BEFORE THE

IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER COMPANY'S PETITION TO MODIFY TERMS AND CONDITIONS OF PURPA PURCHASE AGREEMENTS	)	CASE NO. IPC-E-15-01
IN THE MATTER OF AVISTA CORPORATION'S PETITION TO MODIFY TERMS AND CONDITIONS OF PURPA PURCHASE AGREEMENTS	)	CASE NO. AVU-E-15-01
IN THE MATTER OF ROCKY MOUNTAIN POWER COMPANY'S PETITION TO MODIFY TERMS AND CONDITIONS OF PURPA PURCHASE AGREEMENTS	)	CASE NO. PAC-E-15-03

REBUTTAL TESTIMONY OF RICK STERLING

IDAHO PUBLIC UTILITIES COMMISSION

MAY 14, 2015

Q. Please state your name and business address for the record.

A. My name is Rick Sterling. My business address is 472 West Washington Street, Boise, Idaho.

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

A. I am employed by the Idaho Public Utilities Commission as the Engineering Supervisor.

Q. Are you the same Rick Sterling that previously submitted testimony in this proceeding?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address several issues raised by Clearwater/Simplot witness Dr. Reading and ICL/Sierra Club witness Beach.

Q. Various witnesses have suggested that there is unequal treatment between QFs and utility-owned resources. Do you agree?

A. I would agree that QFs and utility-owned resources are not treated the same. However, much of the different treatment is because PURPA requires it. A significant difference is the pricing of QF generation. PURPA dictates that the price or rate a utility pays for the purchase of QF power be based on the avoided cost of the utility—not the QFs cost of producing the power. In particular, a QF that places its facility into service

before January 1, 2017 will receive a 30 percent tax credit. This substantial tax credit is not reflected in the avoided cost rate.

Furthermore, most of the different treatment is to the benefit rather than the detriment of QFs. For example, the utility has a "must purchase" obligation under PURPA whereas utilities may engage in arms-length bargaining when acquiring resources. In addition, QFS are entitled to contracts regardless of a utility's need, whereas utility-owned resources must obtain a Certificate of Public Convenience and Necessity, which requires a showing of present or future need and competitive cost compared to other alternatives. Utility-owned resources must be competitively procured and are subject to cost-based pricing, whereas QF contracts are not subject to competition and non-negotiated pricing. Utility-owned resources are dispatched based on market prices or the cost of alternate resources, but QF power must be accepted by the utility whenever offered. Finally, the fuel and variable costs of utility-owned resources are subject to annual adjustment through PCAs, but PURPA prices are fixed for the entire duration of the contract.

Q. Various witnesses (Reading pp. 25-26; Beach pp. 21-25) have also suggested that PURPA projects, because of their fixed pricing, provide a valuable risk hedge and a

benefit to ratepayers. Do you agree?

A. No, not entirely. QF pricing, because it is locked in for 20 years, may eliminate price volatility, but it does not completely eliminate risk. QF prices that prove to be too high can be locked in to the detriment of ratepayers. Conversely, QF prices that prove to be too low can be locked in to the benefit of ratepayers. In either case, ratepayers are still exposed to the same risk. PURPA projects can help to limit risk when market prices rise to extreme levels, but they can also limit opportunities to take advantage of very low or declining prices for the benefit of ratepayers. Like all hedges, the critical question is how much protection do you need and how much should you be willing to pay for it. Utility-owned resources, on the other hand, are economically dispatched. In other words, they are only run when they are less costly than other alternatives or when their output can be sold at a profit.

Q. On pages 10 and 11 of Dr. Reading's direct testimony, he quotes a passage from Commission final Order No. 32697 in the GNR-E-11-03. In that Order, the Commission declined to adopt a contract length less than 20 years. Are the circumstances of the 2011 case the same as in this case?

A. No, they are not. In the GNR-E-11-03 case, Idaho

Power proposed that the maximum contract length for all PURPA contracts be reduced from 20 years to 5 years. Tr. at 487, 489, 524 ("Idaho Power recommends that the five-year contract term apply to all PURPA QF power sale contracts."). In the GNR-E-11-03 case, Staff's position was that PURPA contracts be limited to five years for only those contracts utilizing the IRP methodology (i.e., above the SAR-based eligibility cap). I testified that: "Twenty-year contracts should continue to be available to QFs under the SAR methodology." Tr. at 1107-08.

So the Commission's statement quoted by Dr. Reading was also responding to Idaho Power's position that all PURPA contracts should be reduced to five years, regardless whether they used the SAR-based methodology or IRP-based methodology. In the present case, all the parties have agreed to continue 20-year contracts for SAR-based contracts. In other words, the parties have agreed that SAR-based PURPA contracts will be unaffected by the reduction in contract length recommended for IRP-based contracts.

Q. Are there other reasons for the Commission to re-examine the length of IRP-based PURPA contracts?

A. Yes, there are. First, the Commission is a regulatory agency that performs legislative functions and re-examines regulatory policies from time-to-time. The

Commission is not bound to decide future cases in the same way as in past cases. As I recounted in my direct testimony, since PURPA was first implemented in Idaho, maximum contract length has gone from 35 years, to 20 years, to five years, and back to 20 years. The Commission can and should change policy as circumstances change.

Second, at the time the Commission issued its Order No. 32697 in the GNR case in December 2012, Idaho Power had less that 800 MW of nameplate PURPA power. Since the GNR case, Idaho Power reported that it had 461 MW under contract from solar developers (including the 141 MW of recently terminated contracts in the Clark Solar 1 - 4 projects) and an additional 885 MW of proposed solar development. See Idaho Power Ex. 1. Simply put, Idaho Power claims that it has more than 1200 MW of contracted and proposed solar projects in this case. This compares with the Company's peak load of 3,400 MW, its minimum system load of 1,073 MW, and its average system load of 1,800 MW. (Grow, Dir at 3; 2013 IRP Appendix A).

