

Proposal

To

North Dakota Public Service Commission

To Assist in an
**Advance Determination of Prudence
Application**

**By Montana-Dakota Utilities Company &
Otter Tail Power Company**

July 27, 2011

19 PU-11-165 Filed 08/01/2011 Pages: 76
Response to RFP
Vantage Energy Consulting, LLC

20 PU-11-163 Filed 08/01/2011 Pages: 76
Response to RFP
Vantage Energy Consulting, LLC



Vantage Energy Consulting, LLC

Management Consulting and Energy Services

TRANSMITTAL LETTER

July 27, 2011

Joshua Gallion, Procurement Officer
North Dakota Public Service Commission
600 E Blvd Ave, Dept 408
Bismarck, ND 58505

Re: Request for Proposal (RFP): Consulting Services for MDU & Otter Tail ADP
RFP Number: 408.06.11.003

Dear Mr. Gallion,

Vantage Energy Consulting LLC, (Vantage) is pleased to respond to the Request for Proposal to provide services regarding an Advance Determination of Prudence Application by Montana-Dakota Utilities Company & Otter Tail Power Company. We believe our proposal is completely responsive and takes no exceptions. We look forward to working with the North Dakota Public Service Commission, hereafter known as "purchasing agency," "State," or "Commission" as well as the staff responsible for this project.

The following specifically required provisions are provided in this Transmittal Letter;

- This transmittal letter binds Vantage Energy Consulting LLC's offer to provide the audit services as stated in the audit proposal at the prices stated in the price proposal.
- Vantage Energy Consulting LLC certifies that the contents of the proposal are true and accurate.
- Vantage Energy Consulting LLC agrees to be bound by the prices quoted in our price proposal for a period of no less than 60 days from the date of the notice of intent to award any contract that may result from the RFP.
- Walter P. Drabinski, President of Vantage Energy Consulting LLC, is the individual authorized to legally bind this proposal, all contracts and this transmittal letter. He is the only point of contact for this assignment.
- Vantage Energy Consulting LLC certifies that we have no conflict of interest on this assignment. After a review of the Vantage team members work experience, Vantage can conclude that they have no current contracts with Montana-Dakota Utilities Company or Otter Tail Power Company or any affiliates. Further, it does not appear that any of the Vantage consultants have worked for any of these entities in the past.
- By signature on the proposal, Vantage certifies that it complies with:



Vantage Energy Consulting, LLC

Management Consulting and Energy Services

**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

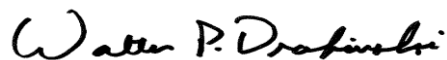
- the laws of the State of North Dakota;
 - North Dakota Administrative Code;
 - all applicable local, state, and federal laws, code, and regulations;
 - the applicable portion of the Federal Civil Rights Act of 1964;
 - the Equal Employment Opportunity Act and the regulations issued by the Federal Government;
 - the Americans with Disabilities Act of 1990 and the regulations issued by the Federal Government;
 - all terms, conditions, and requirements set forth in this RFP;
 - a condition that the proposal submitted was independently arrived at, without collusion;
 - a condition that the offer will remain open and valid for the period indicated in this solicitation; and
 - a condition that the firm and any individuals working on the contract do not have a possible conflict of interest.
- Our contact information is:

Vantage Energy Consulting LLC
21460 Overseas Hwy.
Cudjoe Key, FL 33042
Tel: 305-744-3440
Fax: 305-744-3450
Cell: 305-394-0784

Contact Person: Walter P. Drabinski, President
E-mail: wdrabinski@vantageenergyconsulting.com
Web Site: www.vantageenergyconsulting.com

Vantage does not take exception to any parts of the RFP. As evidenced by my signature below, I certify that all of the information in this proposal is accurate.

Sincerely,



Walter P. Drabinski, President



Vantage Energy Consulting, LLC

Management Consulting and Energy Services

TABLE OF CONTENTS

I. Executive Summary.....	1
II. Project Overview.....	3
A. Project Background and Key Info	3
B. Key Project Participants.....	3
C. Proposed Compliance Plan	6
D. North Dakota Prudence Standards.....	10
III. Vantage Experience & Qualifications.....	13
A. Vantage Description and Background	13
B. Related Consulting Projects and Experience.....	14
C. Historical Vantage Assignments.....	15
D. References	18
IV. Project Team	26
V. Preliminary Work Plan.....	31
Task 1 - Review of currently available data and development of additional data requests.....	31
Task 2 - Analysis of all aspects of the plan.....	32
Task 3 - Development of testimony.....	33
Task 4 - Testimony activities.....	33
VI. Project Administration.....	34
VII. Cost Proposal.....	37
VIII. Personnel	40
VIII. Attachments.....	69



Vantage Energy Consulting, LLC

Management Consulting and Energy Services

I. EXECUTIVE SUMMARY

Vantage Energy Consulting LLC., (Vantage) appreciates the opportunity to offer this proposal to provide services regarding an Advance Determination of Prudence Application. Vantage proposes to perform the required services on all tasks defined in the RFP. Vantage has all of the resources and experience needed to conduct every aspect of this assignment. Vantage has no conflicts of interest regarding past assignments with Montana-Dakota Utilities Company, Otter Tail Power Company or any other affiliates. Vantage will provide written testimony and effective oral testimony at the Commission's technical hearing and assist in the preparation of pre- and post-hearing documents.

Please note that Vantage re-incorporated in Florida in early 2010 to reflect their permanent move here. Their previous firm, Vantage Consulting, Inc., was a Pennsylvania-based firm for almost 20 years. All personnel, resources and systems associated with Vantage Consulting, Inc., are now with Vantage Energy Consulting LLC.

The material that follows provides details on the planned approach to this project as well as further details on their firm and consultants. Vantage commits to fully comply with all requirements in the Request for Proposal. Vantage takes no exceptions to the RFP.

We are proposing a small team, four consultants, led by Walter P. Drabinski, as Project Director. As President of Vantage, he has been involved in almost every project Vantage has undertaken. His education, BS Electrical Engineering from SUNY Buffalo and MBA from The Wharton School, along with 39 years in the utility industry give him sound credentials. Mr. Michael Boismenu has worked as a Management Consultant with Vantage for four years on a diverse number of technical assignments. He has extensive coal power plant operating and environmental control system experience. For this assignment, we will call upon his past experience as a plant and regional manager of coal-fired power plants with Niagara Mohawk Power Corporation and NRG. Mr. Mark Fowler has been an Associate Consultant with Vantage since 1998. He has worked on over 100 consulting assignments in the electric, gas, water and wastewater and telecommunications industries. His work has included investor owned utilities, municipals, cooperatives and regulators at the state and federal level. Mr. Chuck Buechel has over 32 years working as a regulator with the Kentucky PSC and as a Management Consultant. His education as an Economist lends itself to much of the IRP and economic analysis on this project.

Vantage will provide a detailed analysis and conclusion related to the necessity and the economic prudence of installing the air quality control system on the existing Big Stone Coal Plant in comparison to other resource alternatives. We will emphasize determining



the reasonableness of the air quality control system project costs, as well as the cost of other resource alternatives not chosen, the modeling inputs and sensitivity analysis, and the results as submitted by Montana-Dakota Utilities Company and Otter Tail Power Company.

Vantage has organized the requirements for this assignment into four task areas. This will permit more effective management, cost control and report presentation. The preliminary work plan provides specific detail on how we will perform this assignment.



II. PROJECT OVERVIEW

A. PROJECT BACKGROUND AND KEY INFO

BIG STONE PLANT AND OWNERS

The Big Stone Plant ("Big Stone" or "Plant") is located in Grant County, South Dakota, 2.5 miles northwest of Big Stone City, South Dakota, which is near the Minnesota/South Dakota border. Big Stone is rated at 495 MW gross and 475 MW net electrical output. The Plant has three owners; Otter Tail Power Company ("OTP") owns 53.9 percent of the Plant, NorthWestern Energy owns 23.4 percent, and Montana-Dakota Utilities Co. ("Montana-Dakota") owns 22.7 percent. The Plant provides electricity to the owners' customers in South Dakota, North Dakota, Montana and Minnesota service areas. Montana-Dakota and OTP serve North Dakota load.



In 2005 the Environmental Protection Agency (EPA) Administrator signed the Regional Haze Best Available Retrofit Technology (BART) Regulations and Guidelines. Among other requirements, the BART guidelines require emission controls for specified facilities that began operating between 1962 and 1978 and may emit air pollutants that could reduce visibility in any of 156 Class I areas across the nation. Class I areas typically are national parks and wilderness areas. Big Stone Plant, which began operating in 1975, has been determined through studies and modeling to potentially reduce visibility in the Class I areas of the Boundary Waters Canoe Area and Voyageurs National Park. In order to meet recent environmental compliance requirements, the Plant must be equipped with an air quality control system ("AQCS"). Montana-Dakota and OTP request in their Applications that the Commission find prudent Montana-Dakota's and OTP's participation in the AQCS Project.

B. KEY PROJECT PARTICIPANTS

Some of the key regulatory elements and players associated with this project include:

APPLICATION CASES

Montana-Dakota Utilities Co.
Advanced Determination of Prudent - Big Stone Air Application
Case No. PU-11-163

Otter Tail Power Company
Advanced Determination of Prudent - Big Stone Air Application
Case No. PU-11-163

KEY PROJECT CONTACTS

North Dakota Public Service Commission
600 E. Blvd. Ave. Dept.
Bismarck, ND 58505-0480
701-328-2400

PSC Advocacy Staff
Mark Gruman - 701-328-2421
Mike Diller
Christopher Marohl

Illona A. Jeffcoat-Sacco
General Counsel - Commission Advisory Staff
701-328-2407

Montana-Dakota Utilities Co.
400 North Fourth Street
Bismarck, NO 58501
701- 222-7854

Daniel S. Kuntz, Associate General Counsel
MDU Resources Group, Inc.
P.O. Box 5650
Bismarck, ND 58506-5650
701- 530-1016

Otter Tail Power Company
P.O. Box 496
Fergus Falls, Minnesota 56538-0496
218-739-8200

Mark Bring - Associate General Counsel
Otter Tail Corporation
P.O. Box 9156
Fargo, ND 58106-9156
218- 998-7152



ENVIRONMENTAL COMPLIANCE REQUIREMENTS

The Big Stone Plant burns low sulfur Powder River Basin ("PRB") fuel to limit sulfur dioxide emissions, but it is not currently equipped with a flue gas desulfurization system for control of sulfur dioxide emissions, commonly referred to as a scrubber. Particulate emissions are controlled by a baghouse, and an over fire air system provides nitrogen oxide control.

Of the multiple Clean Air Act ("CAA") requirements for state regional haze programs, among the most significant requirements is the requirement to procure, install and operate Best Available Retrofit Technology ("BART") on major air emission sources, including existing electric generating units, that were placed into operation between 1962 and 1977. The BART requirement is designed to determine appropriate air pollution control equipment to retrofit major air emission sources that were constructed before the applicability of the New Source Review program in the late 1970s. The Big Stone Plant became operational in 1975 and is among the newer plants subject to the BART requirement. Because the Big Stone Plant is located in South Dakota, the South Dakota DENR is the agency responsible for developing the SD Haze SIP, which includes the determination of BART emission controls for air emission sources in the state that are subject to the BART requirement. The DENR determined that BART must be installed on Big Stone.

Based on its extensive technical analysis, the South Dakota DENR made a final determination that the following control technology constitutes BART for the Big Stone Plant:

- Selective Catalytic Reduction with Separated Overfire Air ("SCR," "SOFA," and collectively, "SCR/SOFA"), for NO_x, which provides the highest level of control of the control equipment found to be feasible;
- Semi-Dry Flue Gas Desulfurization ("FGD"), for SO₂, which provides slightly less than the highest level of SO₂ control of the control equipment found to be feasible, but which SD DENR found to have less visibility impact than the top-ranked option for SO₂, when modeled in combination with the selected NO_x and PM BART controls; and
- Baghouse, for PM, which provides the highest level of control of the control equipment found to be feasible.

The comparison of emission limitations in the Big Stone Plant's current South Dakota DENR air quality permit with the emission limitations that represent the DENR's BART determination are shown in the table below.



Big Stone Emission Limits

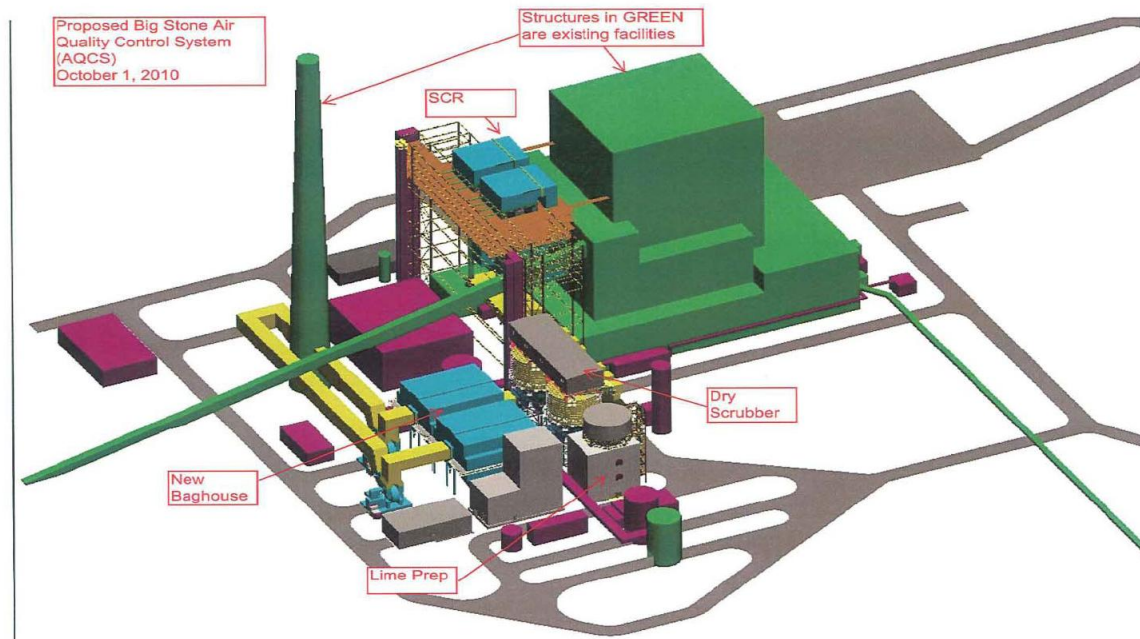
	Current Permit	BART Rule
SO ₂	3.0 lb/mmBtu	0.9 lb/mmBtu
PM ₁₀	0.26 lb/mmBtu	0.012 lb/mmBtu
NO _x	0.86 lb/mmBtu	0.10 lb/mmBtu

C. PROPOSED COMPLIANCE PLAN

The proposed AQCS consist of the following:

- Semi-Dry Flue Gas Desulfurization - The semi-dry FGD system is focused on the control of SO₂ emissions, and includes spray dryer absorbers, a baghouse, lime and recycle preparation, and solid waste handling.
- Selective Catalytic Reduction with Separated Overfire Air - SCR/SOFA technology is focused on the control of NO_x emissions.
- Activated Carbon Injection - ACI technology is focused on the control of mercury emissions.
- Balance of Plant Modifications - In order to install and efficiently operate the AQCS, the following modifications are required:
 - Modify the boiler to deliver flue gas at the required temperature for operation of the SCR and to maintain or improve boiler efficiency;
 - Replace the existing baghouse;
 - Replace the ID fans;
 - Reinforce the boiler and duct work; and
 - Modify the plant electrical infrastructure.





