Q. Please state your name, business address, and present position with PacifiCorp dba Rocky Mountain Power ("the Company").

A. My name is Cindy A. Crane. My business address is 1407 West North Temple, Suite 310, Salt Lake City, Utah 84116. My position is Vice President, Interwest Mining Company and Fuel Resources for PacifiCorp Energy.

Qualifications

Q. Briefly describe your business experience.

A. I joined PacifiCorp in 1990 and have held positions of increasing responsibility, including Director of Business Systems Integration, Managing Director of Business Planning and Strategic Analysis and Vice President of Strategy and Division Services. My responsibilities have included the management and development of PacifiCorp's 10-year business plan, assessing individual business strategies for PacifiCorp Energy, managing the construction of the Company's Wyoming wind plants and assessing the feasibility of a nuclear power plant. In March 2009, I was appointed to my present position as Vice President of Interwest Mining Company and Fuel Resources. In my position I am responsible for the operations of Energy West Mining Company and Bridger Coal Company as well as overall coal supply acquisition and fuel management for PacifiCorp's coal plants.

Purpose and Summary

Q. What is the purpose of your testimony?

A. I explain the Company's overall approach to providing the coal supply for the Company's coal plants and support for the level of coal costs included in fuel

expense in this case. Several of the Company's very favorably priced long-term coal purchase agreements terminated in 2011 and have been replaced with new agreements at prevailing market prices or contain market reopener provisions that allow resetting of the contract price. As these contracts expire they must be renegotiated and replaced at prices reflective of the current market.

Q. Please summarize your testimony.

A. My testimony:

- Explains the primary causes of the $47.6 million price related to the coal cost increase reflected in the Utah general rate case for the May 2013 ending test period;
- Provides background on the third-party coal contract revisions that are driving the majority of the coal cost price increase in this case;
- Reviews the Company's affiliate mine coal costs and compares them to other supply alternatives;
- Demonstrates that Utah customers benefit from the Company's diversified coal supply strategy; and
- Discusses the increasing sulfur content of the Company's Utah coal supplies.

Overview of the Coal Supplies for the Company's Coal Plants

Q. How does the Company plan to meet fuel supplies for its coal plants during the June 2012 through May 2013 test period?

A. As reflected in Table 1: *Coal Sourcing* below, the Company employs a diversified coal supply strategy. The Company will supply approximately 65.5 percent of its coal requirements from third-party multi-year contracts and 34.5 percent with coal

from the Company's affiliate mines. Approximately 29.8 percent of the Company's total coal requirements are supplied under fixed-price contracts, 35.3 percent under contracts that escalate or de-escalate based on changes to producer and consumer price indices and 0.4 percent through spot coal purchases.

Table 1: Coal Sourcing

	Plant	New Contract	Price Reopener	MMBtu's (000's)	MMBtu's (000's)	
Captive Mines						
Bridger Coal Company/Bridger	Bridger			72,479		
Enery West/Deer Creek	Utah			75,990		
Trapper Mining Inc/Trapper	Craig			9,274		
Subtotal Captive Mines					157,743	34.5%
Fixed Price Contracts						
Rhino Energy/Castle Valley	Utah	√		7,080		
America West Reources/Horizon	Utah			5,046		
Arch/Sufco	Utah			49,107		
Utah American Energy/West Ridge	Utah			20,711		
Arch/Coal Creek	Dave Johnston	√		9,252		
Western Fuels/Dry Fork	Dave Johnston	√		22,134		
Peabody/Rawhide	Dave Johnston			22,825		
Subtotal Fixed Price Contracts					136,155	29.8%
Escalating Contracts						
Amber Energy/Black Butte	Bridger			31,478		
Peabody/Lee Ranch	Cholla			27,876		
Westmoreland/Rosebud	Colstrip			11,916		
Rio Tinto/Colowyo	Craig			4,201		
Peabody/Twentymile	Hayden	√		6,044		
Westmoreland/Kemmerer	Naughton		√	55,480		
Black Hills/Wyodak	Wyodak			24,685		
Subtotal Escalating Contracts					161,680	35.3%
Spot/Unidentified Supplies	Dave Johnston				1,846	0.4%
Total Coal Supplies					457,424	100%

Q. Please explain how the Company's Utah plants are supplied with coal.

A. The Utah plants are sourced collectively through a diversified portfolio of coal supplies. While the Deer Creek mine supplies primarily the Huntington plant and a portion of the Hunter plant, the contract coal supplies are typically interchangeable between the plants.

