BEFORE THE

KANSAS CORPORATION COMMISSION

PREPARED DIRECT TESTIMONY OF

GARY VICINUS

ON BEHALF OF

MIDWEST ENERGY, INC.

DIRECT TESTIMONY OF GARY VICINUS

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and occupation.

A. My name is Gary Vicinus. I am Chief Operating Officer of Pace Energy Services, LLC ("Pace") and Deputy Director for Pace's Utility, Power and Risk Management Division. Pace's corporate address is 4401 Fair Lakes Court, Suite 400, Fairfax, Virginia 22033.

Q. Please describe your education and experience.

A. I have undergraduate and graduate degrees in economics with over 30 years' experience performing economic analyses of energy and electric utility planning issues, including the development of resource plans, evaluating energy portfolios, valuing and acquiring power plants, reviewing, interpreting and negotiating energy contracts, conducting market assessments relating to fuels and power, analyzing contract price escalators, and evaluating the inherent risks associated with energy and fuel costs in contracts.

I developed the process that we employ for electric utilities that we call "Risk Integrated Resource Planning" for electric utilities which we have employed for numerous electric utilities in the United States, including Duquesne Power, MEAG, The California Department of Water and Power, Madison Gas and Electric and Dayton Power and Light.

I have testified in federal and state courts, arbitration proceedings and before regulatory agencies, having been qualified as an expert on a variety of energy planning, pricing and cost issues. My background, and a listing of testimony experience, presentations and publications that I have authored or co-authored, is provided in Exhibit GWV-1 to this Report.

II. PURPOSE OF REPORT AND EXPERT TESTIMONY

I have been retained by Midwest Energy Inc., ("Midwest Energy" or "Company") to describe the resource plan that we developed with the Midwest Energy planning team in late 2004 and early 2005 and the updated wind power assessment we completed in 2006.

This Report sets forth my opinions and conclusions with respect to these studies. All of the analytical work presented in this Report and the resource plan was performed under my overall direction. My opinions are based upon my extensive experience in these matters, as detailed in Exhibit GWV-1.

In preparing this testimony, I have reviewed our proposal and reports, the testimony of Dr. John Cita, KCC Staff Economist, on the recent Westar Docket 07-WSEE-616-PRE, the Direct Testimony of Mr. Gary Groninger in this case, and wind-related background information from Midwest Energy.

III. BACKGROUND AND CONTEXT

Q. When and why was Pace originally retained?

A. Pace was retained in October 2004 to develop with Midwest Energy planning staff a comprehensive resource plan. We completed our report in mid 2005 and presented our findings to Midwest Energy's senior management team and Board of Directors. The final report is available upon request from Midwest Energy.

Midwest Energy undertook a detailed evaluation of its long-term electricity resource and supply portfolio plan as it was facing a host of supply contract expirations from 2005 through 2010. By 2010, Midwest Energy found itself with a 100% open position in terms of its power supply if additional resources are not layered into the portfolio to offset capacity expirations. Pace was retained by Midwest Energy to help determine the best supply portfolio strategy consistent with Midwest Energy's explicit business objectives, namely: (1) providing rate stability for members, (2) providing supply reliability, (3) maintaining competitive rate levels with neighboring utilities, (4) executing a prudent supply strategy and (5) preserving corporate solvency and strong financial condition. Exhibit GWV-2 shows a summary of Midwest Energy's open position over time as of the time of the study.

Pace's risk integrated resource planning perspective was central to the analysis to ensure the risks of the commodity markets and other factors such as the implementation of transmission projects that might open up the northern and southern Southwest Power Pool (SPP) regions to become a more integrated transmission network, the potential of increased environmental compliance costs, and major contract abrogation were considered in defining a comprehensive resource strategy. Additionally, the load growth (or decline) uncertainty for Midwest Energy was factored into the analysis.

Through the course of the long-term planning study and our direct interaction with Midwest Energy's senior managers, insights were gained on business objectives, the current and future supply options of Midwest Energy, and the importance of transmission availability in successfully implementing the long-term resource plan.

