BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-991606

REBUTTAL TESTIMONY OF WILLIAM G. JOHNSON

REPRESENTING AVISTA CORPORATION

Q. Please state your name, business address, and present position with Avista Corporation.

A. My name is William G. Johnson. My business address is East 1411 Mission Avenue, Spokane, Washington, and the Company employs me as a Power Contracts Analyst in the Resource Optimization Department.

Q. Have you previously provided direct testimony in this proceeding?

A. Yes.

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

A. My testimony will respond to issues raised by the testimony of Messrs. Buckley's, Schoenbeck and Lazar on behalf of WUTC Staff, Industrial Customers of Northwest Utilities, and Public Counsel respectively regarding the Company's proposed Power Cost Adjustment (PCA) mechanism. I will also offer several modifications to the Company's PCA proposal that will limit its scope to only changes in hydro generation and short-term energy prices and make the mechanism

very simple to understand, implement and audit.

Q. Are you sponsoring any exhibits to be introduced in this proceeding?

A. Yes. I am sponsoring Exhibit No(s). ___ (WGJ-1) through ___ (WGJ-3), as previously marked for identification, which were prepared under my supervision and direction.

OVERVIEW

What issues regarding the Company's proposed PCA were addressed by Messrs. Buckley, Schoenbeck and Lazar in their direct testimony?

The primary issues raised were:

The lack of a cost of capital reduction.

The inclusion of long-term PURPA expenses.

The inclusion of Rathdrum dispatch expenses.

The tracking of short-term market transactions and issues surrounding the calculation of a short-term energy price, particularly in regards to the

separation of system trades from commercial trades.

The effect on the Company's incentive to acquire power in a least-cost manner.

Concerns with calculating the Hydro Hourly Shape Adjustment.

General concerns regarding the ease of administration and auditing of the mechanism.

How are you going to respond to these issues?

A. In his testimony on pages 44 and 45, Mr. Buckley notes that the Commission has generally favored mechanisms such as Avista's proposed PCA that insulate a company from the uncontrollable effects of fluctuations in hydro conditions provided several conditions are met. While Avista believes that the PCA as originally proposed meets these criteria, we have modified our original proposal in response to issues raised by Commission staff and other parties to this proceeding. With the changes that I describe, we believe we have addressed all the technical

objections to the Company's original PCA proposal. The modified PCA proposal is simple and will be easy to administer and audit.

I will discuss each issue and propose modifications to the Company's PCA to address concerns of the Commission staff and other parties. I have prepared Exhibit ___ (WGJ-1) to diagram a modified PCA and Exhibits ___ (WGJ-2) and ___ (WGJ-3) to show what the PCA worksheets might look like after incorporating my proposed modifications.

I will not address the issue of a cost of capital reduction. Dr. Avera will offer testimony on behalf of the Company regarding a cost of capital reduction associated with the implementation of a PCA.

Please briefly describe Exhibit ___ (WGJ-1) and explain how this demonstrates the simplification of the PCA to take into account technical issues raised by staff and interveners.

A. Exhibit ___ (WGJ-1) illustrates the inputs and steps in the PCA

calculation. Small boxes represent inputs to the PCA. Only those inputs in bold, the Dow Jones Mid Columbia Index Prices and Hydro Generation, vary in each month's calculation. All other inputs remain constant at the levels included in the normalized power supply expenses included in retail rates. The proposed PCA modifications have removed PURPA expense changes, thermal generation changes, Rathdrum fuel cost changes, and the Company's calculated energy price. The only variables remaining in the PCA are actual hydro generation and market energy prices.

The balance of my testimony will address the technical issues raised by staff and interveners.

INCLUSION OF LONG-TERM PURPA CONTRACTS

What is the issue regarding the inclusion of long-term PURPA contract expenses in the PCA?