Q. Why is it important that they be interchangeable?

A. Interchangeable coal supplies allow the Company to minimize transportation costs between the coal mines and power plants while ensuring the coal quality blend meets plant quality specifications.

Summary of Coal Cost Increases in the Current Filing

Q. Do coal costs in this case reflect an increase above cost levels in the 2011 general rate case?

A. Yes. As mentioned in the testimony of Company witness Mr. Gregory N. Duvall, test period coal costs have increased on a total company basis from $733.7 million in the June 2012 ending test period, used in the 2011 rate case, to $767.4 million in the May 2013 ending test period used in this case, an increase of $33.7 million. The increase related to higher coal prices is approximately $47.6 million; the decrease related to reduced coal fired generation is approximately $13.9 million. Average coal costs have increased from $30.91 per ton to $32.81, an increase of $1.90 per ton.

Q. What are the primary drivers of the $47.6 million increase in coal prices?

A. Approximately $18.0 million of the cost increase is associated with the affiliate mines; $0.3 million is associated with increased operating costs at the Hunter prep plant and the remainder of the increase, $29.3 million, is associated with third party coal purchases and transportation costs.

Affiliate Mine Costs

Q. Please explain the increase associated with the affiliate mines.

A. Deer Creek mine production costs have increased from [redacted] per ton to [redacted]

per ton, an increase of [redacted] per ton. Bridger mine costs have increased from [redacted] per ton to [redacted] per ton, an increase of [redacted] per ton, and Trapper mine costs have decreased slightly from [redacted] to [redacted] per ton, or [redacted] per ton. These changes result in the following increases:

Table 2: Affiliate Mine Cost Increase

	Millions ($)
Captive Mines	
Bridger Coal Company	[redacted]
Deer Creek	
Trapper	
Total Captive Cost Increase	[redacted]

Third-Party Coal Costs

Q. Please identify the major aspects of the $29.3 million increase in third-party coal supplies.

A. For the May 2013 ending test period, the Company expects third-party coal supply cost increases at all of the plants, as set forth below:

Table 3: Contract Price Increases

Plant	Contract	Millions ($)
Utah	Skyline Mine Contract Replacement	$ [redacted]
Utah	Sufco Coal Cost Increase	
Utah	West Ridge Coal Cost Increase	
Naughton	Kemmerer Mine Price Increase	
Bridger	Black Butte Rail and Coal Cost Increase	
Dave Johnston	Wyodak Contract Replacement	
Dave Johnston	Dry Fork and Rawhide Price Increases	
Dave Johnston	BNSF Rail Rate Increase	
Wyodak	Wyodak Contract Price Increase	
Hayden	Peabody Contract Replacement	
Cholla	Lee Ranch Rail and Coal Cost Increase	
Colstrip	Rosebud Mine Cost Increase	
Craig	Colowyo Coal Cost Increase	
Other		
Total Contract Cost Increases		29.3

Coal Supply Agreements for the Utah Plants

Q. Please describe the Skyline coal agreement for the Carbon plant.

A. In the prior test period, the Carbon plant was supplied, in part, with 150,000 tons of coal from the Skyline mine that was deferred from 2009. In 2008, the Company and Arch agreed ("2008 Agreement") to defer 300,000 tons of the Company's 2009 contract tonnage under the long-term Sufco coal supply agreement, a separate agreement, until 2011. Under the 2008 Agreement, Arch also agreed to supply the coal from its Skyline mine, a substitute source for Sufco. In addition to obtaining the Skyline tonnage at the 2009 Sufco contract price the Company required Arch to discount the Skyline coal price by [redacted] per ton in exchange for the Company agreeing to the 2009 tonnage deferral. With the expiration of this supply transaction in December 2011, the Company entered into negotiations with

Rhino Energy, the operator of the Castle Valley mine, for a new long-term coal supply agreement as well as increased volumes under the Company's long-term agreement with the West Ridge mine. Replacement of the Skyline coal supply will increase test period costs by [redacted] million.

