman quantified the value created by deferring the investment and learning more about potential carbon regulation and gas price movements and the value lost by foregoing attractive government debt guarantees and equipment purchase incentives.
- For a large integrated utility in the Southeast, Mr. Coleman performed an in depth analysis of the costs and benefits of a new coal-based resource in a predominantly gas-based market. He analyzed the future uncertainty surrounding carbon costs and the costs of a gas-based alternative resource. The analysis emphasized the distinction between cost savings on an expected basis versus the probability of achieving savings.
- For a large integrated utility in the Southeast, Mr. Coleman utilized a real-option approach to value the benefit of delaying further capital commitment in a project that had become only marginally cost competitive.

- For a large integrated utility in the Southeast, Mr. Coleman determined CO_2 allowance price levels that would force the retirement of a coal unit. Mr. Coleman identified retirement thresholds for both scrubbed and unscrubbed resources.
- For a large Texas utility, Mr. Coleman evaluated the economics of potential coal resource expansion plans in ERCOT, including the identifying the point at which further resource development would cannibalize margins due to market price depression.

RENEWABLE ENERGY AND CARBON POLICY

- Mr. Coleman implemented a resource planning model to identify the impact of wind resource expansion on energy and capacity prices in the Midwest. The model incorporated a linear-programming algorithm to determine the optimal combination of resource expansion and utilization while satisfying environmental restrictions.
- For a large integrated utility in the Southeast, Mr. Coleman constructed a supply curve of on-system CO_2 abatement options and quantified the investment and production subsidies available to renewable resources.
- For a large integrated utility in the Southeast, Mr. Coleman assessed the economics of biomass co-firing in coal units and the implied cost of CO_2 abatement. Separately, Mr. Coleman evaluated the revenue requirement of a purpose-built biomass facility and its ability to provide a hedge against future carbon allowance costs.
- Mr. Coleman performed a cost-benefit analysis contrasting weatherization programs to residential solar cell installations.
- For a large integrated utility in the Southeast, Mr. Coleman analyzed the likely allocations of CO_2 allowances to local distribution companies (LDCs) and the net impact on retail rates of the CO_2 and renewable energy requirements contained in Waxman-Markey climate bill.
- Mr. Coleman advised a not-for-profit organization on the economic viability of a new compressed air wind energy storage technology. He developed a model using linear programming to optimized storage and generation decisions thereby maximizing value.
- Mr. Coleman provided analytical support for a client's lobbying effort advocating for climate legislation. He addressed the congressional delegation's concerns about the impact CO_2 emission restrictions might have on the price of natural gas.

WHOLESALE PROCUREMENT STRATEGY

- Mr. Coleman conducted risk analysis and strategic support for a large Eastern utility evaluating its general wholesale procurement process, including forecasting retail rates, credit requirements, rate volatility, and comparing full requirements approaches to active portfolio management.
- For a large Midwestern utility, Mr. Coleman researched the impact of long term purchase contracts on imputed debt and debt ratings.

Mr. Coleman graduated cum laude from Dartmouth College with an A.B. in physics, and received his M.B.A. from the Tuck School at Dartmouth where he was a Tuck Scholar. Before returning to Dartmouth for his business degree, Mr. Coleman was a research analyst at The NorthBridge Group.