A. Both Mr. Buckley on pages 45-46 and Mr. Schoenbeck raised concerns that the Company's proposed PCA went beyond the tracking of weather-

related changes by including changes in PURPA expenses.

Q. Do you agree with Mr. Buckley's and Mr. Schoenbeck's concerns with including PURPA expenses.

A. To some extent. I recognize that the PURPA contracts are long-term contracts, and that the Company's PCA proposal does not include changes in other long-term contracts. I don't agree, however, that PURPA expenses are not weather-related. All but two of the Company's PURPA contracts are hydro facilities whose expense varies directly with the changes in generation due to weather. Over 83% of the PURPA energy included in the normalized power supply expense comes from hydro generation. So for the most part, even though the contracts are long-term, the PURPA expense is primarily an uncontrollable weather-related expense.

MODIFICATION TO PCA FOR PURPA EXPENSES

Are there modifications that could be made to Avista's PCA proposal to address concerns regarding tracking changes in long-term PURPA contract expenses?

Yes there are. Although PURPA expenses are primarily uncontrollable weather-related expenses, the Company will modify its proposal to remove the PURPA expense component of the Company's proposed PCA. This change will completely remove all long-term contract changes from the PCA. By removing PURPA expenses, the only change in expense tracked by the PCA would be changes in short-term purchases and sales due to variations in hydro generation, thermal plant dispatch and short-term energy prices.

RATHDRUM GENERATION AND GAS COST

What issue was raised concerning the Rathdrum combustion turbine costs in the Company's proposed PCA?

Mr. Buckley on page 46, lines 26-28 cites the costs associated with dispatching the Rathdrum CT into the market as evidence that the Company's proposed PCA mechanism is structured to recover costs well beyond those that are weather related.

Do you agree with Mr. Buckley that Rathdrum generation and fuel cost are not weather-related?

I don't agree with Mr. Buckley that Rathdrum generation and fuel costs are not weather-related in the context of the PCA. In the PCA mechanism, absent changes in thermal generation, variation in the level of short-term purchases or sales is strictly a function of actual hydro generation.

Rathdrum generation is used as a substitute for short-term energy purchases. Increased Rathdrum generation either reduces purchases or increases sales. In either case, customers benefit through the PCA because they receive Rathdrum generation at its actual fuel cost (by including actual fuel expense) and that generation is valued at actual short-term energy prices. Since the Company economically dispatches Rathdrum, the customer receives the benefits of the plant under the Company's proposal.

MODIFICATION FOR RATDRUM DISPATCH COSTS

Are there modifications that could be made to the Company's PCA proposal to address concerns regarding tracking changes in Rathdrum generation and gas costs?

Yes there are. To address concerns that a PCA mechanism should not track changes in thermal plant generation or fuel cost the Company proposes to remove from the PCA changes in generation and/or fuel costs at Colstrip and Rathdrum. With this modification, thermal generation and fuel expense would not vary from the normalized power supply expenses included in retail rates. This modification ensures that the only change the PCA will track in the volume of short-term purchases and sales is strictly due to changes in the level of hydro generation.

SHORT-TERM MARKET TRANSACTIONS

What issues were raised concerning tracking changes in the Company's short-term energy purchases and sales.

A. The issues seem to fall into two major categories:

Are changes in short-term purchases and sales appropriate for a PCA?

The general concern and confusion surrounding how the Company will compute the actual energy price, particularly with the issue of separating system transactions from commercial trading.

Why is the tracking of change in short-term purchases and sales a legitimate weather-related adjustment?

The changes in short-term purchases and sales should be tracked by a PCA because they are necessary, legitimate expenses that the Company cannot control and they are influenced by weather (streamflow) conditions. The variations in hydro generation are the primary variable affecting the change in our short-term purchases and sales. Market prices are also an important factor. As market prices have become

more volatile over the past few years (as illustrated by Company witness Mr. Norwood in his rebuttal testimony), the overall volatility of the Company's power supply expenses has increased thereby increasing the Company's risk. This increased risk makes it more difficult for the Company to maintain a resource portfolio, consisting of owned resources, long-term purchases and short-term purchases. While we don't claim to know the perfect resource balance, we do believe that a diversified portfolio is preferred. Having a PCA that tracks changes in short-term purchases and sales and limit some of the increased risk in a more volatile energy market, helps the Company maintain a portfolio of resources.

