Q. Please state your name, business address and present position with Rocky Mountain Power, a division of PacifiCorp (the "Company" or "RMP").

A. My name is John A. Apperson, my business address is 825 NE Multnomah Street, Suite 600, Portland, Oregon 97232, and my present position is Director, Trading.

Q. Briefly describe your education and professional background.

A. I received a Bachelor of Science degree in electrical engineering from Oregon State University. I have worked for PacifiCorp since 1982 and have held various positions in transmission planning and commercial and trading areas. I have worked in the wholesale marketing area of the Company beginning in 1995 and was promoted to my current position in April 2000.

Q. What are your responsibilities as Director of Trading?

A. I am responsible for balancing the Company's physical energy position in the wholesale market to economically meet the Company's load obligations and for hedging the associated price risk. This includes transmission purchases and associated activities performed by the cash and forward trading, real-time trading, prescheduling and production planning groups. Hedging is an important and integral aspect of managing natural gas and power requirements to meet the Company's service obligations.

Purpose and Summary of Testimony

Q. What is the purpose of your testimony?

A. My testimony addresses the Commission's decision to rehear the decision to exclude financial swaps from the Energy Balancing Account ("EBA") and demonstrates why exclusion of swaps would increase the costs of hedging, would not affect the potential losses associated with hedging and would likely expose customers to greater risks of price volatility.

Q. Please summarize your testimony.

A. My testimony addresses the following:

- Hedging products available in the market;
- A comparison of swaps to fixed price physical forward contracts;
- The Company's alternatives if swaps are excluded from the EBA;
- UIEC's mischaracterization of hedging as speculation, its assumption of the word physical in interpreting the EBA statute and other misstatements in opposing the Company's petition for rehearing; and,
- Other issues, including why the historical outcomes of swaps and options are not relevant to the issue of whether swaps should be included in the EBA.

Hedging Products Available in the Market

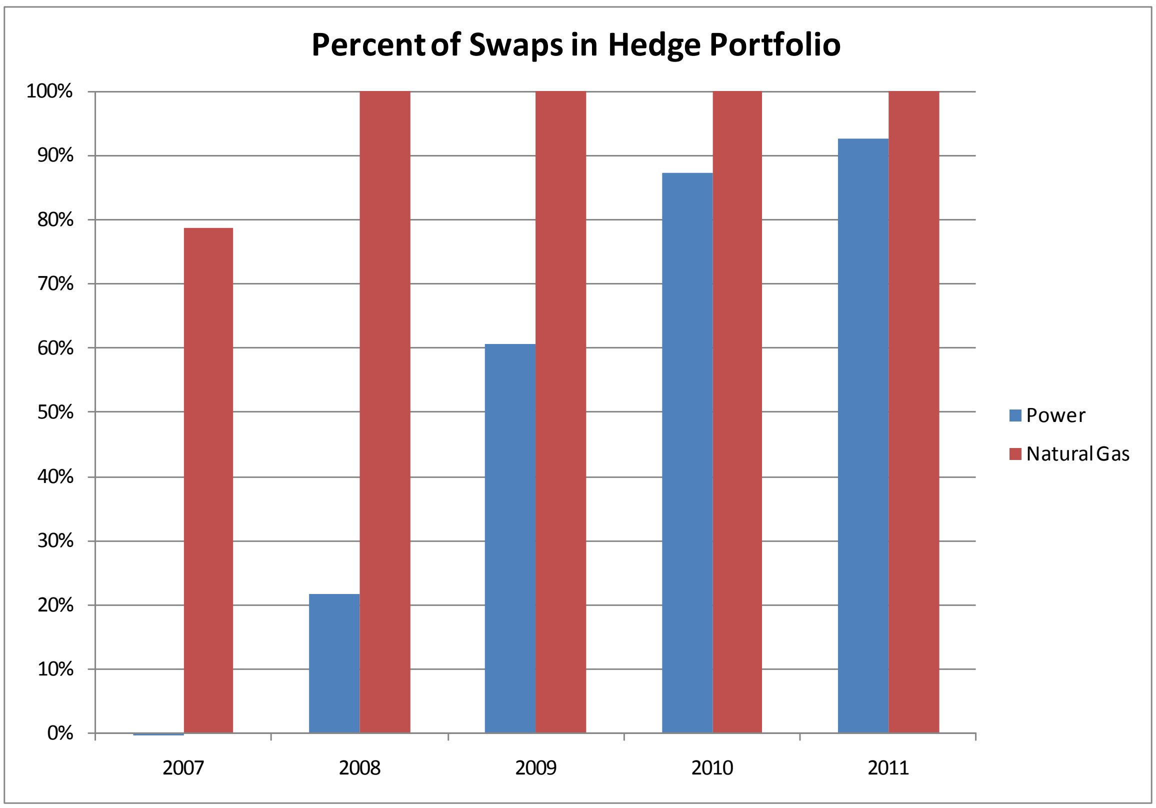
Q. What products are available in the market to physically balance and hedge price risk due to the Company's open forward electricity and natural gas positions?