Q. What were the conclusions of your study?

A. Based on our investigation, we determined that

- Base load coal capacity should comprise approximately 45-50 percent of the generation portfolio (approximately 165 MW of coal fired base load generation in 2010).
- Intermediate, typically combined cycle capacity should comprise the next layer of capacity comprising approximately 5-10 percent of the total Midwest Energy system requirements (about 25 MW in 2010).
- If economic intermediate capacity is not found, the additional capacity can be added to Base Load with little impact on expected costs or risks to the portfolio.
- Gas fired peaking capacity should constitute the remaining capacity requirements of the supply portfolio (approximately 40-50 percent or about 135 MWs in 2010).
- Wind generation would be economic at a price of approximately $27 per MWh (excluding transmission implications) and would not negatively impact overall supply portfolio costs at that rate.
- Diversifying the major supply contracts both in terms of actual generation sources and contract counterparties was a prudent commercial strategy when implementing the resource portfolio.

- Transmission congestion was recognized as a significant issue that would be central to defining the feasible supply options, number of potential counterparties, and the total costs of the supply portfolio and would potentially limit the number of available options for Midwest Energy in crafting its resource supply portfolio.

Q. Is it your belief that these conclusions are still valid?

A. Yes. Since these conclusions were drawn, the energy markets have reached new highs as they have responded to dramatic supply and demand shocks since the last half of 2005. By utilizing the risk integrated resource planning methodology, however, we selected a portfolio that stands up under a variety of market conditions. Hence, we believe that the long-term resource recommendations remain valid.

Q. What has Midwest Energy done to implement this Resource Plan?

A. Midwest Energy subsequently solicited offers and completed plant evaluations and has begun acquiring both power generating stations and contracts to fill its void, consistent with the findings of our study.

Of particular interest in the base rate proceeding is the recovery of the costs for the development and operation of the Goodman Energy Center. The Goodman Energy Center consists of nine Wartsila Engines generating units with competitive heat rate (approximately 8400 btu/kwh) performance. The first six are expected to be on line by June 2008 and the remaining three on line by September 2008. The first six units total approximately 50 MW and the remaining three total approximately 25 MWs.

These units are consistent with the needs of the "remaining load" portion of the resource plan outlined above. In fact, the smaller, efficient units will provide Midwest Energy a great deal of flexibility to follow load, much more so than a single 75 MW combustion turbine unit would provide. Midwest Energy will also receive significant availability benefits by having nine incremental generation units instead of a single unit. This will be a significant operational advantage for a system with a small demand and summer peaking characteristics such as Midwest Energy.

Q. What has Midwest Energy done to meet its renewable portfolio requirements?

A. Within the past eight months, the Governor of Kansas has called for every utility in the state to agree to a 10 percent commitment to renewable resources by 2010 and 20% by 2020. If Midwest Energy's firm peak load is about 300 MW, this would amount to a commitment of 30 MW by 2010 and about 60 MW by 2020.

It is our understanding that Midwest Energy has decided to commit to wind power as long as it does not result in a significant increase in the cost of its portfolio. Midwest Energy has already committed to 25 MW of wind power and is currently negotiating for an additional 25MW of wind energy. This will give Midwest Energy approximately 80 percent of the commitment that the Governor requested in 2020 and over 100 percent of the commitment for 2010.

Q. Are the wind generation commitments that Midwest Energy has made consistent with your recommendations?

A. Originally we evaluated what price for wind power would be the breakeven cost for wind generation in the Midwest Energy power portfolio, i.e. at what price would the price of wind generated power not increase the overall cost of supply. Based upon our analysis, $27 per MWh in 2004 dollars or about $28-30 per MWh in 2007 dollars depending upon volume was determined to be the breakeven price for wind generated power. We updated our study in 2006. When we did, we concluded that the competitive price for wind power had risen to $30-32 per MWh in 2007 dollars depending upon the volume. The price of its new wind contract is higher than the original or amended "best guess" forecast contracted, though it is a fixed price for the life of the contract. These contracts also come with the Renewable Energy Certificates (RECs), which have value in the market above and beyond the energy value of the generation, and thereby offset at least some of the upward pressure on price caused by adding wind to the portfolio.