Q. On pages 14 and 15 of Dr. Reading's direct testimony, he created a chart and purportedly compares the costs of Idaho Power's generating resources to the costs of PURPA projects. Do you agree with the representations made in his Chart No. 1 on page 15?

A. No, I do not. In Chart 1 on page 15 of Dr. Reading's direct testimony, he compares the PURPA costs to the estimated capital and running costs of various Idaho Power-owned thermal generation resources. While the comparison may be numerically accurate, it is extremely misleading because the resources being compared are very different types of resources. More specifically, when resource costs are compared on a cost per MWh basis, and certain resources generate substantially different amounts of MWhs, peaking resources, such as Bennett Mountain and Danskin, will appear far more costly than baseload resources such as Jim Bridger. Peaking resources, because they are used infrequently and generate few MWhs, will always appear far more "costly" than baseload resources when measured on a cost per MWh basis. Conversely, on a cost per MW basis, peaking resources will always be less expensive than baseload resources.

In addition, Dr. Reading acknowledges that he omitted Idaho Power's lowest cost resources-its hydro resources-from his cost comparison. He could have included the hydro data by using an average over several years or normalized data. He also omitted hydro cost due to , in his words, "massive environmental remediation." (Dir at 16). The failure to include hydro costs significantly misstates the Company's power costs,

especially where 1,709 MW of hydro is included in 3,500 MW of nameplate capacity (Grow, Dir at 5).

Fair and reasonable direct comparisons between the costs of different resources can only be made for resources with comparable capacity factors, and when the comparisons are made over the same periods of time. Comparisons either on a cost per MW or a cost per MWh alone basis (capacity or energy) should never be used to judge the cost effectiveness of particular resources. Similarly, cost comparisons in which only a portion of the duration of a contract are considered are also usually inappropriate. Differences between PURPA contract rates and market prices may exist in specific years, but there is no certainty that those differences will persist for the duration or remainder of a contract.

Q. On page 4, Dr. Reading has asked whether there are other viable opportunities for projects like Simplot's and Clearwater's to sell their output to other buyers in the region. Do you agree with his statement on page 5 that "aside from PURPA sales to utilities, neither Clearwater nor Simplot have a legal or economically viable market, retail or wholesale, to sell electricity"?

A. No, I do not. Conspicuously absent in his answer and analysis is the possibility of either of these two entities selling their output to other utilities in

the region. Clearwater and Simplot may be able to operate in a similar fashion to exempt wholesale generators (EWGs) and sell their output to other utilities. For example, Clearwater currently sells its output to Avista using a non-PURA contract.[1] Other renewable projects have sold their non-PURPA output to other utilities such as the wind farm in eastern Idaho (Goshen North Wind Farm) selling to a California utility; Lucky Peak selling its hydro output to Seattle City Light or Palouse Wind selling its wind generation to Avista. Other renewable generators have been successful in selling their output to utilities without resorting to PURPA contracts including the Neal and Raft River geothermal projects to Idaho Power and the Elkhorn wind project to Idaho Power in Oregon.

Q. Could Clearwater sell its output to another utility other than Avista under either a PURPA or non-PURPA agreement?

A. Yes. As Dr. Reading notes on page 3 of his direct testimony, Clearwater's current 2013 agreement "provides Clearwater with a limited right to terminate its

[1] On May 13, 2015, Avista filed an Application seeking Commission approval of an amendment to Avista's contract with Clearwater. The amendment proposes to extend the current agreement by three additional years, in addition to permitting Avista to purchase incremental energy from Clearwater at negotiated prices when it is beneficial to both parties.

energy sales to Avista with 90 days' notice." (Reading, Dir at 3). Under the terms of its current power purchase agreement with Avista, Section 1 on page 2 of the agreement provides that:

> If, during the Term of this Agreement, [Clearwater] desires to sell the output of the Generation to any third party, [Clearwater] shall terminate this Agreement by providing Avista written notice of termination at least 90 days prior to such termination. The sale to the third party shall not commence until the date on which this Agreement is terminated. In the event that [Clearwater] desires to sell the output of the Generation to any third party(ies), [Clearwater] shall be responsible for making all necessary arrangements to facilitate the sale of the output of the Generation to such third party(ies).

The Commission approved this contract in Order No. 32841 issued June 28, 2013. By the terms of this agreement, Clearwater clearly preserved the opportunity to sell its output to a party other than Avista.

Q. Dr. Reading on p. 36 suggests that there is a flaw in the IRP computation methodology because it is unable to account for hours when market prices are negative and that the model instead assigns a price of zero when the actual avoided cost is negative. Do you agree that the model is flawed?

A. I would agree that the model should not be assigning a price of zero when prices are negative. However, I would also point out that, despite possible

misconceptions, that the AURORAxmp model used to generate energy prices can, in fact, generate negative prices under certain circumstances. The Idaho Power spreadsheet that uses AURORAxmp prices as input should then, in turn, be able to capture the effect of negative prices.

Nonetheless, while the capability to account for negative pricing exists, no negatively priced hours appeared in the AURORAxmp output used for pricing the 13 recent Idaho Power solar contracts, primarily because negative pricing is currently not likely under average conditions used for PURPA pricing.

Q. Does this conclude your rebuttal testimony in this proceeding?

A. Yes, it does.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 14TH DAY OF MAY 2015, SERVED THE FOREGOING **REBUTTAL TESTIMONY OF RICK STERLING,** IN CASE NOS. IPC-E-15-01/PAC-E-15-03/AVU-E-15-01, BY E-MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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