

**EXHIBIT NO. \_\_\_(JAH-2)**  
**DOCKET NO. UE-06 \_\_\_/UG-06 \_\_\_**  
**2006 PSE GENERAL RATE CASE**  
**WITNESS: JAMES A. HEIDELL**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY, INC.,**

**Respondent.**

**Docket No. UE-06 \_\_\_**  
**Docket No. UG-06 \_\_\_**

**FIRST EXHIBIT (PROFESSIONAL QUALIFICATIONS) TO THE  
PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF  
JAMES A. HEIDELL  
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**FEBRUARY 15, 2006**

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**PUGET SOUND ENERGY, INC.**

**FIRST EXHIBIT (PROFESSIONAL QUALIFICATIONS) TO THE  
PREFILED DIRECT TESTIMONY OF JAMES A. HEIDELL**

**Q. Please state your name and business address.**

A. My name is James (Jim) A. Heidell. My business address is 390 Interlocken Crescent, Suite 410, Broomfield, CO 80021, USA

**Q. By whom are you employed and in what capacity?**

A. I am employed by PA Consulting Group (“PA Consulting”) as a Managing Consultant – Global Energy Practice.

**Q. What are your duties in that capacity?**

A. I provide consulting services with respect to the following: (i) litigation support for retail utilities, (ii) analysis of generation resource acquisitions, (iii) valuation of electric generation assets, and (iv) analysis of wholesale energy markets in the United States.

**Q. Briefly describe your education.**

A. I hold a Bachelor of Science in Engineering for Civil Engineering from Tufts University. I received a Masters of Science in Engineering Economic Systems

1 from Stanford University and a Masters of Business Administration in Finance  
2 and Accounting from the University of Washington.

3 **Q. Briefly describe your other relevant employment experience.**

4 A. Prior to joining PA Consulting, I was employed by Puget Sound Energy, Inc.  
5 (“PSE”), as Director of Financial Planning and Director of Federal & State  
6 Regulation.

7 Prior to my employment at PSE, I was employed by SRC, a utility consulting  
8 firm. At SRC, I prepared assessments of energy and water conservation potential,  
9 modeled energy use in commercial buildings, performed statistical analysis  
10 associated with large utility customer data sets, and analyzed electro-technologies  
11 for industrial applications

12 **Q. Have you previously testified before a regulatory commissions?**

13 A. Yes, I have served as an expert witness in proceedings before many regulatory  
14 bodies, including the Washington Utilities and Transportation Commission. The  
15 details of my participation in regulatory proceedings are provided in more detail  
16 in Attachment A to this Exhibit No. \_\_\_(JAH-2).

17 [BA060420008]

***Personal Profile*****Name**

James A. Heidell

**Present Position**

Managing Consultant – Global Energy Practice

Mr. Heidell has over 24 years experience in the energy and utility business. His area of specialization at PA includes: litigation support for retail utilities, the analysis of generation resource acquisitions, valuation of electric generation assets, and the analysis of wholesale energy markets in the United States. Mr. Heidell has extensive experience in financial analysis of major generation investments to support restructuring, financing and investment decisions. He is also experienced in regulatory policy, cost-of-service, pricing, performance based regulatory mechanisms, and service quality. Mr. Heidell has prepared expert reports for civil litigation and provided testimony in regulatory proceedings.

**PA Experience****Business Valuation of Merchant Energy Companies**

Mr. Heidell led a PA team that valued the worldwide generation portfolio of NRG a major merchant energy company that went into bankruptcy. The work on behalf of the creditors, valued the company, developed an analysis of cash flows, and advised the creditors on the viability of the debtor's plan of reorganization. Mr. Heidell advised creditors on the strategic plan with regards to which assets and markets the Company should shed and which ones should be retained.

Mr. Heidell provided asset valuations to creditors for a number of different merchant generation projects in the U.S. that were either in bankruptcy, or in the process of consensual transfer to the creditors. These projects included Brazos Valley, Granite Ridge, Lake Road, Audrain, and Kendall. The valuation work incorporated market modeling to develop short and long-term forecasts of gross margins and cash flows, evaluation of contracts, and due diligence on all aspects of the generation company's financials.

Mr. Heidell led the market analysis and valuation of the Wolf Hollow generation project to support the financing of the merchant power plant as well as obtaining credit ratings from Moody's and Standard & Poor's.

Mr. Heidell provides ongoing advisory services to equity and debt funds with regards to valuation of generation assets to support equity and distressed debt acquisition and sales.

Mr. Heidell has valued multiple wholesale generation companies to support billions of dollars of corporate credit agreements. Valuation work involved development of cash flows as a going concern and from a third party basis at the enterprise level. The analysis involved forecasting energy markets, analysis of fuel contracts and off-take agreements, and review of non-fuel O&M and capital expenditures.

#### **Analysis of Wholesale Energy Markets**

Mr. Heidell has worked on modeling energy prices using PROSYM and PA proprietary volatility models to support the financing of generation assets and identification of new generation markets for a number of clients including Edison Mission Energy and KeySpan. He has also developed SAS models to analyze the market value of power contracts for Exelon. The work for Exelon was used to support a bond financing. In a separate transaction involving bond reinsurance, Mr. Heidell modeled distributions of prices to identify 95% and 97.5% probabilities of repayment.