Moreover, the contract for wind power was competitively bid, and was the lowest cost alternative for Midwest Energy. Overall impact to Midwest Energy's portfolio costs has not been determined as its supply portfolio is incomplete. One of the factors that has driven the prices of wind generation higher is the strong demand for wind generation throughout the country and the higher costs for the wind turbine equipment and construction costs that have occurred since 2005. Higher construction costs have also increased the cost of other forms of generation as well. At any rate, Midwest Energy has taken advantage of the least expensive wind power available and prices are likely to rise, not fall, between now and 2010.

IV. APPROACH

Q. What is RIRP?

A. Pace has developed an innovative and highly structured approach to resource planning entitled "Risk Integrated Resource Planning" ("RIRP™") that addresses the failure of traditional IRP approaches. Midwest Energy, by requiring the integration of risk quantification and perspective in the RFP, has seen through these shortcomings. Traditional IRP methods have been lacking over the past decade; such traditional programs do not explicitly address the volatility nor the correlation of resource elements which subject utilities to a variety of risks that can undermine attempts at rate stability and sustained earnings.

Q. Please describe your approach in more detail.

A. The approach consists of several integrated steps:

Pace's risk integrated resource plan began with the development of a risk profile for Midwest Energy. The risk profile determines what could happen to costs if there were no changes to the existing resource portfolio over time. It provides a quantitative assessment of the risks of costs or earnings varying from the most likely outcome due to uncertainties in power or fuel prices, load forecast and regulatory uncertainties and consists of both open position risk, which is the risk that Midwest Energy is exposed to because of the volatility of spot market prices for uncontracted positions and fixed position risk, which is the risk that existing contracted positions will prove to be above market value (thereby exposing the Company to prudence risk). The risk profile varies by year as contract positions expire. We looked at the components of the exposure, whether it is due to gas market volatility, power market volatility, outage or contract abrogation risk.

We also assessed their key corporate objectives. Their objectives included (1) providing rate stability for members, (2) providing supply reliability, (3) maintaining competitive rate levels with neighboring utilities, (4) executing a prudent supply strategy and (5) preserving corporate solvency and strong financial condition. Those objectives helped define the best portfolio since it helped select appropriate risk metrics to evaluate different portfolios. The balance of rate stability and competitive rates for example, can only be determined by evaluating alternative portfolios over a range of market and regulatory outcomes. Exhibit GWV-3 shows how these competing objectives are reflected in the valuation of cost distributions over time. Rate stability requires that the resulting cost distributions are narrowed over time while competitive rates require that the cost distributions shift to the left. Meanwhile Exhibit GWV-4 shows that the central tendency of cost distributions are to widen and shift to the right over time.

Once the appropriate decision metrics were determined, then the most appropriate resource mix was determined. All prudent resource options, including contract additions, tolling options, partial plant ownership, and demand side options were screened and evaluated, and each candidate portfolio mix was evaluated subject to its relative performance against Midwest Energy's risk integrated decision metrics (the combination of expected costs and the variability of costs over time).

Wind energy options were also evaluated. The costs and energy potential for wind were then integrated into the decision metrics and cost analyses to determine the reasonable level of wind resources that may be incorporated into the resource plan with limited impact on portfolio costs.

Market dynamics were integrated into the resource plan using Pace's proprietary market simulation and forecasting tool, the Capacity and Energy Market Analysis System (CEMAS). CEMAS, Pace's spot market clearing price forecast methodology, consists of multiple, interrelated analytical processes overlaid with stochastic inputs and an iterative approach that identifies the statistical uncertainty embedded in prices and project performance.

Alternative resource portfolios were evaluated in the context of both resource needs and economics using Pace's Utility Financial model. Each portfolio had a resulting distribution of costs that is consistent with the objective functions. Demand side options were also evaluated. We screened various demand side programs that might be feasible for Midwest Energy's customer classes utilizing Pace's CEMAS tool to forecast capacity and energy values. Given the relatively low value ascribed to peaking capacity, none of the demand side options were deemed cost competitive alternatives.