AQCS PROJECT DESCRIPTION

Selective Catalytic Reduction (SCR) and nitrogen oxide: Selective Catalytic Reduction/Separated Overfire Air targets nitrogen oxide emissions (NO_x), which contribute to smog. The SCR is similar to the catalytic converter in your car. The current nitrogen oxide emission level at Big Stone Plant is about 0.7 pounds per million BTU of fuel. The target nitrogen oxide emission level is 0.1 pounds per million BTU of fuel.

Semi-dry Flue Gas Desulfurization and sulfur dioxide: Dry scrubbing systems are used to remove acid gases from combustion sources. The dry scrubber at Big Stone Plant will target sulfur dioxide (SO₂), which is thought to be the cause of acid rain. The current sulfur-dioxide emission level at Big Stone Plant is about 0.75 pounds per million BTU of fuel. The target sulfur-dioxide emission level is 0.09 pounds per million BTU of fuel.

Baghouse and dust particulates: Baghouses use filtration to separate dust particulates from dusty gases. Particulate levels (levels of dust in the air) at Big Stone Plant already are within environmental permit limits. The project team is proposing to build a new baghouse because it's more cost effective to build a new one than to reinforce the existing one to meet the higher pressure requirements of new air-quality control equipment.

Mercury: While mercury reduction is not required to meet BART (best available retrofit technology) guidelines, we anticipate that the Environmental Protection Agency will adopt mercury-emission regulations at about the same time we expect to install the BART

controls. The dry scrubber, baghouse, and activated carbon injection combine to reduce mercury by a target of 90 percent.

Ash disposal: In the dry-scrubbing process lime (calcium) is added to the sulfur. This creates a chemical reaction that produces calcium sulfate, a fly ash waste product. Unlike fly ash that hasn't been scrubbed, this fly ash has limited use for recycling into other products. Therefore, it must be safely stored in an ash disposal site.

SCHEDULE AND COST

The SD Haze SIP and its implementing rules require that the Big Stone AQCS be installed, operated and shown to comply as expeditiously as practicable, but not later than five years from the EPA's approval of the SD Haze SIP. As a result, if the EPA approves the SD Haze SIP in 2011, the Big Stone AQCS may be required to be installed and operational by 2016. The final deadline for BART compliance will be set by the EPA's approval date. In addition, the EPA has the discretion to partially approve a SIP submittal, so there is also the possibility that the EPA could decide to approve the Big Stone BART determination in advance of other elements of the SD Haze SIP. This leaves the Co-Owners under the obligation to proceed with the AQCS Project as expeditiously as practicable, and within the timeframe needed to meet a five-year compliance deadline that could end by 2016.

The estimate of the capital costs to install the AQCS Project at Big Stone, including the semi-dry FGD scrubber, SCR/SOFA, new baghouse and balance of plant changes, escalated to an in-service date of late 2015, is \$489,397,400, with an accuracy of +/-20%. Installation of mercury control equipment on the Plant is estimated to cost an additional \$5,012,700. The Co-Owners are recommending installation of the mercury control equipment at the time of the AQCS project as they expect the mercury requirements to become effective by that time.

IMPLEMENTATION SCHEDULE

The SD Haze SIP and its implementing rules require that the Big Stone AQCS be installed, operated and shown to comply as expeditiously as practicable, but not later than five years from the EPA's approval of the SD Haze SIP. As a result, if the EPA approves the SD Haze SIP in 2011, the Big Stone AQCS may be required to be installed and operational by 2016. To be in compliance by 2016, OTP must finalize the AQCS Project Design and start procurement of major elements of the AQCS in early 2012.

The final deadline for BART compliance will be set by the EPA's approval date. In addition, the EPA has the discretion to partially approve a SIP submittal, so there is also the possibility that the EPA could decide to approve the Big Stone BART determination in advance of other elements of the SD Haze SIP. This leaves the Co-Owners under the obligation to proceed with the AQCS Project as expeditiously as practicable, and within the timeframe needed to meet a five year compliance deadline that could end by 2016.



The exact compliance deadline is not now known, and is not in the Co-Owners control to determine. The Big Stone AQCS is a large undertaking that will take several years to complete. The main implementation steps, if regulatory approval is received to proceed, include detailed engineering work in 2011, with procurement of major components of the AQCS starting in early 2012. The construction phase will continue into 2015. Once constructed, the AQCS would need to be tied in to the Plant, which would best be done during a scheduled outage of the Plant in 2015. Testing to demonstrate the compliance of the AQCS with the BART emission limits will need to occur within six months of the tie in of the AQCS with the Plant, and in time to start compliant operation before the final compliance deadline.

Alternatives to Big Stone AQCS Project

In the application, the Co-Owners determined the only alternative to installing the AQCS and achieving regulatory compliance is to cease operations at the facility. The Co-Owners have considered alternatives to the AQCS Project, including the costs and benefits of retirement or repowering of the Plant with natural gas. The four alternatives considered were:

1. Implementing the Big Stone AQCS Project, as Co-Owners have proposed;
2. Repowering Big Stone boiler with natural gas;
3. Retiring/Replacing Big Stone with a CCGT Plant; and
4. Retiring/Replacing Big Stone with a CCGT Plant and purchased wind power.

The costs estimates for the four alternatives were provided in Table 2 of the application.

Table 2 – Estimated Levelized Energy Cost (2016\$/MWh)

	Big Stone + AQCS	CCGT + Wind	CCGT	Big Stone with Natural Gas
Combined Levelized Energy Cost - (Base Case)	\$74.38	\$100.43	\$103.38	\$117.25
Total Energy Cost Including	\$74.38	\$104.24	\$107.19	\$117.25

Accordinging the Application, the Base Case analysis, comparing installation of the AQCS with various options for repowering or retiring and replacing the Plant with natural gas shows that the AQCS is the most cost effective option, with the cost of the other options at least \$26 per MWh or 35% higher than the levelized MWh cost of the proposed AQCS. The Application claims the AQCS remains the most cost-effective option under several sensitivity analyses concerning capital cost (+/-30%), fuel cost (+/-20%), and O & M cost (+/-20%).



D. NORTH DAKOTA PRUDENCE STANDARDS

Our review of North Dakota code has led us to conclude that N.D. Cent. Code, §49-05-16: Advance Determination of Prudence will be the primary statute that we must adhere to on this assignment. In preparing our testimony, we will adhere to the following:

N.D. Cent. Code, §49-05-16

“A public utility proposing to construct, lease, or make improvements to an energy conversion facility, renewable energy facility, transmission facility, or proposed energy purchase contract from another entity or person for the purpose of ensuring reliable electric service to its customers may file an application with the commission for an advance determination of **prudence** regarding the proposal. The commission shall pay the expenses associated with investigating the application made by the public utility for **prudence** of a resource addition from the application fee paid by the public utility in according with section 49-02-02.

1. The commission may issue an order approving the **prudence** of an electric resource addition if:
 - a. The public utility files with its application a projection of costs to the date of the anticipated commercial operation of the electric resource addition;
 - b. The public utility files with its application a fee in the amount of one hundred twenty-five thousand dollars. Upon request of the commission and with the approval of the emergency commission, the applicant shall pay such additional fees as are reasonably necessary for completion of the application process by the commission. The commission may waive or reduce the fee.
 - c. The commission provides notice and holds a hearing, if appropriate, in accordance with section 49-02-02; and
 - d. The commission determines that the resource addition is reasonable and prudent. For facilities located or to be located in this state, the commission, in determining whether the resource addition is reasonable and prudent, shall consider the benefits of having the energy conversion facility, renewable energy facility, transmission facility, or facility generating the energy to be purchased located in this state.

2. The commission order must be rendered no later than seven months after the public utility files its application requesting a **prudence** determination of an electric resource addition.



3. A resource addition approved by the commission is subject to annual reporting requirements until commercial operation of the resource addition.
4. The commission's order determining **prudence** of the resource adjustment is binding for ratemaking purposes.
5. If at any time following an initial commission order, the commission, following a subsequent hearing, determines that continuation of a project is no longer **prudent** or that its prior order should be modified, the public utility may recover in its rates, and in a timely manner consistent with the public utility's financial obligations, the amounts the public utility already has expensed, incurred, or obligated on a project, including interest expense and a return on equity invested in the project up to the time the new order is entered even though the project may never be fully operational or used by the public utility to service its customer.
6. There is a rebuttable presumption that an energy conversion facility, renewable energy facility, transmission facility, or facility generating the energy to be purchased which is located in the state is **prudent**.

N.D. Cent. Code, §49-06-02: Value of property for ratemaking purposes - Determination.

"The value of the property of a public utility, as determined by the commission for ratemaking purposes, is the money honestly and prudently invested therein by the utility including construction work in progress for new facilities that use lignite mined in this state to generate electricity, as well as additions or modifications to existing lignite facilities, less accrued depreciation."

APPLICATION OF PRUDENCE STANDARD

One very important element of our work will be to develop an acceptable means of analyzing the data submitted and developing conclusions as to the prudence of the request. In doing so, Vantage will apply a standard definition of prudence. We propose a definition such as the following, with the recognition that North Dakota may have a more refined definition to apply.

Our definition of prudence, using the "prudent man" standard is:

"Would a knowledgeable person in the electric industry make the same or similar decisions with the information and resources available at the time."



Specifically, we will pose the following questions, and then after analysis render an opinion as to whether a standard of prudence has been achieved.”

Did Montana-Dakota Utilities Company and Otter Tail Power Company (Applicants) meet an appropriate level of decision making capability in the following:

- perform adequately detailed analysis on all environmental data;
- consider future environmental issues such as carbon legislation;
- make sound judgments regarding the ultimate requirements;
- consider all alternatives for meeting the future needs of providing power;
- select the best general solution in the AQCS approach;
- prepare a cost estimate that assumes all risks and uncertainties;
- propose a schedule for completion that both complies with the requirements and is cost effective;
- select engineering, procurement and construction approach that provides assurance that the project will be appropriately managed; and
- has adequate plans for cash flow requirements.

We note that this is a preliminary list that will be further developed after discussions with the Commission Staff and after further analysis of the application and subsequent data responses.



III. VANTAGE EXPERIENCE & QUALIFICATIONS

A. VANTAGE DESCRIPTION AND BACKGROUND

This section describes Vantage Energy Consulting, LLC, the firm, the proposed project organization, and the experience and qualifications of the team proposed to assist the North Dakota Public Service Commission on this assignment.

VANTAGE ENERGY CONSULTING LLC, (VANTAGE)

21460 Overseas Hwy.

Cudjoe Key, FL 33042

Tel. (305) 744-3440/Fax (305) 744-3450

Web Site: WWW.VANTAGEENERGYCONSULTING.COM

E-MAIL: WDRABINSKI@VANTAGEENERGYCONSULTING.COM

Federal Tax ID #: 27-2585037

Vantage Energy Consulting LLC, (Vantage) is a management consulting firm headquartered in Cudjoe Key, Florida, with clients throughout North America. Vantage consultants possess a broad background in all business aspects of electric, gas, and water utilities, but retain particular expertise in utility operating functions. Vantage Energy Consulting LLC and its predecessor company, Vantage Consulting Inc., has been in existence for over 19 years. During that time, the firm has focused on conducting utility related management consulting assignments. As the details on specific assignments described below attests, Vantage has been one of the most successful companies in this venue.

The Vantage team consists of highly experienced, trained consultants, covering virtually all functional work areas within the utility industry. Vantage is staffed by a total of 20 full-time and contract consultants and administrative staff. Consultants have a diverse set of backgrounds, including engineering, accounting, economics, finance, and psychology.

Vantage provides a broad range of consulting services to investor-owned utilities, independent power producers, regulatory agencies, state planning and environmental agencies, and law firms. While the majority of our assignments are tailored to the specific needs of the client, there are specific products and services which we offer. The functional service areas in which we work, and the consulting topics to which we provide expertise, are listed below.



B. RELATED CONSULTING PROJECTS AND EXPERIENCE

Vantage has worked on a large number of utility related projects. Below we provide a brief description of projects related to this endeavor. This description is followed by a table that lists all of our teams consulting projects. Vantage has become very involved in energy/capacity procurement activities. Some specific examples are listed below.

- Vantage is currently conducting a review of the applications by Louisville Gas & Electric and Kentucky Utilities Company related to compliance with the recent regulations on NOx, Sox, Particulate, and Mercury. The two applications propose to retire 5 units totaling 702 MW and to add AQCS equipment to 12 other units at a total cost of over \$2 billion.
- Vantage worked from 2008 through 2010 for the Kansas Corporation Commission on the oversight of the KCP&L Iatan I & II projects. Unit I was an Air Quality Control System (AQCS) upgrade. Iatan II was a new coal fired power plant. Walter Drabinski testified on the prudence of the construction process and costs.
- Mr. Chuck Buechel, as both an Economist with the Kentucky PSC and a consultant, has reviewed the IRP's of numerous utilities. Likewise, Walter Drabinski has helped utilities prepare IRPs and has reviewed them and their implementation as part of many management audits.
- North West Energy - Mill Creek power plant construction - Vantage has monitored the construction of a new, three unit, power plant in Montana that is designed to provide regulation support in the region for the Montana PSC. This unit went into service in January 2011. Vantage developed the "In Service Criteria" for the units which guaranteed compliance with all operational and environmental commitments.
- Mr.'s Buechel and Drabinski have previously performed an independent evaluation role for East Kentucky Power Cooperative (EKPC). EKPC had determined the need for additional generating capacity based on its integrated resource plan. The analysis by EKPC demonstrated that the most economical and efficient way for it to meet this need was the construction of a combustion turbine peaking unit. In order to confirm its analysis, EKPC solicited competing bids and rated those bids relative to the cost per megawatt of the combustion turbine. Our role was to oversee the solicitation process to assure all competing bids were evaluated in an unbiased and reasonable manner. At the conclusion of the solicitation process, we presented our recommendation to the Board of EKPC for the best means to fulfill the need for capacity.
- Vantage participated in a long-term assignment with Public Service Electric & Gas in which it assisted with long-term generation planning and environmental commitment modeling. Over a four year period, Vantage helped transform the PSE&G fleet into a much more efficient and environmentally compliant group of generation assets.



- Vantage testified in a lawsuit between an independent power producer and a large energy marketer in PJM over energy, capacity and collateral requirements associated with a new power plant.
- Conducted an assignment for FERC in which the California ISO was audited during the 2000-2001 energy crises. Vantage consultants assessed the operational effectiveness of CAISO during the stress of the Enron collapse and takeover of contracts by the State. Walter Drabinski testified before Congress on the issues and made recommendations to the State of California, FERC, Congress and the CAISO.

