Gary A. Dodge, #0897
Hatch, James & Dodge
10 West Broadway, Suite 400
Salt Lake City, UT 84101
Telephone: 801-363-6363
Facsimile: 801-363-6666
Email: gdodge@hjdlaw.com

Attorneys for UAE Intervention Group

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations	**Docket No. 10-035-124**

PREFILED DIRECT TESTIMONY OF JEFF J. FISHMAN

[REVENUE REQUIREMENT]

The UAE Intervention Group (UAE) hereby submits the Prefiled Direct Testimony of Jeff J. Fishman on revenue requirement issues.

DATED this 26th day of May, 2011.

/s/_____
Gary A. Dodge,
Attorney for UAE

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by email this 26th day of May, 2011, on the following:

Datareqeust@pacificorp.com

Mark C. Moench
Yvonne R. Hogle
Daniel E. Solander
Rocky Mountain Power
201 South Main Street, Suite 2300
Salt Lake City, Utah 84111
mark.moench@pacificorp.com
yvonne.hogle@pacificorp.com
daniel.solander@pacificorp.com

Paul J. Hickey
Hickey & Evans, LLP
P.O. Box 467
1800 Carey Avenue, Suite 700
Cheyenne, Wyoming 82003-0467
phickey@hickeyevans.com

Katherine A. McDowell
McDowell & Rackner, P.C.
520 SW 6th Avenue, Suite 830
Portland, OR 97204
Katherine@mcd-law.com

Patricia Schmid
Assistant Attorneys General
500 Heber M. Wells Building
160 East 300 South
Salt Lake City, UT 84111
pschmid@utah.gov

Paul Proctor
Assistant Attorney General
160 East 300 South, 5th Floor
Salt Lake City, UT 84111
pproctor@utah.gov

F. Robert Reeder
William J. Evans
Vicki M. Baldwin
Parsons Behle & Latimer
One Utah Center, Suite 1800
201 S Main St.
Salt Lake City, UT 84111
BobReeder@pblutah.com
BEvans@pblutah.com
VBaldwin@pblutah.com

Holly Rachel Smith, Esq.
Hitt Business Center
3803 Rectortown Road
Marshall, VA 20115
holly@raysmithlaw.com

Ryan L. Kelly, #9455
Kelly & Bramwell, P.C.
11576 South State St. Bldg. 1002
Draper, UT 84020
ryan@kellybramwell.com

Peter J. Mattheis
Eric J. Lacey
Brickfield, Burchette, Ritts & Stone, P.C.
1025 Thomas Jefferson Street, N.W.
800 West Tower
Washington, D.C. 20007
pjm@bbrslaw.com
elacey@bbrslaw.com

Gerald H. Kinghorn
Jeremy R. Cook
Parsons Kinghorn Harris, P.C.
111 East Broadway, 11th Floor
Salt Lake City, UT 84111
ghk@pkhlawyers.com
jrc@pkhlawyers.com

Kurt J. Boehm, Esq.
BOEHM, KURTZ & LOWRY
36 East Seventh Street, Suite 1510
Cincinnati, Ohio 45202
kboehm@BKLlawfirm.com

Sharon M. Bertelsen
Ballard Spahr LLP
One Utah Center, Suite 800
201 South Main Street
Salt Lake City, Utah 84111
bertelsens@ballardspahr.com

Mike Legge
US Magnesium LLC
238 North 2200 West
Salt Lake City, Utah 84106
mlegge@usmagnesium.com

Roger Swenson
US Magnesium LLC
238 North 2200 West
Salt Lake City, UT 84114-6751
roger.swenson@prodigy.net

Stephen J. Baron
J. Kennedy & Associates
570 Colonial Park Drive, Suite 305
Roswell, GA 30075
sbaron@jkenn.com

Captain Shayla L. McNeill
Ms. Karen S. White
AFLOA/JACL-ULFSC
139 Barnes Ave, Suite 1
Tyndall AFB, FL 32403
Shayla.mcneill@tyndall.af.mil
Karen.white@tyndall.af.mil

Sophie Hayes
Sarah Wright
Utah Clean Energy
1014 2nd Avenue
Salt Lake City, UT 84111
sophie@utahcleanenergy.org
sarah@utahcleanenergy.org

Stephen F. Mecham
Callister Nebeker & McCullough
10 East South Temple Suite 900
Salt Lake City, Utah 84133
sfmecham@cnmlaw.com

Rob Dubuc
Western Resource Advocates
150 South 600 East, Suite 2A
Salt Lake City, UT 84102
rdubuc@westernresources.org

Steven S. Michel
Western Resource Advocates
409 E. Palace Ave. Unit 2
Santa Fe, NM 87501
smichel@westernresources.org

Nancy Kelly
Western Resource Advocates
9463 N. Swallow Rd.
Pocatello, ID 83201
nkelly@westernresources.org

Gloria D. Smith
Sierra Club
85 Second Street, Second floor
San Francisco, CA 94105
gloria.smith@sierraclub.org

Bruce Plenk
Law Office of Bruce Plenk
2958 N St Augustine Pl
Tucson, AZ 85712
bplenk@igc.org

Janee Briesemeister
AARP
98 San Jacinto Blvd. Ste. 750
Austin, TX 78701
jbriesemeister@aarp.org

Alex M. Duarte
Qwest Law Department
310 SW Park Avenue, 11th Floor
Portland, OR 97205
Alex.Duarte@qwest.com

Sonya L. Martinez
Salt Lake Community Action Program
764 South 200 West
Salt Lake City, Utah 84101
smartinez@slcap.org

Betsy Wolf
Salt Lake Community Action Program
764 South 200 West
Salt Lake City, Utah 84101
bwolf@slcap.org