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Quantification of uncertainty is a hallmark of Pace's forecasting practice. The risk integrated resource plan analyses include forecasts of the most likely price path expectations plus a probabilistic distribution around the expected price path. This means that resource options were evaluated against the most likely forecast of delivered energy prices, demand expectations, and resource performance characteristics as well as against confidence bands around those expected values based on statistical measures of uncertainty. These integrated confidence bands allow for better decision-making and a better understanding of risk exposures as well as the up- and down-side potential for each market.

The results of Pace's CEMAS and Financial assessment analyses allow for a direct comparison of various contract options and traditional generating resource options which can then be evaluated relative to their performance against the decision metric (which in this case was expected costs and the variability of costs). Each portfolio was evaluated with regard to both the expected costs and the potential for higher or lower costs under the types of contract or ownership structures considered given market, operating and regulatory uncertainty (expressed as stochastic distributions). In addition, there would be an assessment of both open and fixed (regulatory) risks for each portfolio.

Transmission service reservations, the reliability of transmission service requirements for various resource options, and the potential costs of acquiring transmission service, including potential upgrade costs, were based on an analysis of all available planning studies from Midwest Energy as well as SPP at the time.

V. Summary of Conclusions

Q: How do you arrive at the conclusion that acquiring 75.6 MW of peaking generation capacity is consistent with your recommended resource plan?

A: Obtaining the 75.6 MWs of peaking capacity associated with GMEC is a good start at meeting its peaking needs for 2010. One of the principal reasons that we determined that approximately 135 MW of peaking capacity is needed by 2010 is due to the summer peaking demand characteristics of the Midwest Energy system. Midwest Energy would typically expect to have to call on its peaking capacity in certain peak hours for the months of June through September and therefore the capacity factor of the peaking units are expected to be below 20% of annual hours. The peaking units have relatively low capital cost and higher dispatch costs which is the appropriate trade-off for low utilization units. Exhibit GWV-5 shows that there is a risk associated with over-committing to base load capacity. When looking at the lower end of the load growth range, one should not commit for more base-load capacity than what will be consistently needed, especially when reserve margins remain favorable (excess power would be discounted in the market).

Intermediate capacity is most economic when it can be used to meet seasonal demand at capacity factors above 25%. Intermediate capacity would be anticipated to dispatch at various points throughout the year including the majority of on-peak hours throughout the summer months and early fall and also for significant periods in off-peak hours in the summer. Peaking capacity is used to meet daily peaks primarily in the summer months. Mapping the system load characteristics against the recommended resource types is clearly depicted in Exhibit GWV-5.

Exhibit GWV-6 shows the cost trade-offs for different levels of base load coal and intermediate and peaking generation from gas. The exhibit shows that less base load coal generation than optimal increases both expected costs and the variability of costs. More coal in the portfolio than optimal increases expected costs and reduces variability but it costs too much to reduce variability except for small changes to the amount of base load generation.

Q. Did you test alternative portfolios? If so, what did you find?

A. We looked at a variety of portfolios, ranging from 100 percent coal and zero percent combined cycle and zero percent combustion turbine generated power, to zero percent coal and 100 percent combined cycle or 100% combustion turbines, and all combinations in between. As shown in Exhibit GWV-7, the optimal portfolio varied very little across a wide range of outcomes. Only in very low power price scenarios, are the gas combined cycle generation scenarios justified (because the high fixed or capital costs for coal are not justified). In virtually every price scenario, however, the amount of peaking generation required remained about the same.

We also found that there was very little difference in portfolios that had about 30 more MWs of base load generation and correspondingly less intermediate load power. Hence we concluded that if Midwest Energy was unable to secure competitive intermediate generation, that amount of generation capacity could be made up with additional base load generation at little or no additional cost or risk. I will note that the low heat rates associated with the Wartsila generating units will allow them to operate more often than typical peaking units.