C. HISTORICAL VANTAGE ASSIGNMENTS

The following table summarizes all the projects Vantage and its core employees have worked on.

Company	Project
Alberta Power	Power plant efficiency review
Allegheny Power Systems	Fuel Procurement Review
Alltel of Pennsylvania	Comprehensive Operations Review
Alstom Development	Cogeneration Development
Ameritech	Review of merger savings
Ameren Illinois	Emergency response planning and development
American Water-New Jersey	Operations Audit
Aqualectra	Management Audit
Belize Electric Limited	Process Improvement
Bell Atlantic - District of Columbia	Comprehensive Operations Review
Bell Atlantic - New Jersey	Developed a cost activity analysis
BellSouth Services	Reviewed marketing opportunities for technical services
BellSouth	Review of customer service and financial systems
Bonneville Power	Maintenance Practices
Central Hudson Electric and Gas	Management Audit
Central Hudson Electric and Gas	Construction Program Review
Choptank Electric Cooperative	Organizational Review
City of Colorado Springs Utilities	Operations Improvement Project
City of Columbus Georgia	Consolidation
City of Corpus Christi	Process Reengineering
Cleveland Electric Illuminating	Fuel Procurement Review
Columbia Gas of Maryland	Fuel Procurement Review
Columbia Gas of Ohio	Credit and Collections Review
Columbus Southern Company	Fuel Procurement Review
Commonwealth Edison	Outage and Reliability
Consolidated Edison	Audit of emergency response
Contel California (Verizon)	Attestation Examination
Contel Service Corporation	Mgmt. and financial information systems rollouts.
Curoil	Management Audit
Dayton Power & Light Company	Fuel Procurement Review
Dominion East Ohio	Credit and Collections Audit



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

Duke Energy Ohio	Credit and Collections Review
Duquesne Light Company	Comprehensive Operations Review
Entergy Corporation	Fuel Procurement Audit
Edmonton Power	Power plant work management system implementation
Entergy Corporation	Affiliate Transactions Review
East Kentucky Power Cooperative	Fuel Procurement Review
El Paso Natural Gas Company	Business Unit Reorganization, Reengineering
FERC	California Energy Crisis
General Waterworks Company	Comprehensive Operations Review
GTE of California	Attestation Examination
Guam Power	Operational Audit
Hampton Roads, Va. Planning Com.	Emissions Credits Banking Strategy
Houston Light and Power	Nuclear Prudence Review
Indianapolis Power & Light	Review of storm response
Illinois Bell Telephone	Affiliate Transactions Review
Kansas City Power and Light	Construction Review and Prudency Testimony
Kentucky American Water Company	Comprehensive Operations Review
Kentucky Utilities Company	Merger Regulatory Support
Kentucky Utilities Company	Governmental Affairs Benchmarking
Kentucky Utilities Company	Comprehensive Operations Review
Louisville Gas & Electric Company	Merger Regulatory Support
Louisville Gas & Electric Company	Comprehensive Operations Review
Montana Power	Power Plant Outage Process Improvement
National Grid	Outage Response
National Grid	Construction Program Audit
New Hampshire Electric Cooperative	Emergency Response
NorthWestern Energy	Construction Review and Prudency Testimony
NYTEL	Affiliate Transactions Review
NRG Big Cajun 2 Coal Fired Power Plant	Operational Assessment
NRG Dunkirk Coal fired Power Plant	Plant Management
NRG Huntley Coal Fired Power Plant	Plant Management
NRG Indian River Coal Fire Power Plant	Organizational Design Assessment and Analysis
NRG Oswego Oil Fired Power Plant	Plant Management
NRG Texas Purchase	Purchase and Integration of Assets into the NRG System
PacifiCorp	Power Plant Maintenance
PacBell	Attestation
Pacific Gas & Electric Company	DSM Analysis
PECO Energy	Nuclear Prudence Review
Pennsylvania Power & Light Company	Staffing Review
PEPCO	Power plant fuel procurement and management
Philadelphia Gas Works	Operations Review, Capital Project Analysis
Philadelphia Suburban Water Company	Comprehensive Operations Review
Philadelphia Suburban Water Company	Reengineering of Operating Departments
PowerSouth	Organizational Design Assessment and Analysis
Plains Electric Generation and Transmission	Power Plant Construction
Public Service Co. - New Hampshire	Power Plant Outage Management
Public Service Co. - New Hampshire	Management audit of T&D operations
Public Service Co. - New Hampshire	Review of Emergency Response
Public Service Electric & Gas Company	Restructuring Plan Review



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

Public Service Electric & Gas Company	Nuclear Prudence Review
Public Service Electric & Gas Company	Generation and Environmental Planning
Public Service Electric & Gas Company	Fossil Generation Rate Case
Public Service Electric & Gas Company	Clean Air Act Compliance
San Diego Gas & Electric Company	Performance Based Ratemaking
San Diego Gas & Electric Company	DSM Analysis
Scranton Steam Heat	Plant Management
Seattle City Light	Comprehensive Operations Review
SEMPRA	Affiliate Transactions
Southern California Edison	DSM Analysis
Southern California Gas Company	DSM Analysis
Southern California Gas Company	Management audit of gas operations
Southern California Gas Company	Affiliate Transactions Audit
Southern Connecticut Gas	Management Audit
South Jersey Gas	Process Reengineering
Southern New England Telephone	Technical re. long-run cost modeling docket
Southwestern Bell Telephone	Call Center Work Management
St. Vincent	Management Audit
Toledo Edison Company	Fuel Procurement Review
Unitil	Emergency Response
Union Light Heat & Power	Operations Review
United Telephone of Pennsylvania	Comprehensive Operations Review
United Telephone of Texas	Comprehensive Operations Review
Vectren Energy	Credit and Collections Audit
Washington Gas Light	Fuel Procurement Review
West Ohio Gas Company	Gas Procurement Analysis
West Texas Utilities	Comprehensive Operations Review
Western Kentucky Gas	Comprehensive Operations Review
Yankee Gas	Management Audit



D. REFERENCES

The RFP asks for letters of reference. In response we are providing correspondence from three references, as well as contact information for a number of other references that may be of value.

Kentucky Public Service Commission

Over the last twenty years Vantage and its consultants have worked on a broad number of projects for the Kentucky PSC. These include management audits of Kentucky Utilities, Louisville Gas & Electric, Kentucky American Water Company, Union Light Heat & Power, West Kentucky Gas, and Bell South.

Currently, Vantage is performing a review of the applications by Louisville Gas & Electric and Kentucky Utilities to comply with their EPA air quality requirements. In their analysis, the two companies propose retiring a number of units and refurbishing a number with AQCs similar to that proposed at Big Stone 1. In total the project will cost about \$2.4 billion. Vantage asked our Staff Project Manager for a reference and the following was provided.

To whom it may concern,

Walt Drabinski and Vantage Energy Consulting have performed many assignments over the past several years in Kentucky. They have always been highly competent and professional. They make every effort to include Commission staff in all stages of the projects and are very responsive to Commission issues and concerns. They do an excellent job of keeping Commission staff informed on issues that may arise during the course of the project. They perform according to the contract, stay within budget and deliver a quality product. The consultants on Vantage's team have all been highly competent and professional. Vantage is currently working on an assignment in Kentucky and I would have no hesitation in hiring the firm again in the future.

Sincerely:

John A. Rogness III Ph.D.
Director
Financial Analysis Division
Kentucky Public Service Commission
502-564-3940 ext 229
john.rogness@ky.gov



Name of Reference Company:	Kentucky Public Service Commission
Address of Reference Company ✓ Street Address ✓ City, State, Zip	211 Sower Boulevard Frankfort, KY 40601
Reference Contact Person Information: ✓ Name ✓ Phone # ✓ E-mail Address	Mr. John Rogness, Director Financial Analysis Tel: 502 564 3940 john.rogness@ky.gov
Dates of Services:	1994 through 2007
If service/contract has terminated, specify reason:	All contracts ended at completion of work.
Dollar Value of Services	Projects varied from \$100,000 to \$400,000
Description of Services Performed	Management Audits and Focused Reviews of numerous utilities Vantage and its consultants have performed six comprehensive audits in Kentucky BellSouth, LG&E, Kentucky Utilities, ULH&P, West Kentucky Gas, and Kentucky American Water Company

Kansas Corporation Commission

Vantage was retained by the KCC in 2008 to perform a diagnostic assessment of the Iatan I AQCS project and the Iatan II new coal plant project. Based on our initial assessment of cost overruns, schedule concerns and problems with implementing the AQCS, Vantage was retained to monitor construction and report on a monthly basis to the KCC Staff. We were then retained to develop prudence testimony in both cases. Mr. Jeff McClanahan recently provided a letter of reference and we attach it for your review.



Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003

1500 SW Arrowhead Road
Topeka, KS 66604-4027

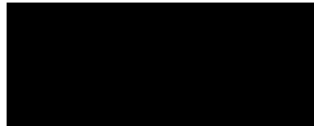
Thomas E. Wright, Chairman
Ward Loyd, Commissioner



phone: 785-271-3100
fax: 785-271-3354
<http://kcc.ks.gov/>

Sam Brownback, Governor

May 20, 2011



Dear Sir/Madam

We are happy to provide our letter of reference on behalf of Vantage Energy Consulting LLC (Vantage), which is located at 21460 Overseas Hwy, Cudjoe Key, FL 33042.

Since 2008, Vantage (both Vantage Energy Consulting LLC, its predecessor Vantage Consulting, Inc.) has provided assistance to the Kansas Corporation Commission regarding the Iatan 1&2 construction project undertaken by KCP&L.

We offer the following responses to your specific questions.

RFP Letter Requirements

1. Describe the type(s) and quality of work done by this firm for your organization.

Answer:

Vantage was hired to monitor and review the construction costs associated with Kansas City Power & Light's (KCPL) Iatan 1 & 2 projects. The Iatan 1 project was an environmental retrofit project consisting of an SCR, Baghouse, FGD, with a price-tag of approximately \$600 million. Iatan 2 was a new super-critical coal unit with a full compliment of environmental equipment. The price-tag of Iatan 2 was approximately \$1.9 billion.

Vantage's work included:

- regular meetings with Iatan's on-site construction management team and KCPL's construction management consultants
- review of thousands of pages of change orders, audit reports, consultant's reports, project reports, and cost and schedule analysis
- regular tours of the construction site to observe progress and ascertain potential critical path issues
- prepare expert testimony regarding its findings and defend its findings in a hearing

Vantage's quality of work was outstanding in my opinion. Vantage quickly determined



the root causes of scheduling delays and cost overruns. Vantage then, in a fair and unbiased process, determined whether cost overruns could or should be tied to the cost overruns. Vantage was in constant communication with the KCC's Utilities Division and trained members of our Staff in its review and evaluation process. Vantage periodically checked with the Utilities Division to ensure that we were satisfied with the direction of its review and analysis and to confirm that we were all moving towards the same goals and objectives.

2. How long has the firm provided these types of work for your organization?

Answer:

Vantage began working on the Iatan projects in 2008 and completed its work in 2010.

3. How would you rate the work performed by this firm for your organization? Why?

Answer:

As stated above, the work performed was outstanding. Vantage continually demonstrated its expertise and KCPL's construction manager's at times sought Vantage's input and opinion on construction issues.

4. Was the work performed by this firm completed on time? If not, why not?

Answer:

Yes, the work was completed on time and Vantage literally worked around the clock at times to ensure it met all of our tight deadlines.

5. Was the work performed by this firm completed within the budget? If not, why not?

Answer:

Yes. In addition, Vantage was very cognizant of the fact that we are a state agency with limited resources.

6. Was staff responsive to solving problems that may have occurred? Please explain.

Answer:

Yes. The Iatan project took a number of unexpected twists and turns. Vantage was very responsive to evaluating and explaining the affect on the schedule and cost of construction issues as they arose.

7. What was the extent of staff turnover in the firm?

Answer:

There was no turnover in the firm during the Iatan project.

8. What are the strengths and weaknesses of the firm?



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

Answer:

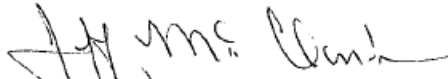
The strengths of the firm are its experience, professionalism and industry-wide contacts. Vantage continually used its experience and/or reached out to its contacts across the country to gain insight into construction issues at latan. As stated previously, because of Vantage's experience and contacts, KCPL often asked for Vantage's input as to potential root cause(s) and solutions to construction issues. As for weaknesses, I honestly can't think of any.

9. Would you be willing to contract with this firm again?

Answer:

Yes.

Please feel free to call if you have further questions. My number is 785-271-3212.



Jeff McClanahan, Chief of Accounting and Financial Analysis
Kansas Corporation Commission

Name of Reference Company:	Kansas Corporation Commission
Address of Reference Company ✓ Street Address ✓ City, State, Zip	1500 S.W. Arrowhead Road Topeka, KS 66604
Reference Contact Person Information: ✓ Name ✓ Phone # ✓ E-mail Address	Mr. Jeff McClanahan, Chief of Accounting and Financial Analysis Tel: (785) 271-3212 Email: j.mcclanahan@kcc.ks.gov
Dates of Services:	2008 - 2010
If service/contract has terminated, specify reason:	All contracts ended at completion of work
Dollar Value of Services	Project cost was approximately \$950,000



Description of Services Performed	Review of Iatan I & II AQCS and coal plant construction for prudence. Testify in prudence hearings. Vantage was retained to monitor construction and then develop prudence testimony regarding Iatan 1 & 2 power plant construction.
-----------------------------------	--

NRG Corporation – Reference for Mike Boismenu

We provide the following e-mail letter of reference that describes the work Mike Boismenu performed while at NRG.



From: Michael Boismenu [mcboismenu@hotmail.com]
Sent: Tuesday, July 19, 2011 9:37 AM
To: Walt Drabinski
Subject: Boismenu Professional Reference

Walt: As per your request, please see the professional reference from Byan Riley our VP at NRG.

Mike

From: briley@powercore.us
To: mcboismenu@hotmail.com
Subject: reference
Date: Tue, 19 Jul 2011 07:56:44 -0400

To who it may concern:

Mike Boismenu worked for me at NRG Energy from 1999 – 2003 as Plant Manager Dunkirk Station. During this time we were faced with significant air regulation challenges. To meet proposed emission rates several evaluation and tests we conducted. Various scrubbers and NOx/SOx reduction systems were evaluated, however the primary focus was centered on coal switching. These fuels ranged from lower sulfur Appalachian, Powder River Basin Coals, and blends of multiple fuels.

During this time Mike led the efforts to conduct the tests and coordinate the studies. His ability to focus on details and to consolidate the data into concise reports was excellent. He continually looked for new ways to improve the system and was open to all alternatives that might prove valuable.

Mike is professional in his approach, considerate of all team members, and knowledgeable in all facets of the operation and maintenance of coal fire generating stations. I would highly recommend him for virtually any undertaking in the electric generation field.

