IN THE MATTER OF THE COMMISSION'S REVIEW OF PURPA QF CONTRACT PROVISIONS INCLUDING THE SURROGATE AVOIDED RESOURCE (SAR) AND INTEGRATED RESOURCE PLANNING (IRP) METHODOLOGIES FOR CALCULATING PUBLISHED AVOIDED COAT RATES.

REBUTTAL TESTIMONY OF DR. CATHLEEN M. MCHUGH

IDAHO PUBLIC UTILITIES COMMISSION

JUNE 29, 2012
Q. Please state your name and business address for the record.

   A. My name is Cathleen McHugh. My business address is 472 West Washington Street, Boise, Idaho.

Q. Are you the same Cathleen McHugh who previously submitted testimony in this proceeding?

   A. Yes I am.

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

   A. The purpose of my rebuttal testimony is to propose an update to the manner in which capacity payments are calculated in the SAR model. I am effectively providing rebuttal testimony to my earlier direct testimony.

Q. What was your previous recommendation in terms of how capacity payments are calculated in the SAR model?

   A. Previously, I had recommended that when a utility is capacity deficient, resource-specific capacity payments be based on that resource's ability to contribute to the deficient season's peak demand. If both seasons were deficient, then capacity payments would be based on the minimum of the two seasons' capacity contribution. This method is straightforward and computationally simple. Furthermore, it considered the fact that capacity provided by a QF in one season does not
necessarily translate into capacity avoided by the utility if the utility has to add capacity for the other season.

Q. Why are you now proposing changes to this method?

A. Since filing direct testimony, Staff has continued to review the SAR model. Quite frankly, during this time Staff devised what it believes is a better method of computing avoided capacity. Staff recognized that if the nameplate capacity of the QF resource was used as an input into the SAR model, then the capacity contribution of the QF could be computed for each year of the contract. Capacity payments could then be based on this capacity contribution.

Staff devised a worksheet to be included in the SAR model which demonstrates how the capacity contribution is calculated step-by-step and the resultant factor applied to the capacity payment. The factor represents the share of the capacity payment the QF receives – for instance, a factor of 10 percent indicates the QF would receive 10 percent of the capacity payment. This worksheet is included as Exhibit No. 305 for a 10 MW canal drop hydro project located in Idaho Power's service territory.

In 2012-2013, the capacity factor is 0 percent reflecting the fact that Idaho Power is not capacity
deficient in those years. In 2014, the factor is 10 percent which reflects the fact that only 10 percent of the QF’s output can be used to reduce Idaho Power’s need for capacity. From 2015 onward, the capacity factor is 100 percent reflecting the fact that all the capacity provided by the QF can be used to reduce Idaho Power’s need for capacity. As can be seen, this new method is robust to different scenarios regarding the needs of a utility and the ability of a particular QF resource to meet those needs.

Q. How does this new method compare to the old method?

A. In Exhibit No. 305, I use a star to indicate years in which the capacity factor differs between the two methods and show the capacity factor calculated under the old method. The old method could not differentiate between years in which the utility needed a little capacity (such as 2014) and years in which the utility needed a lot of capacity (years 2015-2031). Furthermore, the old method could not recognize that sometimes capacity provided in only one season did actually translate into capacity avoided by the utility (years 2027-2031).

Q. Have you updated Exhibit No. 303 to reflect this new methodology?

A. Yes. I have included this as Exhibit No. 306.
I have used a star to indicate which rates have changed from the old method to the new method. Furthermore, I have indicated the magnitude of those changes. Only the avoided rates for Idaho Power and Avista change. The biggest change for both utilities is the rates for canal drop hydro projects. Under the new method, Idaho Power rates increase by 7 percent and Avista rates increase by 6 percent.

Q. Are there any other changes you have made to this exhibit?

A. Yes. I have updated the energy and capacity needs for PacifiCorp based on new information from the Company.

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

A. Yes, it does.
Notes:
1. Capacity contributions are set equal to zero when the utility does not need capacity; i.e., when the planning deficit (column d) is not negative.
2. Capacity contributions cannot exceed the absolute value of the planning deficit (column d).
3. A capacity payment will be made if the capacity contribution is strictly positive.
4. The factor is calculated as the capacity contribution divided by the project nameplate.

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<th>Utility</th>
<th>IPCO</th>
<th>Project type</th>
<th>Drop Canal Hydro</th>
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<tr>
<td>Peak Capacity Factors</td>
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<tr>
<td>Peak Capacity (MW)</td>
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<td>Current Year</td>
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**Calculation of basis for capacity payments**

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### Comparison of Proposed SAR Methodology Rates

**Levelized Rates for 20-yr Contract Term, January 2013 Online Date**

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<th>Baseload</th>
<th>Canal Drop</th>
<th>Fixed PV Solar</th>
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<tr>
<td></td>
<td>Idaho Power</td>
<td>Avista</td>
<td>Idaho Power</td>
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<tr>
<td><strong>Rates under new method</strong></td>
<td>$61.27</td>
<td>$84.65</td>
<td>$47.01</td>
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<td><strong>Rates under old method</strong></td>
<td>$62.90</td>
<td>$79.09</td>
<td>$44.50</td>
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<td><strong>Difference</strong></td>
<td>($1.63)</td>
<td>$5.56</td>
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<td><strong>Percentage difference</strong></td>
<td>-3%</td>
<td>+7%</td>
<td>+6%</td>
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**PacifiCorp’s avoided rates also changed but they changed because of updated resource and load data.**

Deductions to account for integration and for transmission costs and losses are included for all utilities.
CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 29TH DAY OF JUNE 2012, SERVED THE FOREGOING REBUTTAL TESTIMONY OF DR. CATHLEEN M. McHUGH, IN CASE NO. GNR-E-11-03, BY E-MAILING AND MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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