Q. What other sensitivity studies did you conduct?

A: We identified five risks to the portfolio that needed to be addressed in the study. Energy price risk (coal, gas and power) and load uncertainty were captured directly in the distributions of load and prices directly in the study. In addition, we evaluated three "quantum" events in addition to our evaluation of commodity and load uncertainty to account for the other three. One included consideration of additional transmission lines that would change the SPP transmission configuration from north and south to become a more integrated region for market pricing purposes. A second quantum event looked at the loss of a single largest unit or contract on the system. The third quantum event was the potential impact of higher than anticipated environmental costs for coal fired generation resulting from more stringent mercury and carbon regulations.

The whole point of these "game changing" situations assessed whether the recommended portfolio was susceptible to changes in one time significant events. The best portfolio is one that meets the company's objectives under nearly every circumstance and has a manageable outcome if a "game changing" scenario does occur.

In none of these quantum events did the need for peaking generation fall below about 40 percent of peak load generation. In every case, the costs of the portfolios changed significantly; in the case of additional transmission lines, power prices fell, while in the more stringent environmental scenarios and the contract abrogation/outage scenarios increased costs to Midwest Energy. The contract abrogation quantum event suggested that several suppliers be used to contract for coal based generation rather than rely on one. But none of the quantum events impacted the mix of generation significantly and particularly did not change the amount of peaking generation required.

Q. Are there any other factors that you would like us to consider?

A. Yes. The Commission has taken a position that resource plans need to explicitly consider risks in determining the optimal resource plan. I believe Midwest Energy's approach in determining an optimal portfolio structure via an RIRP™, and then procuring that portfolio via an RFP is "best practice" and consistent with Commission Staff recommendations. From my read of Dr. Cita's testimony, Staff suggested to Westar that Midwest Energy's use of RFPs reflected an appropriate standard for them to follow. In addition, Staff recognizes that there is inherent risk in using a point load forecast. Again, the RIRP™ approach allows for variance in the projected load because it looks at the wider view of the market.