Randy N. Parker
Leland Hogan
Utah Farm Bureau Federation
9865 South State Street
Sandy, Utah 84070
rparker@fbfs.com
leland.hogan@fbfs.com

Arthur F. Sandack (Bar No. 2854)
8 East Broadway, Ste 411
Salt Lake City, Utah 84111
801-595-1300 office
asandack@msn.com

/s/ _____

BEFORE

THE PUBLIC SERVICE COMMISSION OF UTAH

Direct Testimony of Jeff J. Fishman

on behalf of

UAE

Docket No. 10-035-124

[Revenue Requirement]

May 26, 2011

DIRECT TESTIMONY OF JEFF J. FISHMAN

INTRODUCTION

Q. Please state your name and business address.

A. My name is Jeff J. Fishman. My business address is 215 South State Street, Suite 200, Salt Lake City, Utah, 84111.

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

A. I am the Director of Gas Services in the consulting firm of Energy Strategies, LLC. In my capacity as Director of Gas Services, I am responsible for managing certain natural gas-related needs of the firm's Clients, including gas supply management, gas market development, risk management services, and project development support.

Q. On whose behalf are you testifying in this proceeding?

A. My testimony is being sponsored by the Utah Association of Energy Users Intervention Group ("UAE").

Q. Please describe your professional experience and qualifications.

A. I have over thirty years of experience in the natural gas industry. I have worked for or managed companies involved in gas gathering and transportation and gas marketing services, and provided consulting services to gas producers and industrial and utility consumers. A more detailed description of my experience and qualifications is contained in Attachment A, UAE Exhibit RR 3.1.

Q. Have you previously testified before this Commission?

A. No.

Q. Have you testified previously before any other state utility regulatory commissions?

A. Yes. I have testified before the Colorado Public Utilities Commission.

PURPOSE OF TESTIMONY AND PRIMARY CONCLUSIONS

Q. What is the purpose of your testimony in this proceeding?

A. The primary purpose of my testimony is to provide a review of the practices undertaken by some western regional natural gas and electric utilities to mitigate natural gas price risk through hedging programs. In order to provide some background for this purpose, I will present an overview of the natural gas market and certain components of gas price risk management strategies and tools. I will also summarize some utility natural gas hedging programs and present a range of strategies undertaken by these utilities to mitigate gas price risk.

Q. Please summarize your primary conclusions.

Gas and electric utilities routinely construct natural gas price risk management strategies that include the use of various physical gas purchase contract terms, gas storage, and financial hedges to mitigate the risk of price increases. The use of the financial futures and options marketplace tools is common practice for virtually all major utility natural gas consumers. My review and assessment of regional utility gas hedging strategies indicate that utility

natural gas hedging plans routinely include financial hedging to fix the price or range of prices for various portions their gas supply portfolio. The hedging plans that I reviewed reported hedging of approximately 29% to 77% of the peak natural gas demand for the forward season or annual period, with an average of about 52% of the volumes hedged. These results are based on published documents, including Integrated Resource Plans, which disclose actual hedging plan details. Of the 17 utilities that I reviewed, 15 made reference to the use of hedging activities, and 9 provided references to specific quantities or percentages included in current or recent financial gas hedging plans.

GENERAL OVERVIEW

Q. Please provide a brief overview of the current natural gas marketplace.

A. U.S. natural gas markets have undergone a significant transformation in the last 30 years. After decades of strict regulation, the natural gas industry was substantially transformed during the 1980's under FERC Orders 436 and 636 and is much more open to competition and choice. The nature of the current natural gas market is similar to other competitive commodity markets and the price of natural gas is largely a function of the supply and demand of the product.

Fluctuations in gas prices and production levels are a normal response of the competitive and liquid gas market. While the price of the natural gas commodity fluctuates, it is this inherent change that provides

the signals and incentives to both suppliers and consumers to ensure a constant move towards supply and demand equality.

Another outgrowth of the new competitive market for natural gas was the need for futures and options trading to manage the price uncertainties in a free market environment. Price uncertainty creates both risks and opportunities. Futures and options markets provide a forum for commercial interests in a commodity to hedge against price risk by transferring that risk to those more willing and able to bear it, or to those commercial interests with inverse risk profiles. In addition, an active futures market provides a readily available and widely accepted reference price for the underlying commodity, thereby improving the efficiency of the overall market.

Q. Please provide a brief description of natural gas price hedging.

A. Energy markets operate in an environment exposed to a variety of risks that contribute to the volatility of the prices of natural gas. The desire to control this price variability within a production or consumption portfolio has prompted the development of valuation and risk management methods for energy industry participants.

Hedging is a risk mitigating activity designed to secure a known price for deliveries of a specific quantity of a commodity at a defined future point in time.

By hedging, gas consumers enter into a transaction that fixes a portion of their future gas needs at a defined, set price. A hedge is essentially a forward purchase that locks in gas prices over a defined period. A well planned and

executed hedging strategy is not designed to beat the market, but more to smooth out market volatility over time and limit upside risk. A hedge program provides a high degree of certainty going forward about the cost of a portion of overall energy costs for the consumer. It is no guarantee of net savings, but rather considered as insurance against unforeseen price increases, with the expected costs and resulting value of such insurance.

Q. Why do some natural gas consumers use hedging programs?

A. There are a variety of reasons why consumers hedge natural gas prices. A degree of price risk can be managed by hedging, or fixing a price, providing price certainty and protection against unforeseen market price increases. Fixing gas prices can limit the otherwise variable impacts on cash flows, budgets, and plans, and protect a specific expense fluctuation related to an operating budget or production costs. Another objective may be opportunistic, where a reduction in market pricing may provide the chance to fix gas prices at a level considered attractive, especially when future months and years may be less expensive than the current market. Assuming a level of annual or seasonal price escalation, hedging to secure these future prices may prove to be a discount.