Q. Please explain the cost increase under the Sufco contract.

A. The majority of the Hunter and a portion of the Huntington power plant requirements are supplied by the Sufco and Dugout mine under the Company's long-term coal supply agreement with Arch Coal Sales. The delivered price of coal supplied by the Arch mines has increased from [redacted] per ton in the June 2012 ending test period to [redacted] per ton in the May 2013 ending test period, used in this case, an increase of approximately [redacted] million. The increase is due primarily to the annual price increase under the Sufco contract and the savings included in the prior test period with the inclusion of Sufco carryover tonnage from 2010 at the 2010 contract price. As part of the Arch 2011 price re-opener dispute settlement, Arch agreed to provide the Company on a pro-rata basis in 2011 with 817,000 tons of Sufco contract shortfall associated with 2010 contract deliveries at the 2010 contract price. The inclusion of the carryover tonnage at an approximate [redacted] per ton savings in the prior test period accounts for [redacted] million of the [redacted] million increase. The remainder of the increase is associated with annual escalation of the Sufco contract price.

Q. Please explain the [redacted] million cost increase under the West Ridge agreement.

A. A portion of both the Carbon and Hunter plant requirements is supplied by the

West Ridge mine under a long-term fixed price coal supply agreement that expires in December 2014. The approximately [redacted] million increase in coal costs reflects both an increase in delivered costs from [redacted] per ton in the June 2012 ending test period to [redacted] per ton in the May 2013 ending test period and an increase in contract tonnage from approximately 700,000 tons in the prior test period to approximately 870,000 tons in this test period.

Coal Supply Agreements for the Wyoming Plants

Q. Please describe the increase relating to the Naughton contract.

A. The Naughton power plant is supplied under a long-term coal supply agreement with Westmoreland Coal Company's Kemmerer mine. Test period costs will increase from [redacted] per ton in the prior test period to [redacted] per ton for the May 2013 ending test period, an increase of a [redacted] per ton. The contract price adjusts with changes in contract specific producer and consumer price indices as well as production taxes and royalties. As part of the September 2010 contract renegotiation, the parties agreed to several price resets over the term of the agreement with the first price reset occurring January 2013. This price reset adjusts the contract price to [redacted]. Approximately [redacted] million of the [redacted] million increase is associated with the January 2013 price reset; the remainder is associated with higher diesel fuel expense.

Q. Please explain the [redacted] million increase in Black Butte costs.

A. Almost 30 percent of the Bridger plant coal requirements are supplied by the Black Butte mine. The delivered cost of Black Butte coal to the Jim Bridger

power plant has increased to [redacted] per ton from the June 2012 ending test period cost of [redacted] per ton, an increase of [redacted] per ton. Higher rail costs account for [redacted] per ton of the increase; the remaining [redacted] per ton is associated with higher F.O.B. mine costs. Coal costs adjust monthly based on changes to contract specific producer and consumer price increases as well as Wyoming production taxes and royalties; Union Pacific rail rates are adjusted quarterly based on the changes to the All-Inclusive Index less Fuel published by the Association of American Railroads.

Q. Please explain the [redacted] million increase in Dave Johnston power plant coal supply costs.

A. In October 2007, the Company entered into a long-term coal supply agreement with Wyodak Resources Company for up to 1.8 million tons of coal annually for the Dave Johnston plant from the Wyodak mine that extended through December 2011. During the spring of 2011, the Company issued a solicitation for Powder River Basin coal supplies for the Dave Johnston power plant. Based on the results of the coal solicitation, the Company entered into new coal supply arrangements with Arch, Peabody and Western Fuels for coal supplies from the Coal Creek, Rawhide and Dry Fork mines.