Q. Does this conclude your testimony?

A. Yes, it does.

Exhibit GWV-2: Midwest Energy's Business Objectives – Current Condition

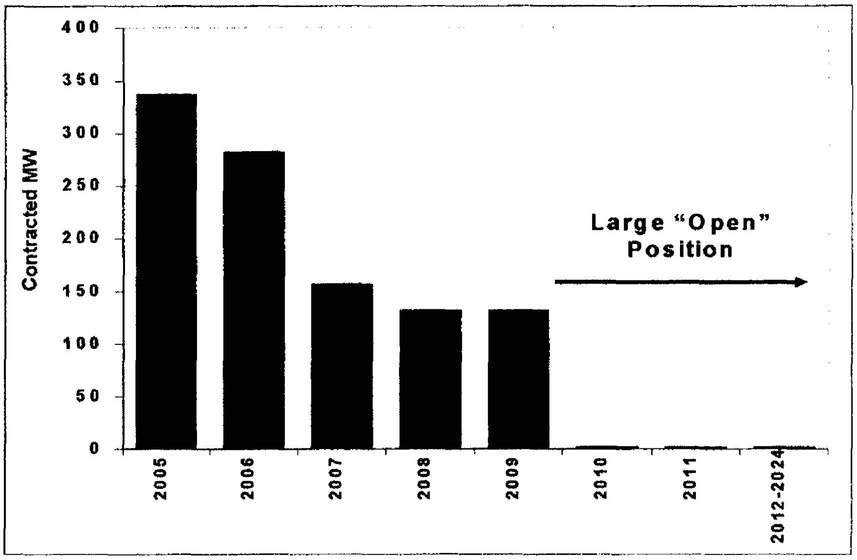


Exhibit GWV-3: RIRP Portfolio Design Approach

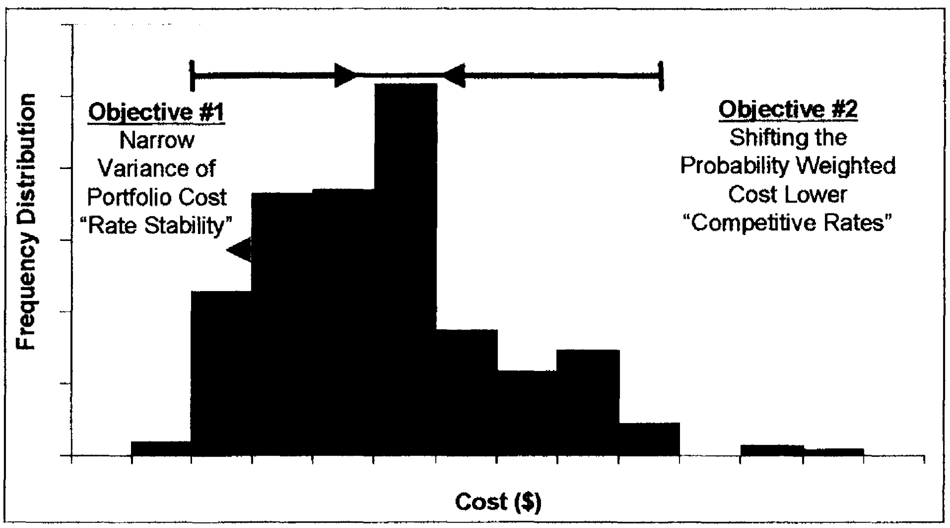
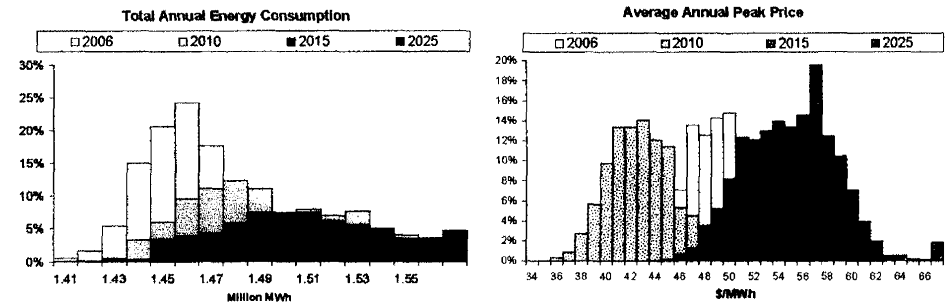


Exhibit GWV-4: Midwest Energy's Risk Profile 2006, 2010, 2015 and 2025



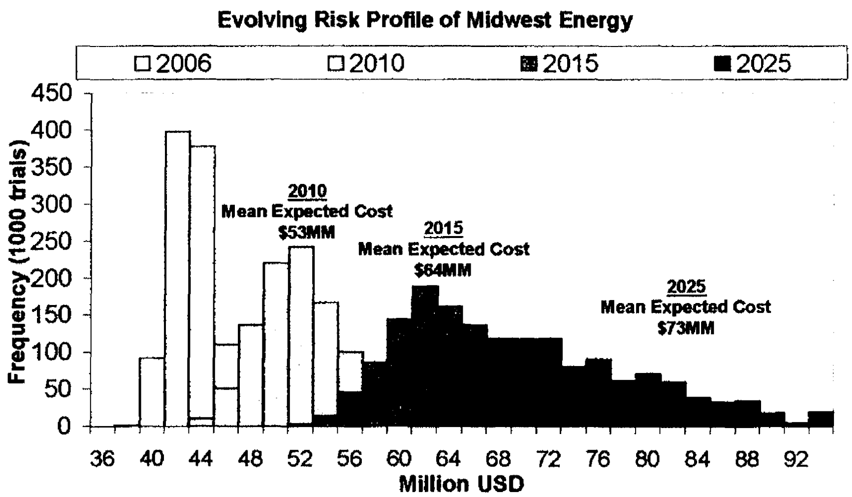


Exhibit GWV-5: Portfolio Mix Overlayed to Midwest Energy's Projected Load Profile (2010)