Mr. Heidell has worked with numerous retail electric utilities to develop least cost generation resource acquisition strategies. This area of work involved analysis of wholesale markets and identification of least cost alternative between build versus buy decisions. Mr. Heidell has developed probabilistic distributions of future market electric prices to identify how resource acquisition strategies are impacted by uncertainty.

Mr. Heidell has developed valuations of generation assets to support development of bids for the acquisition of major generation portfolios. In two separate transactions the valuation of assets involved developing distributions of asset values as well as valuing POLR load and merchant generation contracts.

Mr. Heidell led an evaluation of wholesale markets for MDU to support an investigation into the feasibility of building a new lignite coal plant to be included in utility rate base.

Mr. Heidell performed an analysis the Alberta Energy Markets to develop benchmark prices for evaluation of bids as part of the sale of the rights to generation assets.

#### **Natural Gas LDC Due Diligence**

Mr. Heidell conducted due diligence of the Mountaineer Gas local distribution company to support bank financing of the acquisition.

**Risk and Other Modeling**

Mr. Heidell developed a model to analyze quarterly earnings risk associated with weather variation for a U.S. retail utility. The model incorporated correlations between weather, load, and wholesale energy prices to identify changes in retail revenue and associated changes in cost based upon historic temperature distributions.

Mr. Heidell developed a value at risk model for a U.S. retail utility to guide risk management decisions about the level of surplus power sales to target for long-term versus short-term positions. The model develops target long-term positions based upon risk preferences, earnings targets, and a combination of historical and simulated distributions of wholesale gas and electric prices.

Mr. Heidell was part of a team to develop the market value of gas in the German markets. The modeling determined the value of gas based upon the cost of the use of alternative fuels. The analysis was used as part of contract negotiations to determine the price of natural gas.

Mr. Heidell reviewed the Alberta Electric System Operator load forecasting methodology. The review examined the analytic approach; bench marked forecasting techniques, and made recommendations for enhancements.

**Litigation Support**

Mr. Heidell developed avoided costs and an economic analysis to support a utility litigating with a wind developer seeking to obtain a long-term power contract under PURPA.

Mr. Heidell reviewed the prudence of actions of a public power entity regarding the appropriateness of financial and ratemaking policies as part of litigation related to a power sales contract.

Mr. Heidell benchmarked management performance of a major utility to support management in a shareholder lawsuit.

Mr. Heidell filed testimony on behalf of Hydro One addressing the issue of rate mitigation as part of the transition from the vertically integrated market structure in Ontario.

Mr. Heidell prepared cost-of-service and rate design testimony for PSE's 2001 and 2004 electric and natural gas rate cases. Mr. Heidell developed a gas and electric cost of service model used to support regulatory filings.

Mr. Heidell provided complex financial modeling support in a federal tax case to identify levels of losses associated with utility power contracts that were not fungible.

Mr. Heidell has supported NRG in litigation pertaining to breach of contract claims. The analysis involves examining the value of certain merchant power opportunities in New York state through the development of market assessments and development of a financial analysis.

Mr. Heidell supported Firestone in the preparation of insurance claims for recovery of losses related to major injury claims associated with recalled tires. The work involved development of databases and analysis of claim rates.

Mr. Heidell was part of a team analyzing emissions from coal plants over the past two decades to defend a client against Federal prosecution in New Source Review litigation.

### **Financial Management & Analysis**

Mr. Heidell served as the interim Finance Manager for a New England gas fired combined cycle plant. Responsibilities included financial reporting, developing an annual budget, and preparing long run financial projections for a project to be turned back to the creditors.

Mr. Heidell developed an analysis of the economics of the Dallas Fort Worth airport pursuing an option to purchase the natural gas and electric distribution systems used to deliver energy to the airport facilities. The analysis considered the economics with regards to the airport pursuing different organizational structures under Texas law for delivering and selling electricity.

### **Pre PA Experience**

Mr. Heidell worked in the energy business for eighteen years prior to joining PA. Prior to joining PA he worked at Puget Sound Energy, an investor-owned electric / natural gas utility in Washington state. He held multiple positions including Director of Financial Planning and Director of Federal & State Regulation. Prior to working at Puget Sound Energy, he was an energy consultant providing services to government agencies, investor owned utilities, and public utilities. Mr. Heidell has conducted numerous financial studies related to the purchase and sale of power plants, NUG contracts, and natural gas generation supply contracts. He has also worked on the valuation of utility distribution companies and determined the profitability associated with adding and disposing of electric and natural gas distribution service areas. Mr. Heidell has performed embedded and marginal cost of service studies and developed pricing for regulated and market-based electric services. Mr. Heidell has presented expert

testimony on cost-of-service and pricing.

Mr. Heidell was the manager of energy economics at a SRC, a utility consulting firm. Mr. Heidell prepared assessments of energy and water conservation potential, modeled energy use in commercial buildings, performed statistical analysis associated with large utility customer data sets, and analyzed electro-technologies for industrial applications.

**Education**

CFA - Chartered Financial Analyst, 1997

University of Washington, MBA, Finance and Accounting, 1989

Stanford University, MS, Engineering Economic Systems, 1982.

Tufts University, BSE, Civil Engineering, 1979

**Societies**

Association of Investment Management Research