Q. How does a natural gas consumer develop a hedging strategy?

A. In order to establish an appropriate hedging strategy, a consumer risk profile must be defined. This risk profile is based on an appropriate level of risk for the consumer, the contribution of the cost of energy to the bottom line, and the

financial goals of energy price risk management. The financial goals may be based on the budget, earnings targets, other costs within an energy portfolio, or the relative impacts of fixing prices and then watching prices fall, or not fixing prices and watching those prices increase.

A strategic hedging program should be based on the needs and objectives of the consumer. An initial evaluation should determine the consumer's risk profile, as well as the program's desired outcome. Once the risk profile and desired outcomes are established, a suitable strategy can be developed to meet these objectives and appropriately limit market risk. Consistent with that strategy, hedges can be filled according to what the market allows within the guidelines of the strategy and plan. When a hedge order is filled, the market price is locked in at that point, and a confirmation is issued with the price, volume, and term of the hedge. Gas is paid for when it is actually delivered during the month hedged.

The hedging strategy typically includes a layering of pre-determined volume hedges over time. This type of risk management strategy routinely includes layers of partial volume hedged positions over a one to three year (seasonal or annual) period. A comprehensive gas price risk management strategy must include a system for monitoring and reporting all hedged positions. The reporting system should address communications between the consumer, supply manager, and financial counterparty.

Q. What tools are available in the financial marketplace to hedge natural gas price?

A. The natural gas financial market is a liquid one, giving participants the ability to enter and exit positions readily without disrupting prices in the broader market. Without futures, market participants would be required to negotiate fixed prices or formulas for physical contract deliveries or accept indexed based pricing. With futures, gas buyers wishing to protect against volatility in spot gas prices have a number of alternatives open to them. The futures market provides flexibility in forward planning. This flexibility is further enhanced by the options market which provides participants with, among other things, the ability to set price floors or ceilings, and hedge against adverse price movements while retaining the ability to participate in favorable ones. The commodity futures marketplace offers a variety of tools, including futures contracts, long position hedges, call and put options, price collars, and strip trading.

Q. Describe how futures contracts are used to hedge natural gas prices.

A. In a commodity futures contract, the buyer and seller agree to make or take a cash payment for a physical commodity at an agreed upon price with the actual delivery and payment to take place at a set date in the future.

Q. What is a long position hedge?

A. A long position hedge is a commitment to purchase and sell a commodity under terms that specify volume, price, location, and delivery period. A long

hedge is beneficial for a consumer that has to purchase a known gas volume in the future and wants to lock in the purchase price.

Q. Describe how options are used to hedge natural gas prices.

A. An option is a contract that conveys the right, but not the obligation, to buy or sell a commodity in the future. If the option holder chooses to exercise the option to buy or sell, the party who sold the option must fulfill the price and delivery terms. Many consumers view options as an insurance policy against market volatility.

A call option provides the right, but not the obligation, to buy a specific commodity quantity for a specific contract period for a specific price on or before expiration of that contract. A call option provides a ceiling, but not a floor, on the commodity price. A call option buyer is a consumer that wants to protect against prices spikes while still being able to participate should the market fall.

A consumer may also elect to sell a put option, which gives the option purchaser the right, but not the obligation, to sell the contract to the consumer at the strike price. Selling a put option effectively places a floor on the amount that a consumer might pay for the contract.

Q. Describe how price collars are used to hedge natural gas prices.

A. A collar is a combination of a call purchase and a put sale or vice versa, where the options have the same underlying volume and expiration date. A costless collar is achieved when the proceeds from the option sale offset the cost

of the option purchase. A costless collar hedging strategy may appear attractive to consumers because there is no premium required and the consumer enjoys some participation should wholesale natural gas prices move lower.

Q. Describe how strip trading is used in hedging natural gas prices.

A. Energy risk managers who wish to hedge extended exposure to natural gas price risk do not have to buy or sell consecutive futures contracts in multiple transactions to do so. Instead, they can hedge through a single transaction called "strip trading." Strip trading gives market participants the ability to cover a number of consecutive months with a single futures transaction at a single price. The strip is valued at an average price for the desired time span. A six-month strip, for example, consists of an equal number of futures contracts for each of six consecutive months.

Q. What are the possible outcomes of natural gas price hedges?

A. If the market price closes higher than the hedged price, the consumer pays the hedged price and saves the difference between the hedge and market prices. This is the optimum outcome, managed risk and prices below market cost. It is inevitable at some point that a particular hedge price may be higher than the market price. At this time, the strategy is still being implemented, and the risk management objectives are still being achieved. The hedge eliminates volatility, provides a known, fixed price into the future, and limits exposure to price spikes for that portion of the portfolio which has been hedged. There can be times when these hedge benefits lead to slightly higher costs within a volatile market.

Hedging strategy success is determined by comparing the results to the objectives. Success rarely means "beating the market" at all times. For reporting purposes, it is important to keep track of the basis (what and why) and timing of all hedging decisions. Hedging is the safest and easiest way to manage market volatility over time and limit upside risk. To ignore the opportunity to implement strategic hedges is to completely accept the variability of the index price. Hedging fixes a price at a known value in the future relative to the potential price of the unknown index. There is also a tradeoff between price certainty and the risk that may result from hedging too aggressively in a market known for price variability.

EVALUATION OF WESTERN UTILITY NATURAL GAS HEDGING

Q. Have you attempted to evaluate natural gas hedging practices of western utilities?

A. Yes. I identified the primary natural gas distribution companies, electric power generation utilities, and combined gas and electric utilities operating in the west, with a specific focus on Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Washington I reviewed publically available information including Integrated Resource Plan documents and corporate financial filings for descriptions of natural gas risk management and hedging plans.