Best regards,

Bryan K. Riley, P.E.
President – PowerCore Group
5101 W. Eau Gallie Blvd.
Melbourne, FL 32934
321-253-1402 321-253-1402

Indiana Office of Utility Consumer Counselor

Over the last ten years, Vantage has performed three utility related assignments for the Indiana Office of Utility Consumer Counselor. We recommend that the Staff call Sara Campo the Executive Office Director for details on our work.



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

Name of Reference Company:	Indiana Office of Utility Consumer Counselor
Address of Reference Company ✓ Street Address ✓ City, State, Zip	PNC Center 115 W Washington Street, Suite 1500 South Indianapolis, IN 46204
Reference Contact Person Information: ✓ Name ✓ Phone # ✓ E-mail Address	Sara Campo, Executive Office Director 317-233-0892 SCampo@oucc.IN.gov
Dates of Services:	2003-2011
If service/contract has terminated, specify reason:	All contracts ended at completion of work.
Dollar Value of Services	Projects varied from \$100,000 to \$250,000
Description of Services Performed	Review of Indianapolis Power & Light, implementation of new performance monitoring Audit of Duke Energy Indiana Affiliate compliance Support and testimony on merger of Utilities in City of Indianapolis



IV. PROJECT TEAM

Vantage has selected four consultants that have strengths which give us all the requisite skills of this assignment.

Mr. Walter P. Drabinski, President of Vantage Consulting, Inc. - will serve as the Project Director for this assignment. He has managed over one hundred comprehensive and focused utility assignments of varying magnitude and importance during his 26-year tenure as a management consultant. As a native of the Buffalo, New York area, he studied Electrical Engineering at SUNY Buffalo and received an MBA from the Wharton School. He has all the credentials necessary for this assignment. In addition, he worked on the generation side of Niagara Mohawk for ten years prior to becoming a management consultant. His experience includes T&D assessments, construction oversight, fuel procurement, operations assessments, environmental strategy, new technology selection and other related assignments. While with Niagara Mohawk Power Company, he was Construction Manager on 115KV and 345KV transmission line installation. Later he became Electrical Maintenance Supervisor responsible for fossil, nuclear, and hydro facilities in Oswego, NY. As Director of Training, Mr. Drabinski had responsibility for all technical and management training of generation personnel at Fossil and Nuclear power plants. During his career he has worked at, on or performed analysis related to over 150 generating units throughout North America. Qualifications specifically related to this assignment include:

Project Director on reliability related assignments including:

- **Kentucky PSC** - Vantage has been retained to review the application for recovery of costs associated with the AQCS for Kentucky Utilities and Louisville Gas & Electric. This \$2.4 billion project includes addition of new technology or retirement of almost twenty units.
- **Kansas Corporation Commission** - Vantage performed oversight and presented testimony regarding prudence of Iatan I AQCS and Iatan II new project construction.
- **PSE&G Environmental** - Vantage was retained directly by Public Service Electric & Gas during the mid-1990's to assist in developing a long term program to deal with emerging environmental regulations. Vantage assisted on extensive modeling of reductions resulting from emerging technologies, development of IRPs that addressed environmental changes, and in research into new technologies to reduce NOx and SOx in the existing fleet of power plants. Vantage also assisted, in 1997, a team of utility experts working with the US Senate in preparation for the Kyoto meetings on climate change.

Project Director or Lead Consultant on Comprehensive Management Audits of:



- United Illuminating in Connecticut;
- Duquesne Light Company in Pennsylvania;
- Kentucky Utilities;
- Louisville Gas & Electric;
- West Texas Utilities;
- Kentucky American Water Company;
- General Waterworks – Pine Bluff Arkansas;
- Philadelphia Gas Works;
- Cumberland Valley Electric Cooperative;
- Seattle City Light Company;
- Philadelphia Suburban Water Company;
- Curoil Oil & Gas;

Project Director and witness for numerous focused reviews of:

- Iatan 1 & 2 project where he recently submitted testimony regarding the prudence of construction costs for this \$2 billion plus project in both Kansas and Missouri;
- Construction of three unit Mill Creek Project in Montana;
- Project Manager and witness on approximately sixteen fuel procurement audits of Ohio based utilities;
- Project Director on Standard Offer Service procurements in Pennsylvania, Delaware, Maryland and Virginia;
- Project Director on operational audit of California ISO for FERC. Addressed market design, governance, and other operational issues. Evaluated generation models, procurement plans and emergency activities. Testified before House of Representatives subcommittee on major issues of the energy crisis;

Mark Fowler has worked with Vantage since 1998. Mr. Fowler has worked on over 100 consulting assignments in the electric, gas, water and wastewater and telecommunications industries. His work has included investor-owned utilities, municipals, cooperatives and regulators at the state and federal level. Functionally, his expertise includes management of work, services supporting operations such as fleet, materials and purchasing, process improvements and customer services. Of particular note for this project he has worked on the following assignments:

- Mark has worked on many environmental improvement projects during his tenure as a utility manger and as a management consultant.
- Consultant on a number of assignments over the previous 20 years including those involving NYTEL, Consolidated Edison and an earlier review of Central Hudson.
- Consultant on an audit of Iberdrola affiliate Connecticut Natural Gas.
- Consultant on several assignments with Vantage that involved international utilities.



- Consultant on a series of affiliate compliance audits with Vantage over a six year period. The audits included SEMBRA and Pacific Gas and Electric.

Mark worked for the international consulting firms RCG, Hagler, Bailey and Impell Pacific as well as several small niche consulting firms specializing in utilities. Mr. Fowler also held various positions for Williams Energy/Buckeye Gas Products in the areas of mergers and acquisitions, operations and supply and distribution. He worked with an Australian developer of software for call center work force management and billing software for the telecommunications and utility industries. Mr. Fowler has testified in several states in cases involving telecommunications and electric utilities. He maintains offices in Ann Arbor, Michigan and Bozeman, Montana. Mr. Fowler has a B.S. and MBA from the University of Tulsa.

Mr. Chuck Buechel - has over 25 years experience in the regulated utility industry. From 1979 to 1989, he was a member of the Staff at the Kentucky Public Service Commission. During that time, he progressed from Economist to Deputy Executive Director. As a consequence, Mr. Buechel lends a unique regulatory and theoretical perspective to our team. He has worked on numerous consulting engagements for state and federal regulatory commissions as well as investor-owned and cooperative utilities. In addition, he taught economics and finance classes at Morehead State University. He has worked on eighteen Vantage assignments, including the following:

- During Mr. Buechel's tenure at the Kentucky Public Commission, he was instrumental in the development of an integrated resource planning regulation. The integrated resource plans that were to be filed and reviewed by the Commission were comprehensive plans that included demand and energy forecasts, an explanation of the supply side options considered as well as the demand side options. The regulation was developed using a collaborative process that included the utilities, several intervening parties, and an outside consultant engaged by the Commission. Mr. Buechel led each of the sessions to review and receive comments on the evolving regulation. Subsequent to leaving the Commission, Mr. Buechel worked with Kentucky Utilities Company and Big Rivers Electric Corporation to prepare their integrated resource plans consistent with the Commission's regulation.
- Senior Consultant for an audit of Indianapolis Power & Light's quarterly performance reports regarding its compliance with meeting agreed reliability targets.
- Lead Consultant on review of Lower Colorado River Authority Power Plant G&A Cost of Service Study.
- Lead Consultant on Compliance Audit of Duke Energy Ohio Cost Allocation Manual and Energy Supply Plan for the Public Utility Commission of Ohio.
- Lead Consultant for an audit of the municipally-owned Seattle City Light electric utility. Assigned issue was governance of the municipal utility. The audit yielded



recommendations for training the council members to better understand the issues and to add additional resources for oversight of the utility.

- Senior Consultant for affiliated audit at PG&E for 2001 through 2004 calendar years to verify compliance with California PUC restructuring requirements. Assignment included Assessment of Company Plan and Audit of Affiliate Transactions. Acted as the lead consultant on areas that addressed Nondiscrimination Standards, Disclosure and Information Standards, and Competitive Services. Recommendations from these reports addressed means of improving compliance.
- Senior Consultant for an operational audit of the California Independent System Operator. The audit was performed for FERC. Assigned issues of primary focus were market design, the relationships among the parties and governance of the ISO.
- Lead Consultant on monitoring of energy procurement RFPs for four Maryland electric utilities.

Mike Boismenu PE – Mike has extensive utility and power plant design, engineering, construction and operating experience. Vantage will also utilize his experience as Director of Value Engineering, Transmission and Distribution Engineering, and as Director of Standards Engineering for Niagara Mohawk Power Corporation. In addition, Mike has worked as a Management Consultant with Vantage for four years on a diverse number of technical assignments. Some highlights include the following.

- Senior Engineer on review of Iatan project for the KCC. Conducted regular site inspections, assessed outage problems and briefed Commission Staff on potential problems. Performed analysis on prudence of construction costs and root cause of turbine failure.
- Senior Engineer on the Consolidated Edison Audit of Consolidated Edison Company Emergency Preparedness and Storm Restoration for the NY PSC. Responsible for assessment of system planning, equipment standards, communications, field organization and root cause analysis.
- Provided input to NRG's Power Marketing Department to support the day ahead, off-peak and off-system power sales into the NYISO.
- Provided an overall assessment of the operation, maintenance, fuel handling, coal sampling, coal procurement, environmental controls, outage management and engineering for a large coal fired power plant in the Southeast.
- Responsible for departments and programs that addressed Value Engineering, Engineering Standards, Reliability Engineering and Strategic Asset Management for T&D activities.
- Conceptualized and directed the development of an Automated Distribution Station Design System. Resulted in a significant reduction in electric station engineering and design time.
- Directed the automation of the Company's Engineering Standards resulting in a significant improvement in the Line Department's performance.



- Managed the Dunkirk Power Plant for Niagara Mohawk and then NRG and acted as regional manager for other regions.
- Worked as a trouble shooter at NRG power plants throughout the U.S., addressing major fuel, efficiency and reliability issues.
- Provided expertise associated with the development of training material to train new operators at a large coal plant in Iowa.
- Provided the Transmission, Distribution, Substation and Generation Standards for the Company. Each optimized all available resources to ensure a safe, reliable and readily maintainable transmission, distribution, substation and generation system.
- Developed and implemented the Fossil System Combustion Control Upgrade Project. The project resulted in an improvement of the Unit's overall efficiency and responsiveness, which supported the Company's continuance of the Fuel Adjustment Clause.
- Provided design engineering in support of an ASTM D03.23 Bias Testing Coal Sampling System for 2 large coal fired facilities.
- Provided engineering support for six (6) refueling outages at the Nine Mile Point Unit 1 and James Fitzpatrick Nuclear Power Plants.

Jennifer Cummins, Project Administration - has over 14 years experience as a financial and operational manager. Her education lends itself to analytical and meticulous care in coordination of projects, large and small. Jennifer has a Bachelor's Degree in Computer Science and Programming as well as an Associate's Degree in Business Administration. She has a diverse background which includes achieving a Certification as a Paralegal and as a Certified Grant Writer. These two certifications and related experience have given her the skill set for extensive research capabilities, critical thinking, coordination and scheduling, as well as the ability to meet deadlines in an appropriate fashion.



V. PRELIMINARY WORK PLAN

This RFP requires that a successful bidder must provide a detailed analysis and conclusion related to the necessity and the economic prudence of installing the air quality control system on the existing Big Stone Coal Plant in comparison to other resource alternatives.

It further states that of specific interest in this case, advocacy staff is interested in determining the reasonableness of the air quality control system project costs, as well as the cost of other resource alternatives not chosen, the modeling inputs and sensitivity analysis, and the results as submitted by Montana-Dakota Utilities Company and Otter Tail Power Company.

Vantage, in preparing preliminary work plan, understands these requirements and has designed an approach that meets the overall needs in the cost efficient, cost effective manner. We are designing a work plan that consists of four tasks to best quantify the work steps and associated costs. The tasks include:

Task 1 - Review of currently available data and development of additional data requests.

Task 2 - Analysis of all aspects of the plan.

Task 3 - Development of testimony.

Task 4 - Testimony activities.

The work steps detailed below are preliminary and may be modified based on discussions with the Staff team. Further the budget proposed for this assignment will be modified as necessary based on discussions with the Staff.

Task 1 - Review of currently available data and development of additional data requests.

- Review all data previously submitted and determine if it provides adequate evidence to allow a comprehensive analysis that permits us to:
 - determine the reasonableness of costs for the selected solution;
 - determine the details of other alternatives not chosen;
 - determine the validity of the modeling inputs and process;
 - determine the sensitivity and risk assessment process applied; and
 - determine the quality of the results submitted
- Develop additional data requests to assure all information needed to develop a complete and permanent record is available to all parties. It is likely to require two



sets of data requests to assure that we receive all data necessary. We have a set of data requests prepared that will be of value in this case, that include:

- Additional detail on the proposed solution, including sensitivity on costs, construction schedule, impact on heat rate, availability, variable operating costs, manpower requirements and other known and potential impacts.
- Any analysis or positions on the impact that other regulations, such as carbon reduction rules, may have on the long term viability of the plant before its new projected life is met. Included would be analysis on potential stranded costs that would occur at various points of a forced retirement.
- Details on modeling, including inputs such as regional generation expectations, market prices, fuel prices for coal and gas, projections for both quantity and price of renewable options, and projected generation supply mix in the region.
- Detailed analysis on alternatives not selected, including degree that costs and schedule were developed, sensitivity to new carbon reduction legislation, overall impact on costs to the ratepayer.
- Any overall risk assessment of the selected and other options.

Task 2 - Analysis of all aspects of the plan.

- Perform an in-depth review of the data with emphasis on the following:
 - Assurance that all information needed for a decision is provided in a clear, concise and understandable format.
 - Assure that analysis is complete and performed in a manner that meets regulatory standards.
 - Assure that the analysis is supported by underlying documentation.
 - Assure that an appropriate risk analysis is performed on all decisions with uncertainty, such a costs of technology, construction schedules, modeling, life extension assumptions, cost of capital, decommissioning costs and other factors that can impact decisions.
 - Assure that assumptions and analysis appropriately interpret environmental regulations.
 - Provide the Commission with industry data that provides additional insight into the options for compliance.
 - Provide the Commission with our own analysis as to technology options, costs, implementations schedules, and potential risks that need to be considered.
 - Develop conclusions that we can communicate related to:
 - the reasonableness of costs for the selected solution;
 - the validity and potential of other alternatives not chosen;
 - the validity of the modeling inputs and process;
 - the sensitivity and risk assessment process applied; and
 - the quality of the results submitted.