Changes in the Company's short-term purchases and sales are primarily weather driven. The change in purchases and sales are weather-related changes because the volume of short-term purchases and sales only varies because of changes in hydro generation. Also, the change in short-term energy prices are weather driven since higher levels of hydro generation tend to lower short-term prices and lower

hydro generation tends to increase short-term energy prices.

Changes in the Company's hydro generation drives the need for purchases and sales and changes in regional hydro generation drive the energy prices in the Company's Dispatch Simulation Model. Energy prices are generally lower when there are large regional surpluses due to high hydro generation, and prices are high when regional surpluses are low due to low hydro generation.

Including changes in short-term purchases and sales in the PCA, both for the volume of transactions and the price, is weather-related and consistent with the Company's methodology of establishing the normalized power supply expenses included in retail rates. The PCA simply uses the same theory and methodology as is used to establish normalized expenses and replaces the average modeled values with actual values in each month. This insures that, to the extent that hydro generation and energy prices change the Company's expenses, customers only pay the actual expense incurred by the Company.

There seems to be a lot of concern regarding how the Company will determine the energy price in the PCA. Can you explain the purpose of the short-term energy price in the Company's proposed PCA?

Yes I can. The short-term energy price is needed to determine the actual sales revenue when the PCA calculation shows the Company is surplus and the actual purchase expense when the PCA model shows the Company is deficit. The actual sales revenue or purchase expense is then compared to the authorized level of sales revenue or purchase expense from the rate case in that month to determine the change in power supply expenses.

Is the separation of short-term energy transactions between system transactions and commercial transactions an important aspect of the proposed PCA?

A. No, it is not. Short-term transactions are only used to calculate an energy price for the PCA calculation that reflects the actual price for energy for the respective month. Whether that price is determined using all transactions, as we

currently do in the Idaho PCA, or transactions made only for the system is not a significant issue since there is likely little difference in the average price between the two types of transactions.

Again I want to emphasize that the proposed PCA does not track profits or losses from short-term trading. As such, we could not "game" the system by shifting transactions that lose money to ratepayers and letting the shareholders get the benefit of transactions that make money as suggested by Mr. Schoenbeck in his direct testimony on page 31, lines 17-19. The actual short-term transactions are only used to calculate a per unit price per MWh. This per unit price is then used in the PCA calculation to represent the market price of power for that month. The PCA also does not track increased purchases made to serve load growth and therefore have the potential for double counting expenses as suggested by Mr. Lazar on page 27, line 26 through page 28, line 2. The change in short-term purchase and sales volume is only a function of the change in hydro generation.

Q. If the transactions used to calculate the energy price are not that important then why shouldn't the Company just use the energy prices from its Dispatch Simulation Model?

A. The PCA should not use the prices from the Dispatch Simulation Model because those prices are estimates based on the average of 60 different hydro generation conditions. They don't necessarily represent the actual prices in any given month and therefore don't represent the actual revenues or expenses incurred by the Company. The purpose of our proposed PCA is to account for weather-related variations in power supply expenses from the normalized levels included in base rates.

MODIFICATION TO DETERMINATION OF ENERGY PRICE

Are there modifications that could be made to Avista's PCA proposal to address concerns regarding concerns of establishing a short-term energy price to be used in the PCA calculation?