Q. What specific utility hedging programs did you review for this testimony, and what were your general findings?

A. I reviewed available documentation that, to various degrees of detail, discuss natural gas hedging practices and plans for Arizona Public Service Company, Pacific Gas & Electric, Southern California Gas Company, San Diego Gas & Electric, Southern California Edison, Public Service Company of Colorado, Idaho Power Company, Nevada Power, Sierra Pacific Power Company, Southwest Natural Gas Corporation, Northwest Natural Gas, Portland General Electric, Questar Gas Company, Avista Corporation, Cascade Natural Gas Corporation, and Puget Sound Energy.

Some of these companies make public specific natural gas hedging strategies for various periods of time, some acknowledge the use of financial hedging tools in their gas supply portfolio management activities, and others publish detailed plans with key data redacted from the public view.

Q. Can you provide additional details on the natural gas hedging plans that you reviewed.

A. Attachment B, UAE Exhibit RR 3.2, provides specific excerpts from utility company hedging plans as published and reviewed. I was not able to discover information related to hedging plans for all companies reviewed, and I cannot be certain that the information presented is complete. It reflects a summary of hedging plans from public documents that I discovered in my research.

Q. Please summarize the natural gas hedging plans that you reviewed.

A. Arizona Public Service Company's reported hedging program is based on an approach that looks forward three years on a rolling basis. 85% of the

anticipated volumes are hedged for year one, with the remaining 15% during year one generally purchased on a day-to-day basis. 50-60% is hedged for year two, and 30-40% is hedged for year three. The stated purpose of the APS hedging program is to manage price volatility. It does so by purchasing a certain amount of gas and power under the hedging program, and hedges with both financial contracts and physical contracts. Because the plan states that the hedge positions cover both gas and power purchases with both financial contracts and physical contracts, I was not able to identify gas volumes or percentages covered by financial hedges, and this data can't be considered as representative of a natural gas hedging plan.

Pacific Gas & Electric has a stated Hedging Plan for electric and gas positions which is referenced in the Bundled Procurement Plan, March 25, 2011. In its Bundled Procurement Plan, PG&E specifically identified all long-term fuel (gas) buying and hedging plans as Confidential, and no details are made available to the public.

The core natural gas portfolios of Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) are consolidated into a single portfolio managed by SoCalGas' Gas Acquisition Department. As indicated in the 2009 and (proposed) 2012 Long Term Procurement Plans, Gas Acquisition also manages price and basis risk for the core portfolio, including trading of financial instruments such as futures, options, and over-the-counter swaps. SoCalGas and SDG&E describe hedging plans within the Procurement

Plans that include objectives and targets in detail, but redact all specific gas prices, volumes, and percentages as "Confidential/Privileged/Protected Materials". However, in a current filing for revenue requirements, SoCalGas reported the volume of financial derivatives for the gas year ended March 31, 2010 was equal to approximately 46% of gas purchases and sales transactions during that period.

In its Procurement Process, Southern California Edison reportedly hedges portions of open positions regularly over time in small increments and determines the timing and amounts based on an adopted risk tolerance level. The specifics of the SCE Bundled Procurement Plan, March 25, 2011 are Confidential, and no details are made available to the public.

Public Service Company of Colorado Gas Price Volatility Mitigation Plan for the 2011-12 Gas Purchase Year includes two components: a seasonal strategy and a long-term strategy. The combined volume, available to be hedged under the two components, is a maximum of 75% of the Company's normal winter purchase requirements during November 2011 through March 2012. The long term strategy targets up to 25% of PSCo's seasonal gas purchase requirements for the next three heating seasons. The PSCo Gas Department proposes to use storage to hedge approximately 22% of the normal winter requirements and financial instruments to hedge the remaining 53%, and the Electric Department proposes to use storage to hedge approximately 41% of the normal winter requirements and financial instruments to hedge the remaining 34%.

The Idaho Power Company 2011 Integrated Resource Plan Draft contains no reference to natural gas hedging activities.

I found no references in published documents from Intermountain Gas Company related to natural gas hedging activities.

Nevada Power describes a Gas Hedging Plan that includes procuring 75% of projected financial gas exposure with fixed price products and leaving 25% of projected financial gas exposure open to first of month index pricing.

Sierra Pacific Power Company describes a Gas Hedging Strategy under which it proposes to continue to hedge its forecasted financial gas requirements using a 25% open (unhedged) position, 50% fixed price products, and 25% with collars.

Southwest Natural Gas Corporation acquires a portfolio of gas supplies and financial instruments, including a “Volatility Mitigation Program (VMP)”. For periods prior to the 2010/2011 portfolio period, Southwest hedged approximately 50% of the annual portfolio volume under the VMP. For portfolio periods beyond the 2010/2011 portfolio period, Southwest proposes to hedge up to 30% of the annual portfolio volume under the VMP. The 2010/2011 portfolio reflects a transition, during which hedged volume under the VMP will be approximately 37% for northern Nevada and approximately 32% for southern Nevada.

Northwest Natural Gas acquires gas supplies for its core retail customers through wholesale market physical purchases that reportedly may be hedged using

physical assets (e.g. storage) and financial instruments (e.g. derivatives) to hedge price variability both within the current contract year and for up to five years. Northwest Natural entered the 2010-11 gas contract year, which began November 1, 2010, reportedly hedged on gas commodity prices at approximately 77% of forecasted purchase volumes, and are reportedly hedged at approximately 45% for the 2011-12 gas contract year and between 5 and 10% for the 2012-13 gas contract year.