Q. How much of the [redacted] million increase at the Dave Johnston plant is associated with replacing the Wyodak coal supply?

A. The majority of the increase, approximately [redacted] million, is associated with replacing the Wyodak coal supply with new coal supply arrangements.

Q. Has the Dave Johnston plant rail rate changed from the prior case?

A. Yes. Coal is transported to the Dave Johnston plant under a long term rail agreement with the BNSF Railway Company. Rail rates are adjusted quarterly based on the changes to the unadjusted Rail Cost Adjustment Factor published by the Association of American Railroads and have increased from [redacted] per ton in the June 2012 ending test period to [redacted] per ton in the May 2013 ending test period. The increase, approximately [redacted] million, is due primarily to higher diesel fuel expense and application of dust suppression.

Q. Please discuss the causes for the remaining [redacted] million increase in Dave Johnston fuel costs.

A. The remaining [redacted] million increase in Dave Johnston fuel costs is associated with fixed annual price increases under the long-term coal supply agreements.

Q. Please explain the [redacted] million increase in Wyodak plant costs.

A. The Wyodak plant is entirely supplied by the Wyodak mine under a long-term coal supply agreement through 2022 via an overland conveyor. The average mine price of Wyodak coal has increased to [redacted] per ton from the June 2012 ending test period cost of [redacted] per ton, an increase of [redacted] per ton. Coal costs adjust monthly based on changes to contract specific producer and consumer price increases as well as Wyoming production taxes and royalties.

Coal Supply Agreements for the Joint Owned Plants

Q. Please discuss the Hayden plant coal supply.

A. Since its inception, the Hayden plant has been supplied by Peabody under several long-term coal supply agreements. The previous coal supply agreement was

negotiated in December 2005 and extended through December 2011. The Hayden plant owners made numerous attempts to negotiate a contract extension prior to the expiration of the agreement; however, Peabody was unwilling to extend the Twentymile agreement under similar terms and conditions. Consequently, Xcel, on behalf of the other Hayden plant participants, issued a request for proposal for new coal supplies for the 2012 through 2014 timeframe.

Q. Which coal production basins were targeted with the coal solicitation?

A. Xcel received multi-year proposals from Powder River Basin coal suppliers as well as suppliers in the Green River and Uinta Basin in Colorado. Based on the results of the solicitation, the Hayden plant owners negotiated a new coal supply agreement with Peabody. The test period reflects the recently negotiated coal price with Peabody as well as the Union Pacific Railroad's cost to transport the Twentymile coal by rail.

Q. Has the Hayden plant's coal cost changed from the June 2012 ending test period?

A. Yes, the increase above the prior test period is approximately [redacted] million. Approximately [redacted] million of the [redacted] million increase in Hayden plant cost is associated with the new coal supply agreement and the remaining [redacted] million reflects increased transportation costs.

Q. Please explain the [redacted] million increase in Cholla plant costs.

A. The Cholla plant is supplied under a long-term coal supply agreement with Peabody's Lee Ranch/El Segundo mine complex and transported by the BNSF Railway. Contract prices under both agreements adjust quarterly; the coal contract

adjusts to changes in contract specific producer and consumer price indices while the rail agreement adjusts based on changes to the Railroad Cost Recovery Factor published by the Association of American Railroads and diesel fuel prices. Test period costs have increased from [redacted] per ton to [redacted] per ton in the May 2013 ending test period; higher rail costs account for [redacted] per ton of the increase; the remaining [redacted] per ton is associated with higher mine costs.

Q. Please explain the [redacted] million increase in Colowyo test period costs.

A. The long-term contract with Colowyo adjusts semi-annually based on changes to contract specific producer and consumer price indices. Colowyo contract costs have increased from [redacted] per ton in the June 2012 ending test period to [redacted] per ton in the May 2013 ending test period, an increase of [redacted] per ton.

Captive Mine Costs

Q. Please describe the change in Bridger Coal costs.

A. Bridger Coal costs have increased by approximately [redacted] million over the June 2012 ending test period. Bridger Coal test period costs have increased from [redacted] per ton to [redacted] per ton, an increase of [redacted] per ton or [redacted] million. A reduction in Bridger Coal's heat content accounts for the remaining [redacted] million increase.