A. Swaps (products that exchange floating index price for a fixed price) are readily available in the market to hedge electricity and natural gas positions. Index (floating) price physical transactions are readily available in the market to physically balance the Company's position, but these transactions leave price risk unhedged. Fixed price physical forward contracts that simultaneously balance the Company's position and hedge price are available to a lesser extent for electricity and to a much lesser extent, albeit not fully explored, for natural gas.

Q. What products has the Company used to hedge over the past several years?

A. Figure 1 shows the percentage of the Company's electricity hedges and natural gas hedges that are swaps settled in forward periods. Given that the Company strives to transact with low transaction costs, this is an indication that swaps are much more available and liquid than fixed price physical forward contracts.

Figure 1. Percent of Swaps in Hedge Portfolio



Q. Does the Company expect to be able to hedge with fixed price physical forward contracts in lieu of swaps?

A. For electricity hedges, yes, without significantly higher hedge costs. For natural gas, the Company believes it may be difficult to find counterparties to hedge with fixed price physical forward contracts, and if so, higher hedge costs will result.

Comparison of Swaps to Fixed Price Physical Forward Contracts

Q. Is there an advantage to hedging with fixed price physical forward contracts instead of swaps?

A. No. Setting aside the liquidity issue, transacting a fixed price physical forward contract is exactly equivalent to transacting a swap plus an index price physical deal, as shown below. Figure 2 illustrates the transaction of a fixed price physical forward contract. The Company pays a fixed price to the counterparty and receives physical natural gas.

Figure 2. Fixed Price Physical Forward Contract

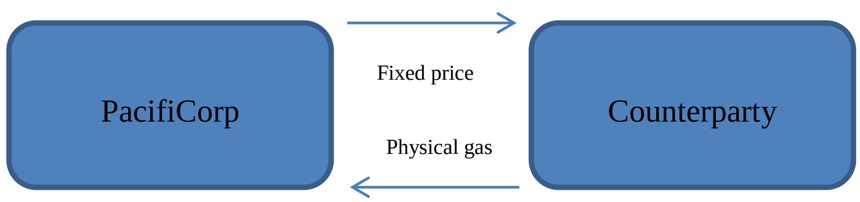
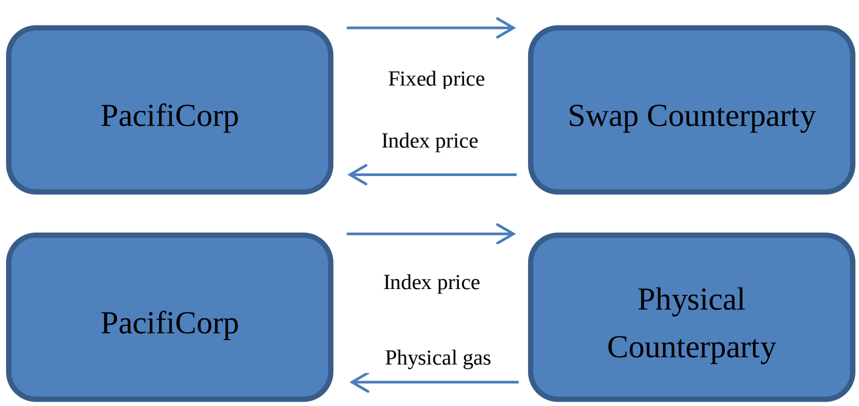


Figure 3 illustrates a financial swap in combination with an index price physical deal with the same quantity at the same location. PacifiCorp enters into a swap transaction where it agrees to pay a fixed price and receive an index price. PacifiCorp separately enters into an index price physical transaction where it agrees to pay an index price and receives physical natural gas.