Portland General Electric reports the use of physical hedge strategies for natural gas supply with deliberate layering in contracts of differing duration of up to five years to reportedly avoid over exposure to a single price or potential adverse market conditions. The Company also employs storage as a reported cost-effective means of providing seasonal reliability and price hedging. PGE uses market instruments such as fixed-price financial swap transactions as a means to hedge gas price exposure as its portfolio has reportedly transitioned from long-term physical purchases to an increased reliance on financial derivative instruments. PGE has also developed a Mid-Term Strategy which includes both power and fuel, with a primary focus on purchasing fixed-price gas via financial instruments with terms spanning two to five years forward. There is no disclosure of any specific hedge targets or volumes in the PGE 2009 Integrated Resource Plan.

Questar Gas Company utilizes hedging transactions limited to those that fix or cap prices used in conjunction with natural gas purchases during the winter

months (October – March). For the October 2009 – March 2010 time period, the Company hedged 29% of its base load purchased gas supplies. Questar's IRP for Plan Year June 1, 2010 to May 31, 2011 indicated its plan to continue a hedging program for the 2010 – 2011 winter heating season.

Avista Corporation reports a natural gas procurement plan process which includes hedging, storage utilization and index purchases to help mitigate financial risks. Avista establishes hedge periods and upper and lower pricing points within which portions of future demand are financially hedged. There is no disclosure of any specific hedge targets or volumes in the Avista 2009 Natural Gas Integrated Resource Plan.

Cascade Natural Gas Corporation has as established gas supply hedging strategy. The current gas hedging strategy is to hedge 45% of the contracted physical supplies of year one, 30% of year two, and 15% of year three. Depending on market conditions, the strategy allows for the segments to increase to 75%, 50% and 30%, respectively, provided current market information supports moving to a higher level.

Puget Sound Energy purchases a strategically diversified portfolio of natural gas supplies ranging from long term firm to daily. Puget reportedly enters into physical and financial fixed price derivative instruments to hedge the cost of natural gas to serve its customers. Puget also makes use of storage to provide a partial hedge to price variability.

Q. What is the range of hedging volumes reported by these utilities?

A. Among the western regional utilities reviewed that reported volumes or volume targets covered by financial hedges (some covering an annual volume and others only a winter season volume), the utility natural gas hedging plans include financial hedging to fix the price or range of prices related to approximately 29% to 77% of the peak natural gas demand for the forward season or annual period. If there is no variable weight given to annual versus seasonal hedging, the utilities that provided specific volumes or targets reportedly hedged an average natural gas quantity of approximately 52% for the front time period. Each hedging strategy is specific and an average may not necessarily reflect an appropriate target.

Q. Please summarize the primary conclusions of your testimony.

A. Some utilities are very specific in reporting natural gas hedging strategies. Some provide general descriptions. Some file risk management plans with specific data redacted. What can be concluded from specific hedging strategies and plans that were reviewed is that regional gas and electric utilities routinely include financial hedging to fix the price or range of prices for various portions their gas supply portfolio. The hedging plans that I reviewed reported hedging of approximately 29% to 77% of the peak natural gas demand for the forward season or annual period, with an average of approximately 52% of the volumes hedged and 48% exposed to contract or variable market prices.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Attachment A

JEFF J. FISHMAN
Statement of Qualifications

I graduated from Carnegie-Mellon University in Pittsburgh, Pennsylvania in 1975 with Bachelor of Science Degrees in Chemical Engineering and Engineering and Public Affairs.

I am currently employed as Director – Gas Services, for Energy Strategies, LLC, in Salt Lake City, Utah, responsible for managing certain natural gas-related needs of the firm's Clients, including gas supply management, gas market development, risk management services, and project development support.

I began my career in the natural gas industry in 1980 as a Project Manager for Northwest Pipeline Corporation responsible for the evaluation and development of non-traditional gas supply projects. In 1983, I was appointed Manager of Northwest Field Services, where I directed the development and implementation of an unregulated natural gas gathering and processing business.

In 1984, I became the President and Chairman of Grand Valley Gas Company, an active participant in the creation and development of the deregulated natural gas market in North America. I was actively involved in the natural gas marketplace, and responsible for company management, growth strategy, and profitability. Grand Valley orchestrated and facilitated a series of corporate combinations within the natural gas services and facilities business and merged with Associated Natural Gas in 1994. I was President of Associated Gas Services until its acquisition by Panhandle Eastern Corporation in 1995.

In 1995, I co-founded and directed Peak Energy, Inc., a consulting firm providing energy market and corporate development activities including business valuation, project development, contract valuation and negotiation, and market strategies and development activities to a range of energy industry clients, including natural gas producers, electric and gas utilities, and industrial end-users.

In 2009, I joined Energy Strategies as Director – Gas Services for the energy consulting firm, directing Client natural gas supply and market strategies and implementation.

Prior to my professional activities in the natural gas industry, I performed project engineering and cost and scheduling functions in chemicals and metals processing and power generation, employed by both industry and contractor companies.

Attachment B

Summary of Available Utility Hedging Information

ARIZONA PUBLIC SERVICE COMPANY

APS Hedging Program

"APS's current hedging program is based on a systematic approach looking three years forward on a rolling basis and using financial model simulations containing built in assumptions, such as load growth and outages at power plants. Eighty-five percent of the anticipated volumes are hedged for year one, with the remaining 15% during year one generally purchased on a day-to-day basis. 50-60% is hedged for year two, and 30-40% is hedged for year three. Additionally, APS's hedging program includes required compliance dates. APS does not engage in market speculation; the purpose of its program is to manage price volatility. It does so by purchasing a certain amount of gas and power under the hedging program. APS hedges with both financial contracts and physical contracts, but it generally prefers financial contracts over physical contracts because of their greater liquidity."