- Confer with the NDPSC Staff as needed to assure that our conclusions are valid within the context of North Dakota law.
- Prepare analysis to address each topic. Some ultimate questions we should answer are:
 - Does the overall plan make sense?
 - Should parts of it be reconsidered or rejected/modified by the Commission?
 - If parts of the plan are rejected/modified, what impact does this have on the remaining plan? Economies of scale? Engineering redundancies, etc.
 - How firm are the projected costs? What could the range of costs be? When will final costs be known? What modeling was done to show the statistical variability?
 - Should the Companies be responsible for costs above some threshold? Should this be a tiered threshold with increasing cost vulnerability?
 - Are there alternative technologies that should be considered?
 - Are there alternatives to gas fired combined or simple cycle as alternative technologies? Are there any renewable options that can be integrated with gas technologies that should be considered?
 - Are purchases of generation through existing markets or bilateral agreements possible and economic in both the short and long term?
 - Given the short time frame for technology implementation, are extensions possible?
 - Is the technology implementation an “all or nothing” decision or can different options be explored within the generation portfolio?
 - What considerations were made regarding future EPA and other environmental regulations which might be even more stringent?

Task 3 - Development of testimony.

- Develop testimony that describes the situation and background, the company analysis and proposed solutions and the Vantage additions.
- Address every issue, with an opinion on validity and proposed changes where appropriate.
- Meet with the Staff to assure that testimony is compliant with North Dakota PSC regulations and North Dakota laws.
- File testimony by the date required.

Task 4 - Testimony activities.

- Review testimony of all other parties.
- Respond to data requests from the Company and other interveners.
- Prepare for cross examination.
- Assist with post hearing activities.



VI. PROJECT ADMINISTRATION

Vantage has developed project administration skills that are ideal for this assignment. We highlight some of these skills below. Vantage uses several proven project management techniques that will enable us to manage this project while enhancing communications among the project team members, Commission Staff and Company management while ensuring confidentiality of key data. This is extremely important on an assignment of this scope, number of project team members, and client representatives. This can only be accomplished through the efforts of strong project management, effective controls, and the coordinated efforts of senior personnel.

The Project Director is responsible for ensuring that the project work is progressing on schedule and within the planned budget. In addition, the Project Director is responsible for ensuring that work across all task areas appears uniform, coordinated, and integrated. Each team member is responsible for meeting schedules and providing interim deliverables.

QUALITY REVIEW

A quality work product is a team effort. The process begins with the consultants (*i.e.*, the individuals performing the day-to-day work). They must clearly understand the requirements of their assignments, have a well-considered plan of attack, and execute their assignments effectively. While it is the Project Director's responsibility to impart initial direction and focus, direct responsibility resides with the consultant for meeting detailed objectives and deadlines.

The Project Director will be responsible for day-to-day monitoring of work, reviewing work products for compliance with project goals and objectives, coordinating information requests, and for anticipating and responding to problems or concerns. He will be responsible for "fine-tuning" the process by: ensuring that the consultants are adequately supported; enforcing administrative controls; ensuring consistency among approaches and methods; and scheduling work to ensure that the consultants are efficient in their efforts. He will periodically review the work in progress including such quality control activities as attending interview sessions, processes used in analysis, testing conclusions, and checking the understandability and completeness of all written materials.

CONFIDENTIALITY

Vantage recognizes that all information collected from the work processed under this contract must be treated with care to preserve any issues of confidentiality. Vantage and all employees involved on this assignment will sign the Non-Disclosure and Use of Information Agreement upon award of the project. Further, Vantage will utilize its internal



controls to ensure all materials are handled in a manner that prevents inappropriate dissemination. Internal controls consist of:

- Vantage's PC-based network database system is secured through a series of passwords for each project. Only selected project consultants have the ability to access the information in the database system;
- all data stored at the Vantage office is kept in locked file drawers;
- all information used by consultants is collected at the end of the project and stored with other working papers, notes and drafts in a secure room;
- the Vantage network can be accessed through direct dial-up using a modem and passwords. The consultant or client is permitted access to limited areas of the network infrastructure, depending on security provisions. Using a password, the individual can upload or download files from prescribed sub-directories. The advantage of this system is that an individual can access any files needed without having them sent;
- Vantage also can use encryption software to ensure that the transmittal of files across the internet is secure. This method allows an individual to send or receive files that are encrypted. Only individuals with the same software and codes can then decode the files.

INFORMATION REQUEST MANAGEMENT SYSTEM

Throughout the course of the review, the team may submit a number of information requests. Efficiently managing outstanding information requests and those documents received are crucial to the success of the project. We use a PC-based system designed to increase the efficiency of handling of all information requests.

AUDITING SAMPLING

Should data sampling be required, Vantage utilizes Section 350 of the Generally Accepted Auditing Standards. We refer to Wiley, 2010 Practitioner's Guide, pages 311-333, for details on both statistical and non-statistical sampling methods as applied to a performance audit of the type required for this assignment.

AUDITING STANDARDS

Vantage utilizes all auditing standards that are appropriate on each assignment we address. This includes the following:

- We consider this assignment to be a Performance Audit in accordance with the Generally Accepted Government Auditing Standards (GAGAS) (also known as the Yellow Book).
- Vantage also utilizes the American Institute of Certified Public Accountants' (AICPA) Code of Professional Conduct when needed.



- The National Association of Regulatory Commissioners' Consultant Standards and Ethics for the Performance of Management Analysis

REPORT DOCUMENTATION

We have extensive procedures and PC-based software systems that permit us to:

- footnote, annotate, and cross-reference the task, draft, and final testimony to our working papers and the detailed work plan, resulting in a complete documentation trail;
- schedule and track interviews through a PC-based database system;
- track the request and receipt of information requests through a PC-based database. Numerous summary and detailed reports permit project management and allow the client to assess company response rates.

Footnotes serve as the basis for annotating our reports, which we use to identify the source of information that supports a statement of fact, finding, conclusion, or recommendation. As policy, we require that every fact, quote, result of analysis, or other statement that can be challenged be footnoted.

TESTIMONY

Details of Mr. Drabinski's experience in providing similar testimony are included in his resume.

END PRODUCTS

Vantage will maintain close communications throughout the project, with both regular and ad hoc reports as needed. Specifically, formal reporting will include:

- Monthly Written Status Reports.
- Briefings on a regular basis.
- A summary of key issues and results of our analysis.
- Draft testimony.
- Preparation of interrogatories as needed.
- Final testimony.
- Assistance with cross examination.



VII. COST PROPOSAL

DETAILED BUDGET PROPOSAL

HOURS, FEES AND EXPENSES

The following is the **projected** cost of our work requirement for the project. The detailed work plan and budget, once completed, will provide a basis for our budget. The actual cost may vary based on the specific needs of the project and requests from the Staff. The rates provided below are standard hourly rates, based on an eight-hour day and include all personnel expenses for travel and incidentals.

The following Table provides a summary of our fees. The schedule duration, complexity, and uncertainty as to the scope of each task has led us to propose a preliminary distribution of hours. After the project is awarded, the Vantage team will meet with the Project Team and Staff to determine the most appropriate hourly distribution.



Big Stone Pre Prudence Consulting Cost Estimate							
Fee and Expense Estimate							
	Project	Lead	Lead	Lead	Project		
	Director	Consultant	Consultant	Consultant	Admin	Total	Total
	Drabinski	Buechel	Fowler	Boismenu	Cummins	Hours	Fees
	\$275	\$250	\$250	\$220	\$90		
Task 1 - Review data and additional data requests.	40	32	24	24	8	128	\$31,000
Task 2 - Analysis of all aspects of the plan.	48	32	24	32	8	144	\$34,960
Task 3 - Development of testimony.	48	16	16	16		96	\$24,720
Task 4 - Testimony activities.	40	16				56	\$15,000
Total Hours	176	96	64	72	16	424	
Project Total Fees	\$48,400	\$24,000	\$16,000	\$15,840	\$1,440		\$105,680
Estimated Number of Trips	4	1				5	
Estimated Travel Expenses							
Onsite Percentage	25%						
Hours per trip	24						
Hotel cost per trip	\$300						
Airfare per trip	\$650						
Ground Trans. per trip	\$150						
Per diem per trip	\$120						
Cost per trip	\$1,220						
Number of consultant trips	5						
Travel Expenses	\$6,100						
Total Project Cost	\$111,780						



INVOICING

Invoices will be submitted monthly and are due 20 days after submitted to the Company. Invoice backup will include:

- a breakdown of charges by consultant and expense category;
- time reports for each consultant and staff person.
-

INSURANCE COVERAGE

Vantage carries extensive insurance coverage for assignments of this type. While we currently carry the levels shown below, we have the ability to increase our coverage to the required level and will commit to do so prior to starting work. A Certificate of Insurance demonstrating coverage will be submitted upon award of the contract.

- Personal and General Liability coverage of \$1,000,000 per occurrence and \$2,000,000 per year.
- Automobile coverage of \$1,000,000 per occurrence with \$2,000,000 aggregate.
- Appropriate workers' compensation and disability insurance for all employees.



VIII. PERSONNEL

Attached are the resumes of:

- Walter P. Drabinski
- Michael Boismenu
- Mark Fowler
- Chuck Buechel
- Jennifer Cummins



RESUME OF MR. WALTER P. DRABINSKI

AREAS OF SPECIALIZATION

Mr. Drabinski is President of *Vantage Consulting, Inc.* He has more than 38 years of experience in the utility industry as both a utility company manager and a management consultant. His functional expertise includes all aspects of utility strategy, organization, executive and financial management, operations practices, productivity improvement, operations and maintenance, and engineering, environmental and construction management. As a utility manager, Mr. Drabinski held the positions of System Training Director, Fossil Generation; Supervisor, Electrical Maintenance; and Operations Project Engineer for Niagara Mohawk Power Corporation. As a management consulting principal, he has worked for national firms and has been President of Vantage for over 19 years. During that time he has managed more than 150 consulting engagements. He has testified in formal regulatory hearings over 100 times.

SELECTED CONSULTING EXPERIENCE

Consolidated Edison Company - Performed an audit of emergency restoration and outage planning capabilities for the New York PSC. Audit followed a number of large and highly public outages. Major recommendations were made to develop new strategies and programs for addressing reliability and outage response.

Commonwealth Edison Company - Retained by the Illinois Commerce Commission to investigate outages suffered in downtown Chicago during the summer of 1999. The assessment provided a comprehensive analysis of eight separate outages, with details of causes and recommendations for improvement.

FERC - Interfaced with Commission and its staff on issues such as Transco structures, restructuring, and ISOs. Prepared a white-paper that addressed a Transmission PBR as a mechanism for incenting utilities.

California Independent System Operator - Project Director on an Independent Operational Audit of the CAISO for the period of 10/01 to 10/02. This assignment was performed at the request of the FERC and led to a series of five global recommendations. Shortly after the completion of the audit, Mr. Drabinski testified before the House of Representatives, Subcommittee on Subcommittee on Energy Policy, Natural Resources & Regulatory Affairs.

Maryland Public Service Commission - Provided technical support in hearings and development of a final order relative to developing a formal procedure for addressing Standard Offer Service (SOS) supplies for its four electric utilities.



Resume of Mr. Walter P. Drabinski

Massachusetts Municipal Wholesale Electric Utility - Performed analysis on options for equipment upgrades at major facility and performed limited life extension analysis.

Seattle City Light - Conducted a controversial audit of Seattle City Light's financial, risk management and governance structure. Serious issues regarding debt, O&M and Capital expenditures were raised. Major recommendations on risk management were developed.

New Hampshire Public Service Commission - Provide technical and strategic assistance under a long-term contract on transmissions and distribution issues. These have included ISO strategies, local distribution reliability, asset decisions and general regional concerns.

Entergy Corporation - Project Manager for a review of affiliated transactions between Entergy Corporation, Entergy Services, Inc., and a myriad of regulated and non-regulated subsidiaries. This engagement, performed for five regulatory agencies, is in response to the 1991 Settlement Agreement with the SEC, at which time the holding company was formed. The results of this audit included reallocation of almost \$5 million and a reconfiguration of reporting requirements.

Sempra Energy (SDG&E and SoCalGas) - Project Director for affiliated audit for 1998 and 1999 calendar years to verify compliance with California PUC restructuring requirements. Assignment included assessment of company plan and audit of affiliate transactions. Acted as the lead consultant on areas that addressed Nondiscrimination Standards, Disclosure and Information Standards, and Competitive Services. Recommendations from these reports addressed means of improving compliance.

PSE&G - Project Manager and Lead Witness for an audit of the Company's Unbundling, Stranded Cost, and Restructuring plans and testimony. On this assignment, under the auspices of the New Jersey Board of Public Utilities, Vantage was the lead firm for a consortium of five consulting firms that addressed numerous critical and cutting edge issues. These included areas such as reconciliation of the regulatory and FERC books, development of cost of service studies, assessment of capital additions proposed for stranded cost recovery, calculation of market prices for energy and capacity, calculation of stranded costs associated with nuclear, fossil and non-utility generation, assessment of securitization as a mitigation option, and development of a comprehensive model that determined the possible rate reduction that could be achieved.

PJM Power Plant Arbitration - Provided testimony and technical assistance on arbitration for an independent power plant built in the PJM region. Issues involved interpretation of PJM rules and contractual issues such as commercial operation date and performance guarantees.



Resume of Mr. Walter P. Drabinski

St. Vincent Energy Services Ltd. - At the request of the Board of Directors and Prime Minister, Vantage conducted a review of system reliability and fuel procurement. Significant findings resulted in a new strategic plan, a reorganization of management and a legal investigation into procurement practices.

Pacific Gas & Electric Co.- Project Director for affiliated audit for 2001,2002, 2003, 2004 and 2005 calendar years to verify compliance with California PUC restructuring requirements. Assignment included assessment of company plan and audit of affiliate transactions. Acted as the lead consultant on areas that addressed Nondiscrimination Standards, Disclosure and Information Standards, and Competitive Services. Recommendations from these reports addressed means of improving compliance.

Louisville Gas and Electric/Kentucky Utilities Merger - Assisted with broad range of issues including regulatory strategy, synergy quantification, testimony development, witness preparation, interrogatory development and responses. System reliability and monitoring was a key element of this complex project.

Public Service Electric & Gas Company - Retained by the New Jersey Board of Public Utilities to assess compliance with all Affiliate Compliance and Code of Conduct Rules enacted as a result of restructuring.

San Diego Gas & Electric - Project Manager on an assignment for the California PUC and SDG&E to review the implementation of Performance Based Ratemaking. This assignment included an assessment of financial, operational, performance and culture changes that were impacted by the two-year experimental program. While involved in this project, Mr. Drabinski developed an understanding of the SDG&E holding company formation and its interaction with the proposed industry restructuring.

New Jersey Board of Public Utilities - Director on major project to review hedging practices of the four gas distribution utilities in New Jersey. Working with Pace Energy as a sub-contractor, alternate hedging strategies were developed and proposed using more advanced techniques, including options.

Louisville Gas & Electric - Project Manager for a comprehensive management and operations review for the Kentucky Public Service Commission. A key element of this audit was the analysis of the Energy Services Company of LG&E Energy, a holding company which was the organizational entity responsible for all regulated generation and non-regulated generation, power marketing, and natural gas transmission activities. This included a special review of affiliated transactions. Acted as Lead Consultant in the areas of power production, fuel procurement, Affiliated Review, Clean Air Act compliance, Energy Policy Act response, and T&D engineering and construction. Assisted in review of strategic planning and power marketing activities. In conjunction with this audit, Mr. Drabinski met



Resume of Mr. Walter P. Drabinski

with the Commissioners a number of times to discuss issues of industry restructuring and the role the Commission should play.