Figure 3. Swap Transaction Plus Index Price Physical Transaction



Note the opposite index price legs of the two transactions cancel out, leaving the Company to pay a fixed price and receive physical natural gas. The combination of the two transactions in Figure 3 is identical to the transaction in Figure 2.

Q. If the two transactions are identical, why does the Company use the two-part transaction involving the swap transaction instead of fixed price physical forward contracts for electricity and natural gas?

A. Customers benefit when the Company uses fixed for floating price financial swaps for these practical reasons:

1. Financial markets are significantly more liquid than physical markets, thereby increasing market efficiency and lowering transaction costs.
2. Many more counterparties participate in financial swap markets than in physical markets.
3. Physical markets with which the Company can hedge price risk are around many specific points of delivery, of which only a limited number are connected to the Company's system.
4. Financial markets with which the Company can hedge price risk are structured around major trading hubs that provide benchmark pricing for many specific locations; thereby encouraging liquid markets.
5. Financially settled transactions can reduce transactional costs and risks related to price risk hedging activities.
6. Financially settled transactions do not require physical scheduling, whereas physical transactions executed expressly to hedge price risk need to incur scheduling costs.

Q. Are you aware of any evidence other than your own experience that the combination of swaps plus index priced physical contracts shown in Figure 3 are used in place of fixed price physical forward contracts shown in Figure 2?

A. Yes. In testimony filed by Questar Gas in a 2005 docket before this Commission, Mr. Alan J. Walker, who was responsible for gas procurement for Questar Gas at that time, testified that:

> Trading or buying natural gas using an index for the immediate pipelines interconnecting the supply area and market offers significant advantages in liquidity and trading partners. Some parties are unwilling to purchase or sell gas using fixed prices because they fear they may not get a fair deal during the transaction, their management is unwilling to risk missing the market or other reasons. Questar Gas buys most of its gas using index-related prices because its purchases extend far into the future. Trying to predict future fair market values is nearly impossible, so Questar Gas contracts for most gas on an index-related basis. When the Company feels it is advantageous to swap the price on index-related gas, the Company will convert the contract with the supplier or use financial instruments.[1]

Q. Please explain the concept of liquidity and how it impacts the Company's decisions on what products to use to hedge price risk.

A. Liquidity manifests itself as the difference between the buyer's bid price and the seller's offer price in the marketplace. Greater liquidity results in lower hedge costs. Lower liquidity markets have larger price differences, or wider "spreads", between bids and offers and higher liquidity markets have smaller price differences, or narrower "spreads" between bids and offers. Considering that bids represent the price at which a counterparty is willing to buy and offers represent the price at which a counterparty is willing to sell, narrower bid and offer spreads

[1] Direct Testimony of Alan J. Walker, Docket Nos. 04-057-04, 04-057-09, 04-057-11, 04-057-13 and 05-057-01 (Utah PSC Apr. 15, 2005) lines 456-465 (emphasis added).

are preferred because it means counterparties are willing to purchase at higher prices from PacifiCorp and sell at lower prices to PacifiCorp, as compared to a wide bid and offer spread.

Q. Would the cost of hedging be the same using fixed price physical forward contracts as the cost for using swaps?

A. No. The cost of hedging would most likely increase. Again, the issue is liquidity. The market for fixed price physical forward contracts is less liquid than the market for the combination of swaps and index price physical deals. Therefore, as discussed above, the spread between a buyer's bid price and a seller's ask price is wider as liquidity decreases, thereby increasing the transaction cost.

Company's Alternatives if Swaps are Excluded from the EBA

Q. If the Commission does not modify its order on rehearing and swaps are excluded from the EBA, would the Company continue to hedge?