SOURCE: Arizona Public Service Company Resource Alternative Planning Stakeholder Meeting Report, March 7, 2008, Docket No. E-01345A-08-0010

APS Fossil Fuel Supply and Hedging Report, May 28, 2010
Fuel and Purchased Power Hedge –Current Plan
Rolling three years forward
85% of price risk is hedged in year one (+ / -2%)
50%-60% is hedged in year two
30%-40% is hedged in year three

SOURCE: APS Application and Submission of Resource Plan Docket No.E-01345A-09

SOUTHERN CALIFORNIA GAS COMPANY & SAN DIEGO GAS & ELECTRIC

"The core natural gas portfolios of Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) are consolidated into one single portfolio managed by SoCalGas' Gas Acquisition Department, effective April 1, 2008.

Gas Acquisition also manages price and basis risk for the core portfolio in accordance with the internal risk management policy, including trading of financial instruments such as futures, options, and over-the-counter swaps. It continuously monitors market

conditions, performs various analyses, evaluates and implements trading strategies to lower gas costs while meeting operational performance requirements.

During the period April 1, 2009 through March 31, 2010, Gas Acquisition entered into over 10,000 gas purchases and sales transactions totaling over 405 billion cubic feet (Bcf) of net purchases, at a total cost of approximately $1.6 billion. It also entered into approximately 400 financial derivatives transactions totaling over 185 Bcf."

SOURCE: Application of Southern California Gas Company for authority to update its gas revenue requirement and base rates effective on January 1, 2012. (U904G)

SDG&E reports a hedging strategy in its 2012 Long Term Procurement Plan that includes hedging objectives and targets based on a statistical approach, but redacts all specific gas prices, volumes, and percentages as "Confidential/Privileged/Protected Materials".

SOURCE: 2012 Long Term Procurement Plan Hedging Strategy

Although the details of the Procurement Plan and Hedging Strategy are Confidential, the reported volume of financial derivatives for the gas year ended March 31, 2010 was equal to approximately 46%.

PACIFIC GAS AND ELECTRIC COMPANY

"The purpose of PG&E's annual hedging plan is to protect PG&E's core gas procurement customers against severe winter gas bill run-ups by hedging the price of the wholesale gas that PG&E will procure on their behalf. The 2009 Plan covers gas hedging for three forward winter periods: the prompt winter (2009- 2010), Winter 2010-2011, and Winter 2011-2012."

SOURCE: 2009 Annual Hedging Plan

"The Hedging Plan addresses hedging for electric and gas positions and has several key elements, including, tenor, operating targets, product mix targets, implementation schedule, conditions under which it is permissible to operate outside the plan, and a procedure for modifying the Hedging Plan."

SOURCE: Bundled Procurement Plan March 25, 2011

Specifically, PG&E has identified all long-term fuel (gas) buying and hedging plans depicted in the Bundled Procurement Plan as Confidential, and no details are made available to the public.

SOUTHERN CALIFORNIA EDISON

Procurement Process

"SCE generally hedges exposures ratably. This means that SCE hedges portions of the open positions regularly over time in small increments rather than sporadically in large pieces.SCE develops the timing and amount to hedge considering a number of different tradeoffs, and ultimately determines such timing and amounts based on an adopted risk tolerance level.SCE then seeks to hedge its various open positions over time using available markets (e.g., several years forward, prompt year, prompt quarter, prompt month, balance of month, day-ahead, hour ahead and in real-time) with due deference to any alternative scenarios, using the products (e.g., RA tags, tolls, financial products, transmission rights), and procurement methods, within the limits set forth in its approved AB 57 Bundled PP."

SOURCE: Bundled Procurement Plan March 25, 2011

PUBLIC SERVICE COMPANY OF COLORADO

Gas Price Volatility Mitigation Plan Approval Form
Gas Department 2011-12 Gas Purchase Year

"The Gas Price Volatility Mitigation Plan for the 2011-12 Gas Purchase Year includes two components: a seasonal strategy and a long-term strategy. The combined volume, available to be hedged under the two components, is a maximum of 75% of the Company's normal winter purchase requirements during November 2011 through March 2012. The long term strategy targets up to 25% of the Company's seasonal gas purchase requirements for the next three heating seasons…The Company will use storage to hedge approximately 22% of the normal winter requirements and financial instruments to hedge the remaining 53%."

SOURCE: Gas Price Volatility Mitigation plan Approval From Public Service Company of Colorado Gas Department 2011 – 2012 Gas Purchase Year, Docket 11A-036G, Appendix B to Verified Application (Public Version) Pgs. 1-2

Gas Price Volatility Mitigation Plan Approval Form
Electric Department 2011-12 Gas Purchase Year

"The Gas Price Volatility Mitigation Plan for the 2011-12 Gas Purchase Year includes two components: a seasonal strategy and a long-term strategy. The combined volume,

available to be hedged under the two components, is a maximum of 75% of the Company's normal winter purchase requirements during November 2011 through March 2012. The long term strategy targets up to 25% of the Company's seasonal gas purchase requirements for the next three heating seasons…The Company will use storage to hedge approximately 41% of the normal winter requirements and financial instruments to hedge the remaining 34%."

SOURCE: Gas Price Volatility Mitigation plan Approval From Public Service Company of Colorado Electric Department 2011 – 2012 Gas Purchase Year, Docket 11A-037E, Appendix B to Verified Application (Public Version) Pgs. 1 -2

IDAHO POWER COMPANY / INTERMOUNTAIN GAS COMPANY

In a review of the Idaho Power Company 2011 Integrated Resource Plan DRAFT, there is no reference to natural gas hedging activities. I found no references in published documents from Intermountain Gas Company to natural gas hedging activities.

NEVADA POWER COMPANY

Gas Hedging Plan

" Approval of a gas hedging plan which includes procuring 75% of projected financial gas exposure with fixed price products and leaving 25% of projected financial gas exposure open to first of month index pricing….The Company will continue to monitor and review the gas hedging strategy in light of current energy market conditions."