Maryland Public Service Commission – Monitored all RFP solicitations for 2007 and 2008 bid years. This amounted to nine solicitations for all four utilities in Maryland. Provided oversight on bid day, reviewed applications, provided confidential analysis and briefings to the Commissioners and testified on results.

Cumberland Valley Electric Cooperative – Performed a focused management audit of this small, rural cooperative. Worked with management to develop transition to new management team.

Alleghany Power Virginia – Monitored RFP solicitations for 2007 and 2008 bid years. Provided oversight on bid day, reviewed applications, provided a final report on results for the Virginia regulatory agencies.

Delaware Public Service Commission – Monitored all RFP solicitations for 2006 bid year. Provided oversight on bid day, reviewed applications, provided confidential analysis and briefings to the Commissioners and testified on results.

California Public Utilities Commission Telco Division (Attestation Exams) – Mr. Drabinski was the Project Director on seven separate assignments for the CPUC during the period of 2000 to 2002. These included:

- examinations of surcharge collections of “high cost fund” and “teleconnect fund” amounts for AT&T, Verizon, Sprint, and PacBell. In each project significant accounting, interpretational and transmittal errors were discovered, leading to the recovery of amounts well in excess of project costs;
- examinations of claims requests of “high cost fund” and “teleconnect fund” for Verizon, PacBell, and Roseville.

Indiana Power & Light – Vantage acted as the evaluator, at the request of the Indiana Utility Regulatory Commission, for a three-year program in which customer service and distribution system reliability are being monitored with penalties for missing targets. A major element of this program was enhanced vegetation control.

Maryland Public Service Commission – Provided analysis and related testimony on restructuring-related cases in 2007 and 2008. Testimony involved wholesale market issues, portfolio options and rebuttal relative to utility witnesses.

Arizona Corporation Commission – Provided assistance to the Commission Staff and Commissioners on all restructuring issues under consideration. This includes development of an ISO. The reorganization of cooperatives and G&Ts for deregulation. Development of



Resume of Mr. Walter P. Drabinski

solutions regarding high costs resulting from California related issues. Reassessment of deregulation orders based on appellate decisions.

Public Service Electric & Gas – Engagement Manager during a long-term engagement with PSE&G. Specific assignments he directed are listed below.

- Developed a 30-year environmental plan, addressing power generation and environmental strategy.
- Assisted in development of innovative rate strategy for Bergen combined cycle unit.
- Worked on a team of utility employees, lobbyists, legislative staff members and the DOE to develop a program for voluntary reduction of CO₂ and global warming initiatives.
- Reviewed gas procurement strategy for 1300 MW of combine cycle generation.
- Conducted a tactical and strategic alternatives study of the Company's fleet of 158 combustion turbine generation plants.
- Developed a plan for complying with the 1990 Clean Air Act Amendments.
- Assisted in a study of the 1992 Energy Policy Act and prepared a report that illustrated how it would impact company operations.
- Wrote and supported testimony in the area of fossil generation on behalf of the Company in a major rate case.
- Developed protocols for NO_x emission trading within NESCAUM.

Kentucky Utilities Company – Project Manager for a comprehensive management and operations review for the Kentucky Public Service Commission. Acted as Lead Consultant in the areas of power production, fuel procurement, transmission operations, and engineering and construction. Provided numerous recommendations to improve competitiveness of this already low-cost utility. Met with the leadership of the State House of Representatives and Senate to discuss utility competition and industry restructuring.

BellSouth Telecommunications, Inc. – Project Manager on a review of BellSouth performance under an alternative regulation plan for the state of Kentucky. This is the first of nine states in which the Price Regulation Plan was up for renewal and, as such, was of great interest to the Company and regulators.

GTE of California and Contel of California (now Verizon) – Audited collection procedures and practices for various surcharge activities. Provided a CPA Opinion Letter, (through a subcontractor.)

US West – Provided assistance with quality control and final reviews of work product while an officer with the lead firm. This project reviewed affiliate transactions between parent and its subsidiaries. Assisted in development of model for cost allocation analysis.



Resume of Mr. Walter P. Drabinski

Pennsylvania Governor Task Force – Provided input to Governor’s office, legislature and PUC on restructuring issues in the State. Issues included handling of stranded costs, securitization, the development of competition, and the education of consumers.

Clean Air Action Corporation – Assisted in development of strategy regarding purchase and sale of emission credits throughout the Ozone Transport Region.

Honeywell/Allied Signal – Provided strategic assistance and research in development of commercial fuel cell. Conducted market research and facilitated meetings with utilities interested in commercial development.

Colonial Chemical Company – Assisted Company in identifying candidates for Selective Non-Catalytic Reduction systems to reduce nitrous oxide emissions from power plants.

Public Service Electric & Gas Company – Retained by the New Jersey Board of Public Utilities to assess compliance with all Affiliate Compliance and Code of Conduct Rules enacted as a result of restructuring.

Duquesne Light Company – Project Manager for a comprehensive management and operations review for the Pennsylvania Public Utility Commission. Mr. Drabinski was also the Lead Consultant in the review of executive management, strategic planning, affiliated relations, and financial management.

Choptank Electric Cooperative – Lead Consultant on a management and operations review for this REA in the State of Maryland. Reviewed all aspects of operations including executive management, organization, construction management, electric operations, system planning, materials handling, purchasing, and customer service.

SDG&E, PG&E, SCE, and SCG – Project Manager on an audit of DSM administrative costs. Conducted for the CPUC CACD, this assignment took place during the period where working groups were assessing issues such as access to utility information and the future of DSM. Vantage provided feedback to a number of working groups on the needs of energy service companies.

East Kentucky Power Cooperative – Performed a comprehensive review of all fuel procurement and fuel utilization activities for the Board of Directors. Visited all power plants, coal tipples, and a sampling of mines. Recommendations addressed a broad range of strategic and operational issues.

Dayton Power & Light – Performed a comprehensive review of all fuel procurement and fuel utilization activities for the PUCO. Visited power plants, coal lab, and other fuel and operations related departments. Recommendations addressed a broad range of strategic and operational issues.



Resume of Mr. Walter P. Drabinski

Pennsylvania Power & Light – Lead Consultant for a comprehensive management and operations review for the Pennsylvania Public Utility Commission. Reviewed all aspects of customer service activities, including CIS and office operations. Also, reviewed system power & engineering, including fuel supply, T&D engineering, environmental, power plant staffing, and plant operations. Reviewed EMF issues and Clean Air Act Amendments compliance planning.

Centerior Companies (Cleveland Electric Illuminating Company and Toledo Edison) – Project Manager on audit of electric fuel procurement practices and procedures for the Public Utilities Commission of Ohio in 1991. Responsibilities included the review of fuel procurement planning, long-term contracts, and spot procurement. Made recommendations regarding coal contracts, interstate wheeling arrangements, and coal transportation costs. Testified twice regarding results of audit report.

Monongahela Power (Allegheny Power Systems) – Performed a comprehensive review of all fuel procurement and fuel utilization activities for the PUCO. Visited power plants, coal lab, and other fuel and operations related departments. Recommendations addressed a broad range of strategic and operational issues.

American Electric Power Company – Project Manager on audit of electric fuel procurement practices and procedures of two AEP subsidiary companies, Ohio Power Company and Columbus Southern Power Company in 1989 and 1990 for the Public Utilities Commission of Ohio. Responsibilities included the review of affiliated mines (surface and deep mines) and fuel procurement planning, long-term contracts, and spot procurement. Made recommendations on strategic planning, purchasing policies, contract analysis, and marketing programs. Testified on four occasions regarding results of audits.

Union Light, Heat and Power – Lead Consultant on a management and operations review for the Kentucky Public Service Commission. Responsibilities included all aspects of customer service and electric operations including: CIS; customer accounting; transmission & distribution; system planning; engineering; and construction. Also assisted in the review of the financial reporting relationship of the company to its parent, Cincinnati Gas & Electric, with an emphasis on allocation of costs.

West Texas Utilities – Project Manager for a comprehensive management and operations review for the Texas Public Service Commission. Acted as a Lead Consultant in the areas of power production, fuel procurement, and customer services.

Philadelphia Gas Works – Project Manager for a management and operations audit for the Philadelphia Gas Commission. Lead consultant for the review of corporate organization and staffing, customer services, operations, and support functions. Addressed major gas supply planning issues. Managed a series of three follow-up reviews including



Resume of Mr. Walter P. Drabinski

development of Management Audit Actions Plans, an Audit Compliance Review, and a Review of the 1993 O&M Budget. Testified at numerous Commission hearings on capital budget planning, automatic meter reading, office aggregation, and theft of service.

Maryland Public Service Commission – Consultant for an assignment to review long-term gas purchasing practices of Columbia Gas of Maryland, Baltimore Gas & Electric, and Washington Gas Light. Responsibilities included review of the 1988 plans, recommendations on requirements for future plans, and the training of commission staff personnel relative to conducting similar reviews of future plans.

Kentucky-American Water Company – Project Manager and Lead Consultant for a management and operations review for the Kentucky Public Service Commission. A key element of this audit was the holding company relationship with the many subsidiaries of American Water Works. Investigated the areas of customer service and marketing and engineering/construction.

El Paso Natural Gas Company – Lead Consultant on a productivity improvement project. Performed an in-depth review of all positions in operating divisions and reorganized operating divisions into profit centers. Developed procedures for in-house vs. outside construction decisions, construction scheduling, and cost data collection. Developed a manpower planning model for restructuring responsibilities and staffing levels. Implemented a workforce management program at gas processing plants, compressor stations, and throughout the gathering system.

Western Kentucky Gas Company – Lead Consultant for a management and operations audit of the customer services function for the Kentucky Public Service Commission. Developed plan for consolidating offices, resulting in significant changes in providing customer service.

National Gas and Oil Company of Ohio – Lead Consultant on audit of fuel procurement practices for the Ohio PUC in 1986. Reviewed purchasing practices, storage activities, sales practices and policies and procedures. Made recommendations on strategic planning, purchasing policies, and marketing programs.

Pennsylvania Power Company – Lead Consultant on a management and operations review for the Pennsylvania Public Utility Commission. Responsibilities included review of customer services with a specific review of collection practices and policies, staffing, T&D, engineering, and system planning. Reviewed organization and staffing for the power production department.

Philadelphia Suburban Water Company – Lead Consultant/Project Manager on a comprehensive management audit for the Pennsylvania Public Utility Commission. Reviewed all aspects of field operations and water production.



Resume of Mr. Walter P. Drabinski

East Kentucky Power Cooperative, Inc. – Performed as a subcontractor on a review of the bidding process for a series of combustion turbines. Analysis included reviews of individual proposals and the bidding process.

General Waterworks Company - Pennsylvania Operations – Lead Consultant in a management and operations review. Reviewed compensation, benefits and staffing, executive management, organizational structure, and corporate policies and procedures.

General Waterworks Company - Pine Bluff Arkansas Operations – Project Manager on a management and operations review. Reviewed finance and accounting, staffing, system operations, organizational structure, and corporate policies and procedures.

General Electric Field Engineering group – Lead Consultant for the implementation of a Job Management Program that included seminars, teaching concepts on work breakdown structures, budgeting, performance measurement, and critical path scheduling techniques. Overall program was aimed at improving construction management skills of field personnel.

Ohio Electric Co./Ohio PUC – Lead Consultant on a prudence review of the Beaver Valley Power Station. Areas reviewed included CAPCO organization and financing, construction management, project accounting, compatibility of prudence standards, and compliance with Yellow Book standards.

Philadelphia Electric Company – Lead Consultant on a retrospective investigation of the Limerick Nuclear Power Plant. Analyzed the Company's financial condition during the construction program and reviewed construction management practices on the project. Prepared testimony for prudence hearings on construction management and financial performance.

Public Service Electric & Gas Co. – Project Manager for a retrospective investigation of the Hope Creek Nuclear Plant. Prepared cost reconciliation that identified reasons for cost overruns. Reviewed construction control tools, productivity results, and analyzed productivity programs for effectiveness. Wrote testimony, answered interrogatories, and assisted in cross-examination of witnesses. Made recommendations on cost tracking systems for future construction projects.

Houston Light & Power – Consultant on South Texas Nuclear Project retrospective analysis. Reviewed construction management procedures and developed testimony for rate case.

Public Service Electric & Gas Co. – Project Manager for a review of the Engineering & Construction Department budgeting and approval process for capital projects at PSE&G. Developed flowcharts and improved methods for processing capital budgeting requests.



Resume of Mr. Walter P. Drabinski

OTHER BUSINESS AND PROFESSIONAL EXPERIENCE

System Training Director for Niagara Mohawk Power Corporation. Managed a staff of eleven supervisors and instructors, as well as numerous contractors and part-time training personnel. Developed and implemented a productivity program to improve operating and employee productivity at all fossil power plants. Developed a performance-based progression program for craft personnel and assisted in negotiating contract changes with the International Brotherhood of Electrical Workers. Member of Electric Power Research Institute committee on power plant staffing and training. Chaired Electric Utility Technical Education Council. Developed and taught a seminar on power plant efficiency improvement to operating, management, and regulatory personnel.

Electrical Maintenance Supervisor for Niagara Mohawk Power Corporation. Managed two supervisors and thirty electricians performing electrical construction, maintenance, and repair. Developed and implemented a preventive maintenance program for a six-unit/2000 megawatt power plant. Managed roving maintenance crew, providing personnel, equipment, and expertise to nuclear power plants during outages. Responsibilities included all plant, fuel handling, and pollution control electrical equipment, switchyards, 345 kV overhead and 115 kV underground transmission lines, relay systems, telemetering, and telecommunication systems.

Operation Project Engineer for Niagara Mohawk Power Corporation. Participated in conceptual system design, construction management, and plant start-up of power plants, transmission lines, switchyards and plant electrical equipment. Represented utility during acceptance testing, start-up, and turnover of all electrical power systems, auxiliary equipment, and turbine and boiler instrumentation and control systems.

TESTIMONY

Testimony was provided in the following cases.