Q. Have Bridger Coal's production levels changed?

A. Yes. Total Bridger Coal plant deliveries from the surface mine decreased from 1,609,150 tons in the prior case to 1,214,785 tons, a reduction of 394,365 tons; however, underground mine deliveries have increased from 4,396,850 to 4,697,215, an increase of 300,365.

Q. Please explain the [redacted] per ton increase in Bridger Coal costs.

A. The majority of the increase is related to increased fixed costs such as depreciation and depletion expense, [redacted] per ton, and an increase in third party costs of [redacted] per ton. Third party costs include increased royalty payments of [redacted] per ton and [redacted] for production taxes.

Q. Please explain Bridger Coal's reduced heat content.

A. During the June 2012 ending test period, the heat content of the coal deliveries from the underground mine was projected to average 9,492 British thermal units per pound. The heat content in the May 2013 ending test period is forecast at 9,262 British thermal units per pound. The approximately 230 btu/lb decrease in heat content is the result of increased ash content in the coal stream. Increased out-of-seam dilution associated with the current sandstone roof has caused the ash content of the underground mine to increase from 11.79 percent in the prior period to 13.67 percent in the May 2013 ending test period.

Q. How do Bridger Coal mine costs compare to the Company's other supply options?

A. Though test period delivered costs of Bridger Coal and Black Butte are similar, [redacted] per ton versus [redacted] per ton, the Black Butte mine has no additional production capacity. The Company was forced to purchase approximately 130,000 tons of Black Butte coal from the Valmy plant owners during the last half of 2011 to supplement the current year coal supply at a delivered cost into the Bridger plant in excess of [redacted] per ton.

Q. Please describe the [redacted] million increase for Deer Creek production costs.

A. Deer Creek costs are projected to increase from [redacted] per ton in the June 2012 ending test period to [redacted] per ton in the May 2013 ending test period, an increase of [redacted] per ton. There are three primary drivers for the Deer Creek cost increase: (1) reduced coal production; (2) increased material and supply costs; and, (3) increased longwall set-up costs. Deer Creek's coal production is projected to be approximately 265,000 tons less in the May 2013 ending test period; the lower production accounts for approximately [redacted] per ton of the [redacted] per ton increase. Materials and supply costs have increased from [redacted] per ton in the prior case to [redacted] per ton in the current test period, a [redacted] per ton increase. The rise is primarily due to increased unit costs and higher usage of operating supplies for roof support and adverse geological conditions associated with elevated levels of ash and sulfur. Finally, due to two additional longwall moves in the May 2013 ending test period and lower coal recovery from the longwall panels, the longwall set-up cost per ton will increase to [redacted] per ton, a [redacted] per ton increase over the prior test period.

Q. How do Deer Creek mine costs compare to the Company's other Utah supplies?

A. The Deer Creek mine represents the lowest cost Company coal supply in Utah. Deer Creek costs are more than [redacted] per ton less than the delivered cost of Castle Valley and Sufco coals into the Huntington power plant.

Q. Have Trapper mine costs changed from the prior test period?

A. Trapper mine costs have decreased slightly from [redacted] per ton in the June 2012

ending test period to [redacted] per ton in the May 2013 ending test period, a decrease of [redacted] per ton.

Q. How does the Company's Trapper mine compare to other alternatives?

A. Favorably. Trapper's test period cost of [redacted] per ton, delivered to the Craig plant, is considerably less than the Company's other Colorado coal supplies. The price is roughly [redacted] per ton less than the [redacted] delivered price of Colowyo coal to the Craig plant and approximately [redacted] per ton less than the delivered coal price of Twentymile coal to the Hayden plant.

Q. Please summarize the benefits of the Company's coal supply strategy.

A. Customers have significantly benefited from the Company's diversified fueling strategy. The Company has pursued a diversified coal supply strategy, relying on fixed contracts, indexed contracts and affiliate-owned coal mines to meet the fuel needs of its coal fired power plants. While coal costs have increased in this case as a result of contract terminations and reopeners, the company's strategy has resulted in a long-term, stable and low-cost supply of coal for its customers.