SOURCE: NV Energy Southern Service Territory IRP 2009 Resource Plan Filing, Volume 22, Pg. 7

SIERRA PACIFIC POWER COMPANY

Gas Hedging Strategy

"Given the importance of reducing price volatility in uncertain natural gas markets while also allowing for flexibility in the event of declining prices, Sierra proposes to continue to hedge its forecasted financial gas requirements using the strategy reflected in Option 11, which utilizes a 25% open (unhedged) position, 50% fixed price products, and 25% with collars…"

SOURCE: Sierra Pacific Power Company Integrated Resource Plan 2008 – 2027, Volume III Energy Supply Plan 2008 – 2010, Pgs. 6 -10

Note: Sierra Pacific Power Company dba NV Energy only offers gas service in Truckee Meadows, a region in Northern Nevada which contains the cities of Reno and Sparks

SOUTHWEST NATURAL GAS CORPORATION

Strategies and Criteria, Supply Reliability, and Alternative Sources of Supply

Southwest Natural Gas Corporation acquires a portfolio of gas supplies and financial instruments, including a "Volatility Mitigation Program (VMP)".

"For periods prior to the 2010/2011 portfolio period, Southwest hedged approximately 50 percent of the annual portfolio volume under the VMP. For portfolio periods beyond the 2010/2011 portfolio period, Southwest will hedge up to 30 percent of the annual portfolio volume under the VMP. The 2010/2011 portfolio reflects a transition…During this period hedged volume under the VMP will be approximately 37 percent…for northern Nevada and approximately 32 percent…southern Nevada."

SOURCE: Southwest Natural Gas Corporation 2010 Nevada Annual Resource Planning Informational Report, Pg. 5

NORTHWEST NATURAL GAS

Physical and Financial Hedging

"NW Natural provides its retail customers with a bundled gas product including gas storage for its regulated utility business. To accomplish this, NW Natural aggregates load and acquires gas supplies for its core retail customers through wholesale market physical purchases that may be hedged using physical storage or financial transactions.

Four goals guide the physical and financial hedging of gas supplies: 1) reliability, 2) lowest reasonable cost, 3) price stability, and 4) cost recovery. Section VII. B. of this chapter provides definitions of the four goals.

The use of selected financial derivative products provides NW Natural with the ability to employ prudent risk management strategies within designated parameters for natural gas commodity prices. The objective is to use derivative products to structure hedging strategies as defined by NW Natural Gas Supply Risk Management Policies. All

wholesale gas transactions must be within the limits set forth by those policies. This is intended to prevent speculative risk.

NW Natural's Gas Acquisition Strategy and Policies Committee maintain oversight for the development and enforcement of the Gas Supply Risk Management Policies. Within those policies, the Derivatives Policy establishes governance and controls for financial derivative instruments related to natural gas commodity prices including financial commodity hedge transactions." Pg. 3-10

Price Stability
"Customers are sensitive to price volatility in addition to prices. Consequently, the Company makes use of physical assets (e.g. storage) and financial instruments (e.g. derivatives) to hedge price variability both within the contract year and for up to five years." Pg. 3-24

SOURCE: NW Natural 2011 Integrated Resource Plan Chapter 3 – Supply-Side Resources

Managing Gas Prices and Supplies

"Our gas acquisition strategy is designed to secure sufficient supplies of natural gas to meet the needs of our utility customers and to hedge gas prices to effectively manage costs, reduce price volatility and maintain a competitive advantage. With recent success in new drilling technologies and substantial new supplies from shale gas formations around the U.S. and in Canada, the supply of North American natural gas has increased dramatically, which has contributed to lower and more stable gas prices. We entered the 2010-11 gas contract year, which began November 1, 2010, hedged on gas commodity prices at approximately 77 percent of our forecasted purchase volumes. In addition, we are currently hedged at approximately 45 percent for the 2011-12 gas contract year and between 5 and 10 percent for the 2012-13 gas contract year."

SOURCE: Northwest Natural 2010 10-K, Pg. 34

PORTLAND GENERAL ELECTRIC

Natural Gas Hedging

"PGE employs a number of physical hedge strategies for natural gas supply:
• PGE layers in contracts of differing durations of up to five years in advance of need for a portion of expected future fueling requirements. As we get closer to our fueling need, purchases are increased to ensure that we have acquired contracts to meet

our expected requirements roughly one year in advance. This deliberate layering or time diversification avoids over exposure to a single price and adverse market conditions.

- PGE employs fuel storage as a cost-effective means of providing seasonal reliability and price hedging.
- To improve longer-term price and supply stability, we are also exploring opportunities for gas-in-the-ground reserves, but have not executed any such transactions.

All natural gas hedge transactions are subject to strict corporate governance requirements with regard to credit, collateral, contract limits, transaction authorizations, etc. Physical and financial hedging for natural gas supply is addressed in greater detail in Section 5.3".

SOURCE: PGE 2009 Integrated Resource Plan Chapter 7. Supply-Side Options, Pg. 144

"PGE also uses market instruments such as fixed-price financial swap transactions as a means to hedge our gas price exposure in our portfolio. This allows us to fix the price of gas without buying the physical fixed-cost supply until it is required, reduces variability in our fuel costs and helps provide stability in customer prices. The market as a whole has transitioned from long-term physical purchases to an increased reliance on financial derivative instruments. The liquidity in the financial forward market allows PGE to better manage a changing forward position. The fundamental market outlook points to a potential for ongoing volatility in prices due to uncertainty about LNG imports, domestic unconventional production, pipeline expansions, oil prices and customer demand. These uncertainties support a strategy to hedge prices. Long-term gas supply planning for a new generating resource is difficult because determining a transportation path--which in turn will determine the supply source--is dependent upon the location of the generating plant, which may not be known in the early stages of planning."