A. The Company will need to evaluate its alternatives and select the best approach for customers in mitigating price risk.

Q. What are the Company's current alternatives?

A. The first alternative is to attempt to continue to hedge the Company's electricity and natural gas open positions consistent with its current hedge program but with the use of fixed price physical forward contracts instead of swaps. As described above, this is anticipated to increase hedge costs at minimum and may restrict the Company's ability to hedge if fixed price physical forward contracts are not available.

Q. What is the second alternative?

A. The second alternative is to continue to hedge using swaps for the Company's entire portfolio, but exclude swaps from the Utah EBA. This has the advantage of providing lower cost hedges than using fixed price physical forward contracts for the Company's customers in its service territories outside of Utah, but has the disadvantage of leaving Utah customers unhedged. For example, if the Company was short natural gas then purchased a natural gas swap of the same volume which subsequently settled at a slightly higher price than the transaction price of the swap, the Company's customers in its service territories outside of Utah would benefit by the difference in price multiplied by the volume. This benefit (or loss) would not, however, be passed on to Utah customers, and swap would not perform as a hedge against price risk for Utah customers through the EBA. The Company believes this alternative is inconsistent with the Commission's intent of hedging price risk to reduce net power cost volatility.

Q. What is the third alternative?

A. The third alternative is to isolate the Company's open forward positions for Utah from the Company's remaining jurisdictions, and hedge with fixed price physical forward contracts for the Utah open positions and hedge with swaps for the remaining jurisdiction open positions. The Company would accomplish this alternative by identifying the Utah Commission jurisdiction-specific deficit or surplus electricity and natural gas positions separately from the remainder of the Company's deficit or surplus electricity and natural gas positions. The Company would then hedge the two positions separately, with only the transactions used to hedge the Utah jurisdiction position included in the EBA. However, the Company has not determined how this alternative can be implemented given the integration of the Company's system across all jurisdictions. Further, the Company believes this approach would be inconsistent with the Commission's intent of retaining the Company's single system operation.

Q. Has the Company identified any other alternatives at this time?

A. No.

Q. Which alternative has the Company adopted since the Commission's order became effective?

A. The Company has adopted the first alternative.

Q. Has the Company been successful in implementing this alternative?

A. That is largely untested for natural gas because the Company has not yet had a need to execute any fixed price physical forward contracts since the EBA Order became effective. This will change as time rolls forward and large open positions enter into risk management horizons which call for more hedging. If fixed price physical forward contracts are not available, the Company may ultimately have to revise its risk management policy and hedging program, which would result in customers and the Company being less hedged and more exposed to the risk of commodity price changes.

Q. Is this the same alternative the Company recommends and plans to continue to implement if swaps continue to be excluded from the EBA?

A. Yes.

Response to UIEC Positions

Q. How do you respond to the statement in UIEC's opposition to the Company's petition for reconsideration page 5 "[The Company's] use of these derivatives does not ensure that it obtains its fuel and power supply at the least cost, but instead, allegedly only 'reduces volatility' in the price of fuel and power."

A. Since this statement is based on Company testimony, I agree that the use of swaps (referred to as derivatives in the UIEC statement) does not ensure least cost but only reduces volatility. However, this statement applies equally and is also exactly true if fixed price physical forward contracts are used in lieu of swaps. The point that seems to be missed by UIEC is that hedging is done to reduce the risk of price volatility; it is not done to reduce net power costs. Therefore, whether hedging is done with swaps or with fixed price physical forward contracts, it does not ensure least cost. Further, as demonstrated earlier in my testimony, swaps have a lower transaction cost than fixed price physical forward contracts, to the extent fixed price physical forward contracts are even available.

Q. How do you respond to the statements on page 5 of UIEC's opposition to RMP's petition for clarification and reconsideration or rehearing, "The derivative the Company uses is simply a bet on the direction of a price," on page 11, "the Company has used ratepayers as its safety net for the gambling losses resulting from its hedging practices," and on page 15, "This insurance policy being sought by RMP effectively permits it to speculate on future natural gas prices with impunity. Just like a person gambling with someone else's money" and "If swap costs are not included in the EBA, the risk of speculation is properly placed with the party that is speculating on future natural gas prices"?