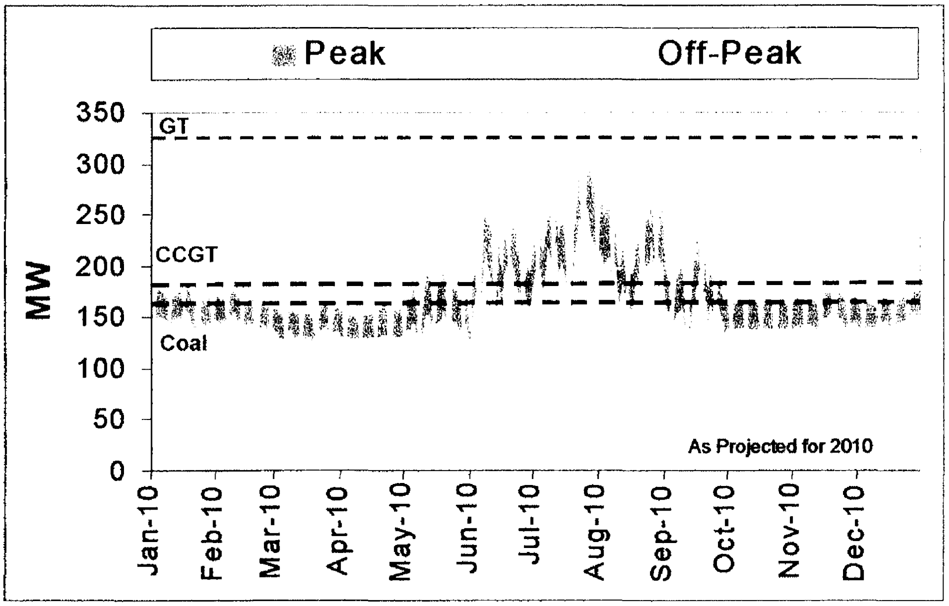


Exhibit GWV-6: Comparison of Expected Costs vs. Cost Variability

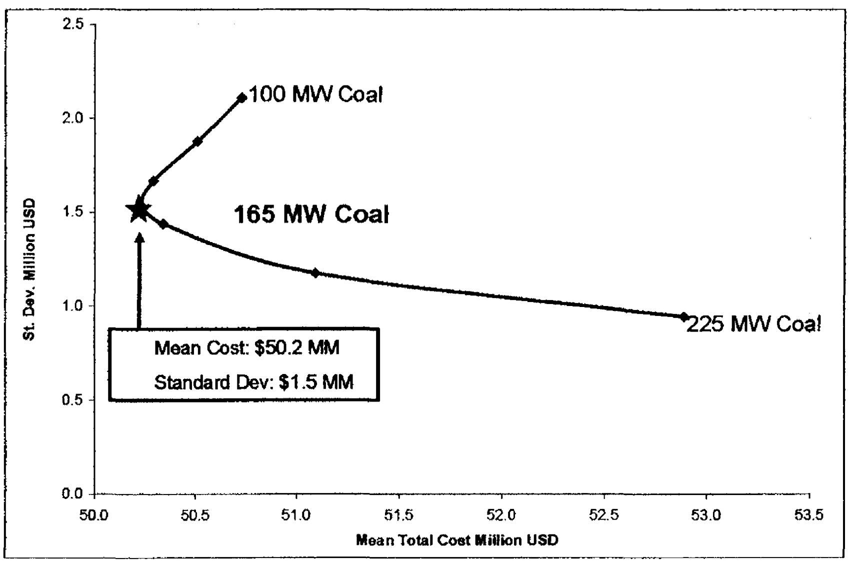


Exhibit GWV-7: Portfolio Screening Level Optimization Results

Price Case	Coal % Portfolio Capacity	CCGT % Portfolio Capacity	GT % Portfolio Capacity
1%	0%	45%	55%
5%	0%	50%	50%
25%	0%	50%	50%
50%	**45%**	**5%**	**50%**
75%	**45%**	**5%**	**50%**
95%	**50%**	**5%**	**45%**
99%	50%	5%	45%

Prudent planning cases given MWE's business objectives (50%, 75% and 95% price cases)

STATEMENT OF QUALIFICATIONS

My name is Gary Vicinus. I am Chief Operating Officer of Pace Global Energy Services, LLC (Pace Global) and also serve as Deputy Division Director for the Utility and Risk Management Services Division. Pace Global's address is 4401 Fair Lakes Court, Suite 400, Fairfax, Virginia 22033.

I received my Bachelors Degree in Economics from Virginia Tech and a Master's Degree in Economics from North Carolina State University. I minored in Statistics.