- Case 99-434 Bell South of Kentucky. Audit and modification of Price Regulation Plan.
- Iatan Unit 1 - Testified on prudence of construction and cost control before the Kentucky PSC.
- Northwester Energy - Mill Creek Power Plant - Testified on prudence of construction and cost control before the Montana PSC.
- Various CPUC Telco cases - Testified on eight occasions regarding results of attestation exams of Verizon, PacBell, Sprint, AT&T, and Roseville.
- Various energy solicitation projects - Testified after acting as independent monitor during energy solicitations in Delaware (2 occasions)



Resume of Mr. Walter P. Drabinski

- Commonwealth Edison – Testified before Illinois PSC on outages of 1999.
- PSE&G Restructuring hearing. Lead witness on all aspects of unbundling, restructuring, stranded costs, and deregulation issues. Testified for eight days.
- Case No. 97-105-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Dayton Light Company for the PUC of Ohio.
- Case No. 95-106-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Monongahela Power Company for the PUC of Ohio.
- Case No. 96-106-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Monongahela Power Company for the PUC of Ohio.
- Case 93-02-041 Financial Audit of the Demand-Side Management Pilot Bidding Program Administrative Services of Pacific Gas & Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Gas Company for the California PUC.
- Case D94-08-023 Mid-Point Evaluation of SDG&E's Base Rates Performance Based Ratemaking Mechanism for the California PUC.
- Case No. 94-219-GA-GCR Management Performance Audit of West Ohio Gas Company for the PUC of Ohio.
- Case No. 91-103-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Toledo Edison for the PUC of Ohio.
- Case No. 91-104-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Cleveland Electric Illuminating Company for the PUC of Ohio.
- Case No. 89-100-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Ohio Power Company for the PUC of Ohio.
- Case No. 89-101-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Columbus Southern Company for the PUC of Ohio.
- Case No. 90-100-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Ohio Power Company for the PUC of Ohio.
- Case No. 90-101-EL-EFC Management Performance Audit of Fuel Related Policies and Practices of Columbus Southern Company for the PUC of Ohio.

PUBLICATIONS

Primary contributing author of five textbooks developed for the Electric Power Research Institute (EPRI) and the Center for Occupational Research and Development (CORD).

- Introduction to Instrumentation and Control.
- Electronic and Pneumatic Control Devices.
- Control Systems I.
- Control Systems II.
- Power Plant Control System Applications.



Resume of Mr. Walter P. Drabinski

EDUCATION

MBA, The Wharton School, University of Pennsylvania, (Finance/Management).
BSEE, State University of New York at Buffalo, (Systems Engineering/Power Technology).
Lectured as a visiting executive at Clarkson College on management in a utility company.

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronic Engineers.
Project Management Institute.
American Water Works Association.



RESUME OF MICHAEL C. BOISMENU PE

Summary

Through the past 42 years I have been actively involved with all phases of the electric power industry. I have successfully completed major design engineering projects, managed multi-disciplined construction projects, managed a large coal fired power plant, managed regional generation assets, and most recently provided consulting services to a variety of power industry clients. My specific power industry related experience includes the following and is further detailed below.

- Power Plant Design Engineering
- Project Management
- Plant Management and Operation
- Asset Management
- Organizational Design and Business Consultant

Power Plant Design Engineering:

- Provided the detailed design to support the initial construction and maintenance engineering of the Nine Mile Point Unit 1 Nuclear Plant.
- Provided detailed design to support the fuel conversion of 2 coal fired power plants to oil fired.
- Provided detailed design review of 2 large oil fired power plants to address major design flaws.
- Provided the electrical design of the New York Power Pool electric distribution system.
- Provided design review services to support the construction issues associated with the Nine mile Point Unit 2 nuclear Power Plant.
- Provide detailed engineering and design to support the TMI modification for the Nine Mile Point Nuclear Unit 1 Plant.
- Provided detailed design support for a variety of municipal project on Central New York.

Project Management:

- Provided conceptual engineering, project management and detailed design for a variety of complex nuclear, fossil, hydro and electric station projects.
- Developed, managed and implemented the combustion control upgrade projects for the Niagara Mohawk Fossil Fleet.
- Successfully managed and completed on budget and schedule a variety of complex power plant engineering projects. Assembled all the project management,



Resume of Mr. Michael Boismenu

engineering and construction resources to support the successful completion of these projects.

Plant Management and Operations:

- Provided total asset management and leadership for the Station in the evolving electric supply business.
- Instrumental in the successful negotiation and settlement of the long-standing real estate tax litigation case with the City of Dunkirk. Resulted in savings of **\$80 million** through the term of the agreement.
- Improved the overall image of the Company through participation in Chautauqua County Reengineering Initiative and the associated Implementation Steering Committee. The initiative resulted in a significant reduction in the size of the County government's Executive Staff.
- Provided the leadership to successfully transition the workforce of the power plant from the regulated electric generation business to a non-regulated electric generation environment.
- Through targeted attrition and position abolishment's reduced the staffing level of the power plant from 208 to 125 employees. This coupled with innovative partnering agreements with vendors resulted in a reduction of the Station's Operation and Maintenance budget by 45% from the previous year's level.
- Provided the organizational design to complete the safe and effective complete of the NRG Dunkirk Power Plant from eastern coal to PRB coal.

Asset Management:

- Provided an assessment of the NRG Big Cajun II operation and maintenance process. Resulted in a significant improvement in availability and a more functional and responsive organization design.
- As the Regional Director of Operations in the NRG Mid-Atlantic Region. Completed an assessment of the operation and maintenance practices and made recommendation and implemented a combination of Station physical, organizational and employee development and improvement programs all of which contributed to the significant reduction in the NRG Indian River Station's forced outage rate.
- As the Regional Director of Operations for the NRG New York Region, developed the Regional plan for emergence from bankruptcy, redirected the Region to assure appropriate input from each generating facility.

Organizational Design and Business Consultant:

- Established an electrical contractor in Florida as a certified Florida Power and Light contractor.



Resume of Mr. Michael Boismenu

- As an independent consultant, leveraged my broad utility experience coupled with my extensive network in the electric utility industry in support of new business development initiatives in Florida, Delaware, Massachusetts and New York.
- Developed Operator Training Systems for the electric power generation industry to meet the needs of the client's manpower initiative, as associated with an aging workforce situation.
- As an independent consultant implemented a staffing, organizational design and operational and maintenance assessment of 2 large power generating facilities in Alabama.
- As an independent consultant conducted a process and operational assessment of a large northeast city's emergency planning and response system.
- Provided detailed support of the cost allocation assessment of a major Southwest power cooperative.
- Providing an assessment of the on-going construction of a large gas turbine facility in the Northwest.



RESUME OF MR. CHUCK BUECHEL

AREAS OF SPECIALIZATION

Mr. Buechel has worked on numerous consulting assignments for electric, gas, water, and telephone utilities. The primary focus of many of these assignments has been regulatory matters, however, he has consulted on other matters, including corporate and strategic planning, incentive regulation, least-cost planning, workforce management, and competitive bidding.

Prior to consulting, Mr. Buechel spent over nine years on the Staff of the Kentucky Public Service Commission. During his tenure at the Commission, he was public utility economist, Director of Research Division, and Deputy Executive Director. His assignments at the Commission included: the preparation of an integrated resource planning regulation; coordinating a statewide load management committee to investigate time-of-day rates and other load management issues; directing staff in rate cases and special investigations; writing orders as directed by the Commission; establishing a management audit program; and testifying in selected cases.

SELECTED CONSULTING EXPERIENCE

Duke Energy Ohio - Senior Consultant on an audit of compliance with corporate separate rules, focusing on code of conduct and structural separation issues.

Consolidated Edison Company - Senior Consultant on an audit of emergency restoration and outage planning capabilities for the New York PSC. Audit followed a number of large and highly public outages. Major recommendations were made to develop new strategies and programs for addressing reliability and outage response.

Maryland Public Service Commission - Monitored all RFP solicitations for 2007 and 2008 bid years. This amounted to nine solicitations for all four utilities in Maryland. Provided oversight on bid day, reviewed applications, provided confidential analysis and briefings to the Commissioners and testified on results.

Pacific Gas & Electric Co. - Senior Consultant for affiliated audit for 2001 and 2002 calendar years to verify compliance with California PUC restructuring requirements. Assignment included assessment of company plan and audit of affiliate transactions. Acted as the Lead Consultant on areas that addressed Nondiscrimination Standards, Disclosure and Information Standards, and Competitive Services. Recommendations from these reports addressed means of improving compliance.



Resume of Mr. Chuck Buechel

Public Service Electric & Gas Company – Retained by the New Jersey Board of Public Utilities to assess compliance with all Affiliate Compliance and Code of Conduct Rules enacted as a result of restructuring.

Delaware Public Service Commission – Monitored all RFP solicitations for 2006 bid year. Provided oversight on bid day, reviewed applications, provided confidential analysis and briefings to the Commissioners and testified on results.

Seattle City Light – Retained by the City Council to perform an audit of the municipally-owned Seattle City Light electric utility. Assigned issue was governance of the municipal utility. The audit yielded recommendations for training the council members to better understand the issues and to add additional resources for oversight of the utility.

Federal Energy Regulatory Commission – Senior Consultant for an operational audit of the California Independent System Operator. The audit was performed for FERC. Assigned issues of primary focus were market design, the relationships among the parties and governance of the ISO.

Arizona Corporation Commission – Senior Consultant to provide advice and assistance to the Commission regarding the on-going implementation of its industry restructuring initiative.

Louisville Electric & Gas and Kentucky Utilities – Actively participated in the development of a comprehensive performance-based regulation mechanism and provided support for development of tariff, preparation of testimony, and witness preparation and worked with attorneys to prepare briefs.

Public Service Electric & Gas – Senior Consultant in the evaluation of cost of service studies and unbundling plan for the Restructuring Plan submitted to the New Jersey Board of Public Utilities.

Entergy – Consultant in this financial audit of affiliated transactions between Entergy Corporation, Entergy Services, Inc., and subsidiaries responsible for the review of affiliated transactions, allocation, accounting procedures and control, improper disclosure, and insulation and segregation of regulated and non-regulated affiliates.

California Public Utilities Commission – Regulatory Lead Consultant for an assignment to assist with the evaluation of a two-year experiment to implement performance-based ratemaking for San Diego Electric and Gas Company's gas procurement and generation and dispatch functions.



Resume of Mr. Chuck Buechel

San Diego Gas & Electric Company - Consultant responsible for this mid-term evaluation of the Company's Base Rates Performance-Based Ratemaking mechanism which included analysis and assessment in the areas of price and corporate performance.

Big Rivers Electric Corporation - Provided support and assisted with the preparation of the Company's regulatory filings before the Kentucky PSC for approval to implement a proposed lease of its generating assets to a subsidiary of LG&E Energy.

Delta Natural Gas - Assisted with the preparation of an application to increase rates and modify rate design. Testified on rate design changes for larger commercial and industrial customers as well as other specific charges.

East Kentucky Power Cooperative, Inc. - Senior Consultant for a project to audit the fuel procurement function at East Kentucky Power Cooperative. The assignment is being performed for the Fuel and Environmental Committee of the Board of Directors.

Louisville Gas and Electric Company/Kentucky Utilities Company - Provided strategic, regulatory and operational advice regarding merger between these two utilities. Assisted with preparation of merger application and provided regulatory strategy regarding synergy savings.

Kentucky Public Service Commission - Engagement Director for a project to prepare a joint response for a consortium of four utilities in Kentucky. The response is to the Kentucky Public Service Commission Administrative Case No. 341, An Investigation into the Feasibility of Implementing Demand-Side Management Cost Recovery and Incentive Mechanisms. The response discusses the advantages and disadvantages of various regulatory incentives with regard to DSM and conservation.

Louisville Gas and Electric Company - Lead Consultant in the preparation of its application to establish a holding company. The application included proposed guidelines to be used in financial dealings between the subsidiary companies, as well as the allocation of costs between the companies.

New England Telephone Company - Consultant for the management audit of its affiliated interests. The audit was performed for the Department of Public Utilities of Massachusetts. Primary responsibilities included providing regulatory advice and consultation to the audit team.

Kentucky Utilities Company - Engagement Director for a project to provide advice and consultation with regard to the preparation of an application for a certificate of convenience and necessity to construct additional peaking capacity. The filing was prepared to comply with a comprehensive regulation on integrated resource plan adopted by the Kentucky



Resume of Mr. Chuck Buechel

Public Service Commission. Areas of responsibility included preparing the responses for the sections of the IRP regulation, which were concerned with demand-side management.

Columbia Gas of Ohio, Inc. - Consultant for its management and operations audit. The audit was for the Public Utility Commission of Ohio. Areas of responsibility include requirements forecasting and flexible transportation program.

Pennsylvania Gas & Water Company - Consultant for a comprehensive management audit. The audit is being performed for the Pennsylvania Public Utilities Commission. Areas of responsibility include requirements forecasting, rates and regulatory relations, and financial management and planning.

West Texas Utilities Company - Consultant for a management and operations audit. The audit was performed for the Public Utility Commission of Texas. Areas of responsibility included financial planning, economic analysis, and system planning.

East Kentucky Power Cooperative, Inc. - Engagement Director for the performance of an audit of evaluation of competitive bids it received for providing generating capacity to meet its needs. The purpose of the audit was to provide assurance to EKPC's management that each of the proposals is provided fair and consistent treatment. The audit was needed because the company had also provided a bid.

Big Rivers Electric Corporation - Engagement Director for an assignment to implement a comprehensive planning process. The process is centered on an annual planning cycle, which incorporates the corporate and strategic plans with the divisional plans and budgets.

Kentucky Public Service Commission - Witness testifying on behalf of GTE Products Corporation in Kentucky Public Service Commission Case No. 10498, a request by Columbia Gas of Kentucky, Inc. to raise its rates. The testimony supported the continuation of a flexible rate for the transportation of natural gas to industrial customers with alternative fuel capability.

Henderson County Water District - Lead Consultant for a comprehensive operations review. The study was sponsored by the district's Board of Directors. Areas of responsibilities included operations planning, organization and staffing, system management, and customer service.

Lexington Fayette Urban County Government - Principal Investigator for a report regarding the feasibility of regulating landfill operations at the Kentucky Public Service Commission.

Kentucky-American Water Company - Lead Consultant for a project to review and comment on drafts of testimony and a consultant's report on the need to expand its water treatment capacity. The testimony and report was the subject of a mock hearing.



Resume of Mr. Chuck Buechel

Kentucky Public Service Commission - Witness testifying on behalf of AT&T Communications in Kentucky Public Service Commission Administrative Case No. 323, an investigation into permitting intraLATA toll competition. The testimony related to the validity of a customer survey submitted by AT&T in the proceeding.

East Kentucky Power Cooperative, Inc. - Engagement Director for a project which reviewed its load research program, made conclusions regarding the statistical validity of its previous efforts, and provided recommendations for future studies.

OTHER BUSINESS AND PROFESSIONAL EXPERIENCE

President, Utility and Economic Consulting, Inc., February 1989-Present. The company provides utility, regulatory, management, and economic consulting services. The consulting engagements described above were performed since the formation of UEC.

Deputy Executive Director for the Public Service Commission of Kentucky, 1986-January 1989. Primary responsibilities include the following.

- Managing staff, through their directors, to ensure that cases were processed according to operating procedures and in a timely fashion.
- Working directly with the staff to develop regulatory policy positions for presentation to the Commissioners. One of the key policies developed involved a revised regulatory scheme to promote a more competitive environment for the delivery of natural gas.
- Preparation of a proposed comprehensive planning regulation for the Commission. The regulation, which is applicable to the state's electric utilities, specified filing requirements for the reporting of load forecasts and resource information including demand-side management and supply-side options.

Director, Division of Research, for the Public Service Commission of Kentucky, 1983-1986. Primary responsibilities include the following.