Utah Coal Supplies – Increasing Sulfur Content

Q. Is the sulfur content of the Hunter and Huntington plant coal supplies increasing?

A. Yes. The Company is experiencing an increase in sulfur content in coal delivered and consumed at the Hunter and Huntington plants. The increase in sulfur content is due primarily to an increase in West Ridge mine coal supplies and an increase in the sulfur content of Deer Creek coal.

Q. Please discuss the Company's contract for West Ridge mine coal with Utah American Energy Inc.

A. In December 2010, the Company executed a coal supply agreement with Utah American Energy for coal from the West Ridge mine for 2011 through 2014. West Ridge mine's high ash fusion temperature mitigates the low ash fusion characteristics of Arch's Sufco coal that causes boiler slagging at Hunter and its high sulfur content improves precipitator performance at the Carbon plant. The contract established 500,000 tons as the annual contract minimum in 2011 and 1.0 million tons as the contract minimum for 2012 through 2014.

Q. What other Utah mines produce high ash fusion temperature coal?

A. Arch Coal's Dugout mine is the only other active longwall operation in Utah that produces high ash fusion temperature coal. Arch previously supplied the Company with over 1.0 million tons of Dugout coal, annually, under the Electric Lake settlement and as substitute coal under the Company's long term agreement with Sufco.

Q. Is Arch still required to supply Dugout coal?

A. No. Arch's contractual requirement to supply Dugout coal as substitute for Sufco coal expired in December 2010. [redacted].

Q. How does the "typical" quality specifications for West Ridge coal compare to coal supplied from the Dugout mine?

A. As reflected below, the typical quality specifications for both coals are similar with the exception of ash and sulfur content. The typical sulfur content of the West Ridge coal is [redacted] times as much as the Company's previous Dugout supply.

Typical Quality Specifications

	West Ridge	**Dugout**
Calorific Value	[redacted]	[redacted]
Moisture	[redacted]	[redacted]
Percent Sulfur	[redacted]	[redacted]
Lbs SO_2/MMBtu	[redacted]	[redacted]
Percent Ash	[redacted]	[redacted]
Ash Softening Temperature	[redacted]	[redacted]

Q. Is the sulfur content increasing at the Company's Deer Creek mine?

A. Yes, Deer Creek's sulfur content has increased with the movement of longwall operations in December 2010 from the upper Blind Canyon seam to the lower quality Hiawatha seam.

Q. Has the Deer Creek mine already encountered pocket areas of high sulfur coal in the Hiawatha seam?

A. Yes, during the first quarter of 2011, the Company's Deer Creek mine encountered areas of high ash and high sulfur with the sulfur content at times exceeding 1 percent. The Company did not previously encounter pockets of high sulfur coal in the Blind Canyon seam.

Q. Will mining continue in high sulfur areas during the test period?

A. Yes, the Deer Creek mine will again encounter elevated levels of ash and sulfur coal with sulfur reaching as high as 1.4 percent in 2012.

Q. How does the Company manage high ash, high sulfur Deer Creek coal production?

A. To ensure emissions compliance, the Company segregates the coal at the Huntington plant and then depending upon quality the coal will be shipped to the Hunter and/or Cottonwood Prep plant. This coal is then reclaimed and comingled with other coals to ensure the blended product does not cause a sulfur exceedance nor violates meeting minimum heat content requirements.

Q. Does the test period include blending and consuming of Deer Creek high ash, high sulfur coal?

A. Yes, for instance, the Hunter plant is forecasted to consume at least 300,000 tons of Deer Creek mine's high ash, high sulfur coal during the May 2013 ending test period.

Q. Can Deer Creek avoid mining these high sulfur areas?

A. Yes, however, not without significantly increasing Deer Creek's production costs and supplementing with higher cost third party coal purchases.

Q. Does this conclude your direct testimony?

A. Yes.