SOURCE: PGE 2009 Integrated Resource Plan Chapter 5. Fuels, Pg. 81

PGE's Mid-Term Gas Strategy

"Gas-fired generation contributes to variability in electricity costs. In an effort to reduce volatility in our power supply portfolio, PGE developed the Mid-Term Purchasing Strategy. The Mid-Term Strategy is the next step beyond the 24- month rolling physical gas purchases. The goal is to reduce or minimize year-over- year increases in PGE's net variable power costs. While the Mid-Term Strategy includes both power and fuel, a primary focus is purchasing fixed-price
gas via financial instruments with terms spanning two to five years forward."

SOURCE: PGE 2009 Integrated Resource Plan Chapter 5. Fuels, Pg. 82

QUESTAR GAS COMPANY

Price Stabilization Measures

Questar Gas Company utilizes hedging transactions limited to those that fix or cap prices used in conjunction with natural gas purchases during the winter months (October – March).

"For the October 2009 – March 2010 time period, the Company hedged 29% of its base load purchased gas supplies. This resulted in 7.17 BCF being hedged at an average price of $4.76/MMBtu. The Company plans to continue a hedging program for the 2010 – 2011 winter heating season."

SOURCE: Questar Gas Company IRP (For Plan Year: June 1, 2010 to May 31, 2011) Submitted May 20, 2010, Pg. 7

AVISTA CORPORATION

Avista's Procurement Plan

"We cannot accurately predict future natural gas prices but market conditions and experience help shape our overall approach. Avista has designed a natural gas procurement plan process that seeks to competitively acquire natural gas supplies while reducing exposure to short-term price volatility. Our procurement strategy includes hedging, storage utilization and index purchases. Although the specific provisions of the procurement plan will change as a result of ongoing analysis and experience, the following principles guide Avista's development of its procurement plan:

Avista employs a time, location and counterparty diversified hedging strategy. It is appropriate to hedge over a period of time, and we establish hedge periods within which portions of future demand are financially hedged. The hedges may not be completed at the lowest possible price, but they will protect our customers from price volatility. Additionally, we pursue diversified purchases at multiple basin/market hubs and transact with a range of counterparties.

Avista establishes a disciplined but flexible hedging approach. In addition to establishing hedge periods within which hedges are to be completed, we also set upper and lower pricing points. In a rising market, this reduces Avista's exposure to extreme price spikes. In a declining market, this encourages capturing the benefit associated with lower prices.

Avista regularly reviews its procurement plan in light of changing market conditions and opportunities. Avista's plan is open to change in response to ongoing review of the

assumptions that led to the procurement plan. Although we establish various targets in the initial plan design, policies provide flexibility to exercise judgment to revise/adjust targets in response to changing conditions.

A number of tools are utilized to help mitigate financial risks. Avista purchases gas in the spot market as well as the forward market. Spot purchases are made on a day for the next day or weekend. Forward purchases are made on a day for a designated future delivery period. Many of these tools are financial instruments or derivatives that can be utilized to provide fixed prices or dampen price volatility. We continue to evaluate how to manage daily demand volatility, whether through option tools available from counterparties or through access to additional storage capacity and/or transportation."

SOURCE: Avista 2009 Natural Gas Integrated Resource Plan, December 31, 2009, Pgs. 64 – 65

"As part of its resource procurement and management operations in the natural gas business, Avista Utilities makes continuing projections of its natural gas loads and assesses available natural gas resources. Forward natural gas contracts are typically for monthly delivery periods. However, daily variations in natural gas demand can be significantly different than monthly demand projections. On the basis of these projections, Avista Utilities plans and executes a series of transactions to hedge a significant portion of its projected natural gas requirements through forward market transactions and derivative instruments. These transactions may extend as much as four natural gas operating years (November through October) into the future. Avista Utilities also leaves a significant portion of its natural gas supply requirements unhedged for purchase in short-term and spot markets."

SOURCE: Avista 2010 10-K, Pg. 74

CASCADE NATURAL GAS CORPORATION

"Cascade's Gas Supply Oversight Committee (GSOC) oversees the Company's gas supply purchasing strategy…GSOC also oversees the Company's gas supply hedging strategy. The Company's current gas hedging strategy is to hedge 45% of the contracted physical supplies of year 1, 30% of year 2 and 15% of year three. Depending on market conditions, the strategy allows for the ratchets to increase to 75%, 50% and 30%, respectively, provided current market information supports moving to a higher level."

SOURCE: 2010 Integrated Resource Plan, Pg. 44

PUGET SOUND ENERGY

2011 Draft Integrated Resource Plan does not address hedging, except that the use of storage provides a partial hedge to price spikes.

"Puget Sound Energy controls its gas-supply costs by acquiring gas, under contract, from a variety of gas producers and suppliers across the western United States and Canada. To obtain gas at the most favorable price, we carefully analyze gas-market trends and conditions, then strategically procure gas under a mix of short-, medium- and long-term contracts. We manage a strategically diversified gas-supply portfolio to reduce financial risks and hold down customers' rates. PSE also controls gas-supply costs by storing gas in large underground facilities, then withdrawing it in winter when customer usage is highest."

SOURCE: 2011 Draft Integrated Resource Plan, Chapter 6, Gas Analysis

Natural Gas Supply for Natural Gas Customers

"PSE purchases a portfolio of natural gas supplies ranging from long-term firm to daily from a diverse group of major and independent natural gas producers and marketers in the United States and Canada. PSE also enters into physical and financial fixed-price derivative instruments to hedge the cost of natural gas to serve its customers."

SOURCE: Puget Energy 2010 10-K, Pg. 17