I have over 30 years of experience in the energy industry. I spent 4 years with Carolina Power and Light Company in the Fuel Department, twenty years with ICF Consulting where I held a number of positions including Project Manager, Vice President, Senior Vice President, Executive Vice President, and culminating in President of their Energy Division, ICF Resources Incorporated. I have been with Pace Global for 5 years, where I have been a Vice President and Senior Advisor to the CEO, then COO and since July 2006, hold my current dual positions.

Pace Global Energy Services is a two-hundred employee energy consulting firm that has its corporate offices in Fairfax, Virginia, and other principal offices in Houston Texas, Columbia South Carolina, London England, and Moscow Russia.

My consulting career has spanned a variety of subjects ranging from strategic energy assessments, resource planning, power and fuel contracting and procurement, market assessments and regulatory analyses. I have performed a number of prudence investigations and management audits. I have worked with a number of utilities, coal companies and independent power producers in either purchasing fuel and transportation services, contracting, renegotiating or litigating coal and transportation agreements. These include Public Service of New Mexico, Western Energy, Entergy, Delmarva Power, Carolina Power and Light Company, Sempra Resources, TMPA, Basin Electric, IMPA, AEP, KCPL, Houston Lighting and Power, Keystone Conemaugh Projects Office, NYSEG, GPU, Consumers Power, Peter Kiewet, and MPPA. Escalation clauses in coal and transportation agreements are often a subject of these assignments. I have solicited coal bids, drafted agreements, evaluated proposals and helped renegotiate agreements. I have testified before state regulatory commissions, FERC, arbitration boards and federal courts in cases in a number of states.

I have performed management audits for public utility commissions of the of the fuel procurement, fuel contracts and transportation agreements, and the escalation of those agreements, economic dispatch and environmental programs of Columbus Southern, Ohio Power, Monongehela Power, and Dayton Power & Light. I worked with Ohio Edison in responding to a management audit of these same issues. I have also been involved with prudence investigations of the fuel procurement and contracting practices what was then owned by NYSEG and Pennsylvania Electric's Homer City Station on behalf of the utilities, the fuel purchasing and contracting practices of Wisconsin Public Service Company on behalf of the Commission, WEPCo on behalf of the Wisconsin

Consumer Council, and Houston Lighting and Power on behalf of Houston Lighting &Power Company. These audits and prudence investigations all involved the submittal of testimony and were completed during the 1990s. I submitted written testimony and was deposed in a litigation between Western Fuels and the Burlington Northern Santa Fe Railroad and the Union Pacific Railway in 2001-2002.

SUMMARY OF PUBLICATIONS AND PRESENTATIONS OF GARY W. VICINUS OVER PREVIOUS TEN YEAR PERIOD

Publications co-authored are provided in the Table below.

Group Presented To	Title/Subject	Date
85 Webinar participants from across the energy sector	"The Challenges of New Electricity Generation"	December 12, 2006
Symposium participants across electric utility sector	"Rolling the Dice with your Resource Strategy?"	February 7-9, 2006
Publication: Public Utilities Fortnightly	"By Executive Decision" (co-authored)	October 2005
National Coal Transportation Association Big Cheese Conference attendees	"Impact of Pending Emission Compliance Requirements on Coal Fired Generation"	July 19, 2004
Symposium participants across energy sector	"Integration of Short and Long Term Planning Using Risk Metrics"	April 23, 2004
National Coal Transportation Association Conference Attendees	"Is Coal About to Make a Big Comeback?"	April 21, 2204
Publication: Public Utilities Fortnightly	"What Does Shakespeare Know about Utility Leadership" (co-authored)	October 2003
Publication: Public Utilities Fortnightly	"Resource Planning After the Crash" (co-authored)	September 9, 2003
Publication: Public Utilities Fortnightly	"Why Aren't Distressed Assets Selling" (co-authored)	May 2003
EEI and Western Coal Conference Attendees	"Coal Contract Administration Issues in the 1990s"	1990s
Energy and Environment Conference Attendees	"Coal Procurement Strategies Under the 1991 Clean Air Act"	1990s