- Managing and providing direction for the economic research staff. The staff provided economic advice to the Commission concerning regulatory issues arising in the electric, telephone, gas, and water industries. This included making case assignments, reviewing the economists' work, preparing budgets, as well as other administrative duties.
- Participating in cases before the Commission. This involved working with other staff personnel, reviewing utility filings, preparing data requests and cross-examination of witnesses, advising the Commission, and preparing orders as instructed by the Commission.



Resume of Mr. Chuck Buechel

- Load Management Coordinator. This position required coordinating, leading discussions, and making presentations to two statewide load management committees - a steering and a technical committee. The committees were composed of Commission staff, utility executives, and consumer representatives. The committees met quarterly to discuss and review the implementation of time-of-day rates for large commercial and industrial customers. Various other load management techniques were also reviewed and considered.
- Project Coordinator, Case No. 8666 - An Investigation Into Alternative Load Forecasting Methods and Planning Considerations for the Efficient Provision of Electric Generation and Transmission Facilities. In this docket, the Commission hired the services of a consultant to perform the following tasks: review the forecasting methods of the state's electric utilities; provide alternative forecasts; examine the potential benefits of conservation; evaluate alternative construction scenarios assuming the formation of a statewide power pool; and estimate the financial impact of the alternative scenarios. Primary duties were to be the intermediary between the consultants, Commission, the utilities, and other parties; to conduct review sessions on the consultant's work; and to evaluate the draft and final reports produced by the consultant.
- Project Officer for comprehensive management audits of Kentucky Utilities Company and South Central Bell Telephone Company. The Commission instituted a management audit program, which involved hiring consultants to review the management practices of all the State's major utility companies. The role of the project officer was to ensure satisfactory and timely performance of the proposed work; to attend selected interviews; and to critically review and evaluate analytical results.

Public Utility Economist for the Public Service Commission of Kentucky, 1979-1983. Primary responsibilities included:

- assisting the Commission in implementing procedures and policies to meet the federal mandates of the Public Utility Regulatory Policies Act (PURPA). This involved performing cost-of-service studies, developing alternative rate design proposals, and testifying on the ratemaking standards in Section 111 of PURPA;
- developing the Commission's regulations pertaining to cogeneration.

Assistant Professor, Department of Economics, for Morehead State University, 1976-1979. Primary teaching responsibilities were investments, introduction to economics, and intermediate macroeconomics. Other teaching responsibilities included managerial economics and computer programming in BASIC. Committee work included membership on the Southern Association Self-Study and the Committee on Student Life.



Resume of Mr. Chuck Buechel

EDUCATION

B.S. in Economics with Honors, University of Kentucky.

M.A. in Economics, University of Kentucky.

Ph.D. Candidate, University of Kentucky.



RESUME OF MR. MARK D. FOWLER

SUMMARY OF QUALIFICATIONS

Mr. Fowler has over 25 years experience in the electric, gas and telephone industry as both a management consultant and employee. His functional expertise in the electric industry includes reliability, emergency restoration, customer service and support services. He has recently worked with a large Midwestern investor-owned electric utility to develop an Emergency Response Plan and Organization. Mr. Fowler was formerly a senior consultant for the utility consulting practices of RCG/Hagler, Bailey, Inc., and Impell Pacific, Inc. He has performed numerous consulting assignments in the utility industry related to reliability, emergency response, operational improvements as well as other topics in the electric industry. He has a B.S. and an MBA from the University of Tulsa with emphasis in Operations Research.

Emergency Restoration Consulting Experience

New Hampshire electric utilities - Lead consultant on a review of the response of four New Hampshire electric utilities and two telephone utilities to the ice storms of 2009. This extensive review included the emergency response organizations, emergency response preparations, procedures and processes, communications, actions and actual response. It involved not only utilities but state and local government officials.

Midwestern utility - Lead Consultant on an assignment to develop an Emergency Response Organization and Emergency Response Plan at a large Midwestern utility. This two year multi phase assignment included initially assisting the company in responding to audit interrogatories and then helping the company to establish a new emergency response plan and organize a new emergency response organization. This project involved extensive communication and data gathering with other utilities as to their emergency operations.

Commonwealth Edison - Lead Consultant on an audit of the Emergency Response of Commonwealth Edison to the storms of 2006. Mr. Fowler reviewed the OMS and SCADA systems and usage, the organization, community communication and customer service responses.

Consolidated Edison - Lead Consultant on a review of a series of major outages which impacted Consolidated Edison in substations, underground cables and transformers. These outages were ultimately found to be specifically unrelated but pointed to systemic issues in repair and replacement.

Indianapolis Power and Light - Lead consultant on a three year review of the emergency response performance of Indianapolis Power and Light (IP&L). Initiated as an audit of



Resume of Mr. Mark Fowler

IP&L response to a series of tornados, the project continued to monitor the performance of IP&L as well as their implementation of audit recommendations over a three year period.

Emergency Response - Reviewed emergency response as a part of broader audits and projects including Central Hudson (underway 2010), Belize Electric Limited, Guam Power, Aqualetra (Curacao owned electric utility)

Selected Utility Management Audit Experience

Niagara Mohawk - Lead consultant for work management on the management audit of Niagara Mohawk for the New York PSC. (2009)

Ohio PUC - Lead consultant for the state-wide review of the credit and collection practices of the four Ohio gas utilities for the Ohio PUC. (2009)

Southern Connecticut Gas - Lead consultant in a review of Southern Connecticut Gas for the Connecticut DPUC. Responsible for review of the non-regulated charges to the operating company and for the review of the support-services and operations functions including work planning, materials, purchasing, MIS, and facilities.

Potomac Edison - Consultant for a management and operations audit of the manpower planning, productivity, and staffing functions of Potomac Edison for the Maryland PSC. Focused on all areas, including contractors, distribution and plant fuel procurement.

Belize Electric - Lead Consultant in an 18-month process reengineering and organizational review of Belize Electric. The review addressed organizational realignment and process improvements in new service installation, emergency preparation, materials management, distribution, and computer systems.

South Jersey Gas - Conducted an operational improvement project for South Jersey Gas which examined all aspects of the field operations and dispatch.

Yankee Gas Services - Consultant in a management review of Yankee Gas Services for the Connecticut DPUC. Areas included construction, maintenance and support services.

Central Hudson Gas & Electric Corporation - Consultant on management audit of Central Hudson Gas & Electric Corporation for the New York PSC. Areas of review included corporate budgeting and the management of contractors. (1990s)

Southern Connecticut Gas - Lead consultant for support services on the management audit of Southern Connecticut Gas for the Connecticut DPUC. (2009)



Resume of Mr. Mark Fowler

Southern California Gas - Consultant on two management reviews of Southern California Gas performed for the California PUC. Areas of review included affiliate transactions and relationships, gas transmission and distribution, engineering, and construction.

Connecticut Natural Gas - Lead consultant for support services for Connecticut Natural Gas in a comprehensive management review for the Connecticut DPUC. Review included charges from the parent company to subsidiary operations.

California ISO - Lead Consultant on a FERC mandated audit of the California ISO following the California Energy Crisis.

Pacific Gas & Electric - Directed a review of the affiliate transaction compliance of Pacific Gas & Electric.

SEMPRA - Conducted two affiliate reviews of SEMPR in which the focus was on the gas trading, purchasing, storage, transmission and storage operations of Southern California Gas, San Diego Gas & Electric and their affiliates.

Potomac Electric Power Company - Consultant on a management audit of the fuel procurement activities of Potomac Electric Power Company for the Maryland PSC. Areas of review included fuel inventory management, gas and oil procurement, transportation, and storage.

OTHER UTILITY CONSULTING EXPERIENCE

Pacific Gas & Electric - Reviewed the gas operations of Pacific Gas & Electric. This review included intrastate pipeline operations, scheduling, systems used for scheduling gas shipments, trades and storage arrangements.

Colorado Springs Utilities - Lead consultant for analyzing the operations of materials management groups in the electric T&D, generation, water and gas departments of Colorado Springs Utilities.

WORK EXPERIENCE

NorthStar Consulting Group (2008 to present)

Independent Consultant (1990-2000, 2001-2008)

Director Business Development-North America-Hansen Industries, Melbourne, Australia (2000-2001)

Senior Consultant RCG/Hagler Bailly (1989-1990)



Resume of Mr. Mark Fowler

Senior Consultant Impell Pacific (1986-1989)

Senior Financial Manager- Plains Electric Generation and Transmission (1985-1986)

Director Gas Trading and Distribution- Western US- Buckeye Gas Products (1979-1985)

OTHER RELEVANT EXPERIENCE

Formally trained in Incident Command as part of Wildland Firefighter Training

Wilderness First Responder (WFR)

EDUCATION

MBA, The University of Tulsa

BS, The University of Tulsa

Mr. Fowler is a member of the International Society of Arborist and is currently working towards becoming certified via the ISA.

Mr. Fowler has been formally trained in the Incident Command System (ICS) as part of Wildland Firefighter training.



RESUME OF MS. JENNIFER CUMMINS

BACKGROUND

Jennifer has over 14 years experience as a financial and operational manager. Her education lends itself to analytical and meticulous care in coordination of projects, large and small. Jennifer has a Bachelor's Degree in Computer Science and Programming as well as an Associate's Degree in Business Administration. She has a diverse background which includes achieving a Certification as a Paralegal and as a Certified Grant Writer. These two certifications and related experience have given her the skill set for extensive research capabilities, critical thinking, coordination and scheduling, as well as the ability to meet deadlines in an appropriate fashion.

SELECTED WORK EXPERIENCE

- *Project Administrator* on multiple Vantage projects, including Assessment of KU/LGE Environmental compliance Plan, Delmarva Power & Light Energy Auction, and Duquesne Light Company Energy Auction.
- *Project Administrator* - for Quality Systems, Inc. - a complete rebuild was conducted in house which consisted of coordination and execution of replacement of 100 station computers, 3 main security servers (which included web servers and email servers), and upgrading all software to meet the needs of the business. This project was accomplished while maintaining all clients (over 2000) connections with their security systems and appropriate emergency systems. Jennifer was the leader in this project as the administrator and the implementer for all system upgrades, replacements, etc. In coordination with this massive upgrade, she conducted a series of classes to instruct users on the new software and systems that were implemented.
- *Computer Programmer, Web Site Developer and Data Base Manager* - for Remax and Brett/Robinson, Inc. - responsible for creating an effective interface program for both companies that allowed all database information to be easily shared between a Linux based system and a Windows environment. She also developed, created, and maintained the websites (each of over 20 pages and multiple links) and databases for these two companies.
- *Chief Financial Officer* - was responsible for all financial transactions for Remax (3 locally owned offices) and managing over 175 agents with over 8,000 listings and 10 office/support staff.



Resume of Ms. Jennifer Cummins

- *Office Management* - has managed several offices for various real estate companies, title companies and private construction/trade companies

EDUCATION

- University of Arizona, Tucson, Bachelor's Degree - Computer Science - 1994
- University of Arizona, Tucson and Florida State University - Associate's Degree - Business Administration - 1994
- University of Phoenix - Paralegal Certification - 2005
- Education to Go, Grant Consulting Division - Grant Writer Certification - 2010



VIII. ATTACHMENTS

Please find attached:

- Approved Registration with North Dakota Secretary of State
- Approved Application for Vendor Database with North Dakota Procurement Department



State of North Dakota
SECRETARY OF STATE



**CERTIFICATE OF AUTHORITY
OF**

VANTAGE ENERGY CONSULTING LLC
Secretary of State ID#: 29,369,500

The undersigned, as Secretary of State of the State of North Dakota, hereby certifies that an application of

VANTAGE ENERGY CONSULTING LLC

for a Certificate of Authority to transact business in this State, duly signed and executed as required by North Dakota statutes governing a FOREIGN LIMITED LIABILITY COMPANY, have been received in this office and are found to conform to law.

ACCORDINGLY the undersigned, as such Secretary of State, and by virtue of the authority vested in him by law, hereby issues this Certificate of Authority to

VANTAGE ENERGY CONSULTING LLC

to transact business in this State under the name of

VANTAGE ENERGY CONSULTING LLC

Issued: July 18, 2011

A handwritten signature in black ink, appearing to read "Alvin A. Jaeger".

Alvin A. Jaeger
Secretary of State



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

From: Haman, Beverly A. [bhaman@nd.gov]
Sent: Thursday, July 21, 2011 10:42 AM
To: wdrabinski@vantageenergyconsulting.com
Subject: ND Bidder List Application - Complete
Attachments: north-dakota-spo-online-instructions.pdf

Vantage Energy Consulting LLC has just been added to the North Dakota Bidder List. Please retain a copy of this email for future reference.

Your Bidder Profile information is listed below:

Name: VANTAGE ENERGY CONSULTING LLC
Vendor No: 0000143804

If any of the company, contact or commodity information is incorrect, please submit a [Change Form](#).

Bid Contact(s)

Name	Address	Telephone	Tel. Ext.	Fax	Fax Ext.	Email
WALTER P DRABINSKI	21460 OVERSEAS HWY CUDJOE KEY FL 33042-4114	305-744-3440		305-744-3450		wdrabinski@vantageenergyconsulting.com

Registered Commodity Codes

Code	Sub-Class	Description
918	97	Utilities: Gas, Water, Electric Consulting

If any of the company, contact or commodity information is incorrect, please submit a [Change Form](#).

Search for State of North Dakota bid opportunities

Whether you are looking for an invitation to bid (ITD), request for information (RFI), request for proposal (RFP), request for faxed quote (RFQ), or any amendments to previous issued solicitations, there is a one-stop destination to view State of North Dakota solicitation information – SPO Online. [Click here to visit SPO Online now.](#)

Solicitation Notice Information

Solicitation notices will be sent from the North Dakota State Procurement Office email account, infospo@nd.gov. Often, email addresses can be blocked by firewall or spam filters. Please take the necessary steps with your email provider to ensure you don't miss a bid opportunity.



**Proposal to North Dakota PSC Advance Determination of Prudence Application
Montana-Dakota Utilities Co. & Otter Tail Power Co. RFP # 408.06.11.003**

Keep in mind, placement on the state bidder list does not guarantee a vendor will receive notice of every solicitation over the amount established for small purchases (North Dakota Century Code <http://www.legis.nd.gov/information/acdata/pdf/4-12-05.pdf>).

Maintaining your Bidder Profile Online (Optional)

You may maintain your Bidder Information via SPO Online, the State of North Dakota's online solicitation database and bidder list. Attached are instructions to create a user ID and password and request online authorization. Be sure to keep your login information handy. You may use this online system to maintain your company's Bid Profile such as Bid contact person, address, phone & fax number, email address as well as removing/adding commodity codes. If you prefer to submit changes manually, use the [Change Form](#) link to access the appropriate state form to notify this office of any changes to your registration.

If you have questions regarding your placement on the bidder list or using the SPO Online system, please contact the State Procurement Office at 701-328-2683 or email us at infospo@nd.gov.

Regards,

Bidder Registration
ND State Procurement Office
(701) 328-2683