A. These are inaccurate statements. A bet on direction of price is a description of a purely speculative transaction. For example, if the Company was neither surplus nor deficit and decided to take on additional price risk by selling natural gas, that would be a bet that natural gas prices would fall. However, the Company has a short (deficit) natural gas position due to its ownership of natural gas fired generation capacity built to serve its customers, and it purchases natural gas to fulfill its short position. This is not a speculative transaction as there is no debate that natural gas must be purchased at some point in time, whether in the forward market or the spot market. Further, a fixed price physical forward contract has the same characteristics as a swap in this regard.

In entering into swaps, which have the same financial attributes of fixed price physical forward contract, the Company is not gambling with customers' or its own money. It is simply reducing the risk of volatility in the price of natural gas and electricity for the benefit of the Company and its customers.

Q. Do you agree with UIEC's statement on page 6 of its Opposition, "the EBA statute permits the cost of the physical contracts for gas or purchased power to be included in an EBA because those contracts are for the actual delivery of fuel and power. While the effect of the EBA is to shift certain risks from the Company to ratepayers, the statute allows that shift only with respect to the delivery of physical products?"?

A. No. The EBA statute does not include the word "physical". UIEC arbitrarily added the word "physical" to its interpretation of the EBA statute. In my non-legal opinion, "incurred actual power costs" includes the impact of all hedges, whether a gain or loss, for both physical and financial transactions.

Other Issues

Q. Is there a difference between the applicability of continued use of swaps and the historic outcome of the use of swaps?

A. Yes. There has been criticism of the Company regarding the hedge losses resulting from the timing of natural gas swaps it executed. However, this same outcome would have occurred if the Company had hedged with fixed price physical forward contracts in lieu of swaps, assuming that fixed price physical forward contracts would have been available. Hedge gains or losses are not dependent on the instrument but rather are dependent on the price executed. Indeed, the hedge losses would have been somewhat greater if fixed price physical forward contracts had been used in lieu of swaps because of the limited liquidity of fixed price physical forward contracts.

Q. Could the Company use options to hedge the Company's open natural gas positions?

A. Yes. However, the utilization of options should not be considered a replacement for swaps or fixed price physical forward contracts. The risk profile and payout for options is very different than that of swaps or fixed price physical forward contracts. The description of the merits and downsides of utilizing options is very complex and not relevant to the issue of whether swaps should be included in the EBA.

Q. Please explain why you say the question of whether the Company could use options to hedge price risk is irrelevant.

A. Like financial swaps and fixed price physical forward contracts, options can also be settled financially or through physical delivery, thereby leading back to the issue of whether financially settled risk management tools should be included in the EBA.

Conclusion

Q. What do you conclude?

A. Exclusion of swaps from the EBA does not eliminate or reduce the possibility of losses on hedging. Losses as great or greater are likely to occur using fixed price physical forward contracts, assuming they are available, instead of swaps. The purpose of hedging is to reduce the risk of price volatility, not to reduce net power costs. The cost of hedging using fixed price physical forward contracts only would be higher than the cost of hedging using swaps. The Company uses swaps to hedge, not to speculate.

The question of whether swaps have been used excessively compared to fixed price physical forward contracts or in lieu of other financial derivatives or imprudently is being reviewed in the Company's currently pending general rate case. That issue is separate from the issue of whether swaps should be included in the EBA. Use of options is also a separate issue. As indicated in prior testimony in this docket and in the Company's testimony in the general rate case, the Company welcomes the input of the Commission and interested parties on its level of hedging and the types of financial derivatives used in hedging. But those questions are different from the question whether all costs of hedging, including the costs of swaps or other financial derivatives, should be included in the EBA. As demonstrated in my testimony and the testimony of Messrs. Gregory N. Duvall and Frank C. Graves on rehearing, exclusion of some hedging costs, but not others, creates perverse incentives and unintended consequences. Therefore, it is in the best interests of customers that swaps should be allowed to be included in the EBA.

Q. Does this conclude your direct testimony on rehearing?

A. Yes.