A. Yes there are. Because of the concerns raised regarding the calculation of a short-term energy price, the Company proposes to use a market index energy price in place of a calculated energy price using Company data. Specifically, the Company proposes that as an alternative to calculating the price using Company information, the Dow Jones Mid Columbia Firm Index price be used in the PCA calculation. I propose that the monthly average of daily on-peak and off-peak firm index prices, weighted equally for all hours, be used as the average short-term energy price used to determine actual sales revenue or purchase expense for the month. This modification eliminates concerns regarding how the energy price will be determined, particularly concerns over the separation of system transactions from commercial trading transactions. It clearly establishes the energy price as a factor that is beyond Avista's control, much the same as hydro generation.

INCENTIVE TO ACQUIRE LEAST COST POWER

What issues were raised concerning the PCA's effect on the Company's

incentive to acquire power in least cost manner?

Mr. Buckley states in his direct testimony on page 47, lines 4-6 that Commission staff is concerned that the direct passing through of all short-term market expenses provides little incentive to acquire power in a least cost manner.

How do you respond to Mr. Buckley's concerns?

A. The PCA proposal will have no affect on the Company's incentive to acquire power in a least cost manner. Under our modified PCA proposal, the revenues and expenses to customers would be based on a market index energy price for the respective month. The risk is on the Company to make actual purchases and sales at those market rates.

HYDRO HOURLY SHAPE ADJUSTMENT

What concerns are raised regarding the proposed Hydro Hourly Shape Adjustment component of the PCA?

Mr. Buckley states in his direct testimony on page 48, lines 4-14 that the

Hourly Shape Adjustment is extremely difficult to follow and would be difficult to administer. He identifies the need to shape generation between heavy load and light load hours, even though the Company's Dispatch Simulation Model does not do that. He also raises the issue of the potential problem of identifying system purchases and sales during specific hours, which is all part of the issue of separating system transactions from commercial trading.

What is your response to Mr. Buckley's concerns with the Hydro Hourly Shape Adjustment?

A. First I note that Mr. Buckley does seem to understand the purpose of the adjustment, which is to match the change in generation during heavy load hours with heavy load hour prices and the change in generation during light load hours with light load hour prices.

The major issue with the Hydro Hourly Shape Adjustment is the implementation of the mechanism. The implementation requires an assumption of

the base hourly shape of the Company's hydro generation. Since the Dispatch Simulation Model doesn't use an hourly shape the Company proposed using the hourly shape for the period 1989 through 1995 because average hydro generation during that period was close to the average hydro generation used to develop normalized power supply expenses. Implementation also requires that we determine the hourly shape of our actual purchases and sales each month. Determining this hourly shape raises the issue of the separation of system transactions from commercial trading. We believe our proposed methodology provides a very reasonable representation of the effect of the hourly shape of the change in hydro generation.

MODIFICATION OF HYDRO HOURLY SHAPE ADJUSTMENT

Does the Company have a proposal to address the issues with the Hydro Hourly Shape Adjustment?

A. Yes, we do. I have previously described the Company's proposal to

use the Dow Jones Mid Columbia Index price, in place of a calculation using actual system trades, as the energy price in the PCA mechanism. The Company proposes that the same index prices also be used in the hydro shape adjustment. This will make the calculations very simple, since the only inputs are the market index energy prices and actual hydro generation. Using market index prices for heavy-load hours and light-load hours eliminates both the issue of determining the normalized hourly shape of hydro generation and the actual hourly shape of purchases and sales in each month. By using index prices both the normalized hydro hourly shape and the purchase and sales hourly shape will always be two-thirds heavy-load hours and one-third light-load hours (16 hours heavy-load and 8 hours light-load). The only inputs in the Hydro Hourly Shape Adjustment will be the Dow Jones Index prices and the actual hourly shape of hydro generation, both of which are easily verified.

The PCA will value the change in hydro generation at an index price that is weighted two-thirds on-peak and one-third off-peak. The Hydro Hourly Shape

Adjustment will then adjust the value of the change in hydro generation to the extent that the actual hourly shape of the change in hydro generation is different than two-thirds on-peak and one-third off-peak. These calculations will be easy to understand, implement and verify.

EASE OF ADMINISTRATION AND AUDIT

Mr. Buckley in his testimony on page 47 and 48 claims the Company's PCA proposal will be difficult to administer and audit. Why does the Company believe that the implementation and audit of the PCA will not be a problem?

There are two primary reasons that the Company believes that implementation and audit of the PCA mechanism will not be difficult. First, we have administered a PCA in Idaho since October 1989, and we are very confident that the mechanism will do precisely what it is intended to do. In short, when hydro generation is good, customers receive a rebate and when it is not as good customers are surcharged. We are confident the mechanism can be understood and audited. To the best of my

knowledge the Idaho Public Commission Staff, using workpapers provided by the Company, have always been able to verify the accuracy and legitimacy of the amounts included in the PCA balancing account.

Second, and most importantly, with the modifications proposed in this testimony, the PCA calculations would be extremely simple. The only changes being tracked would be the change in hydro generation and the change in short-term energy prices. There would be only two inputs in the PCA, the Dow Jones Mid Columbia Index prices for on-peak and off-peak hours and actual hydro generation. The index prices are publicly available to anyone, and the Company's actual hydro generation is recorded by CASSO, an independent control area system services organization.

SUMMARY

Can you please summarize your rebuttal testimony?

Yes. Avista has a significant amount of volatility in power supply expenses due to weather-related changes in hydro generation and short-term energy prices. As

the power markets have started to deregulate, the volatility in short-term energy prices has increased and likewise the overall volatility/risk to the utility has increased. To mitigate some of that increased risk, Avista has proposed a PCA to track the changes in power supply expenses due to weather-related variations in hydro generation and short-term energy prices.

Based on testimony from the witnesses for Commission staff, Public Counsel and Industrial Customers of Northwest Utilities we recognize that there are concerns over the scope of our proposed PCA, the ease of implementation, and the ability to understand, administer and audit the PCA calculations. We acknowledge these concerns and have proposed several modifications to our PCA.

Q. Can you describe your modifications to the proposed PCA?

A. Yes. The Company is proposing to modify its PCA proposal to limit its scope and complexity by implementing the following changes:

Remove changes in PURPA contract expenses.

Remove changes in thermal plant generation and fuel expense at Colstrip and Rathdrum.

Use the Dow Jones Mid Columbia Index price as the short-term energy price.

Use the Dow Jones Mid Columbia Index price and shape in the Hydro Hourly Shape Adjustment.

With the proposed modification described in my testimony the Company's PCA mechanism would be limited to tracking changes in weather-related power supply expenses due to variations in hydro generation and short-term energy prices. The resulting PCA mechanism will be extremely simple to understand, implement and audit. A diagram of the modified PCA proposal is presented as Exhibit ___ (WGJ-1). Example worksheets of a modified PCA are presented as Exhibits ___ (WGJ-2) and ___ (WGJ-3).

The modified PCA proposal has addressed all the technical concerns of Commission staff and other parties and has removed any technical objections to the

adoption of the Company's PCA.

Q. Does that conclude your rebuttal testimony?

A. Yes.

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EXHIBIT NO. ___ (WGJ-1) OF WILLIAM G. JOHNSON
REPRESENTING AVISTA CORPORATION

POWER COST ADJUSTMENT DIAGRAM

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EXHIBIT NO. ___ (WGJ-2) OF WILLIAM G. JOHNSON
REPRESENTING AVISTA CORPORATION

POWER COST ADJUSTMENT EXAMPLE WORKSHEETS

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-991606

EXHIBIT NO. ___ (WGJ-3) OF WILLIAM G. JOHNSON
REPRESENTING AVISTA CORPORATION

POWER COST ADJUSTMENT

HYDRO HOURLY SHAPE ADJUSTMENT
EXAMPLE WORKSHEET