McDOWELL RACKNER GIBSON PC

WENDY McINDOO
Direct (503) 290-3627
wendy@mrg-law.com

July 21, 2016

VIA ELECTRONIC FILING

PUC Filing Center
Public Utility Commission of Oregon
P.O. Box 1088
Salem, OR 97308-1088

Re: UM 1716 - In the Matter of PUBLIC UTILITY COMMISSION OF OREGON, Investigation to Determine the Resource Value of Solar

Attached for filing in the above-referenced docket is Idaho Power Company's Reply Testimony of Michael J. Youngblood.

Please contact this office with any questions.

Very truly yours,

Wendy McIndoo

Wendy McIndoo
Office Manager

Attachment

Idaho Power/200
Witness: Michael J. Youngblood

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

UM 1716

In the Matter of	)
PUBLIC UTILITY COMMISSION OF OREGON,	)
Investigation to Determine the Resource Value of Solar.	)

IDAHO POWER COMPANY

REPLY TESTIMONY

OF

MICHAEL J. YOUNGBLOOD

July 21, 2016

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Michael J. Youngblood. My business address is 1221 West Idaho Street, Boise, Idaho 83702.

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

A. I am employed by Idaho Power Company (Idaho Power or Company) as Manager of Regulatory Projects in the Regulatory Affairs Department.

Q. Are you the same Michael J. Youngblood that filed Response Testimony in this matter?

A. Yes. On June 30, 2016 I provided Response Testimony in this docket.

Q. What is the purpose of your Reply Testimony?

A. My Reply Testimony responds to several specific points made by the parties in their response testimony filed on June 30, 2016. In particular, I respond to:

- Testimony by Bob Jenks and Nadine Hanhan, on behalf of the Citizens' Utility Board of Oregon (CUB), suggesting that the model proposed by Staff witness Arne Olson may not adequately consider the impact of low hydropower generation on the resource value of solar (RVOS);
- Testimony by Eliah Gilfenbaum, on behalf of the Alliance for Solar Choice (TASC), and Michael O'Brien, on behalf of Renewable Northwest, the Oregon Solar Energy Industries Association, the NW Energy Coalition, and Northwest Sustainable Energy for Economic Development, suggesting that the Commission should require the utilities to provide certain modeling inputs regardless as to whether they are currently or reasonably available; and
- Testimony by Mr. O'Brien arguing that Ancillary Service should be considered as a potential value to ratepayers.

Q. Please summarize the point made by Mr. Jenks and Ms. Hanhan of CUB regarding the RVOS in years with low hydropower generation.

A. CUB is concerned that the model proposed by Staff does not recognize the value that solar generation could provide in years of very low hydropower generation. CUB acknowledges that Staff's model is not a short-term model, and in fact looks at avoided costs over a period of 25 years. Nevertheless, CUB is concerned that the model does not account for the value that solar generation might provide in an unusually low hydro scenario.[1]

Q. What is your response to CUB's concerns?

A. Idaho Power is a predominantly hydro-generation based company and has considerable experience with the impacts of high and low water years. The Company is well aware of the potential value non-hydro generation may provide during low-hydro conditions. However, CUB's concern appears to be one-sided. CUB is asking the Commission to give extra consideration to the possibility of an extraordinarily low hydro year, which could render solar generation more valuable to customers. CUB's testimony fails to recognize that an extraordinarily ***high*** hydro year would have the opposite effect, rendering solar generation ***less*** valuable to customers. Therefore, if the Commission is concerned that Staff's—or any other party's—proposed methodology does not consider the full range of possible levels of hydropower generation, the Commission should require the parties to consider both higher and lower levels.

Q. Does the Company believe it is appropriate to recognize a single extreme hydro condition when determining the resource value of solar?

[1] CUB/100, Jenks-Hanhan/5-6.

A. No. If hydrological conditions are deemed to be needed to determine the RVOS, then the model could consider using a median hydro condition, in a similar way as the Company would value potential resources through its long range integrated resource planning process. Or alternatively, the RVOS could be evaluated over all available water years, as the Company does in determining the average net power supply costs included in base rates. In either case, the premise is the same. The value of solar, or any other generation resource, is not determined in one extreme year of low hydro conditions. All resources may have higher or lower relative values, depending on the conditions that exist at any one point in time. The determination of the RVOS should be independent of any single extreme hydrologic condition.

Q. Please summarize the points made by Mr. Gilfenbaum and Mr. O'Brien regarding the granularity of the data provided by utilities.

A. Both Mr. Gilfenbaum and Mr. O'Brien advocate use of granular data as inputs to the model. Mr. O'Brien argues that more granular data will allow the parties to focus on areas where value could be optimized and appropriately compensated.[2] Dr. Gilfenbaum advocates for hourly data, arguing that more averaged inputs could underestimate the value of solar. In addition, Dr. Gilfenbaum argues that utilities should be required to provide inputs for ***all*** proposed elements—regardless of whether the information is reasonably available. Dr. Gilfenbaum states: "An avoided cost category should not be assigned zero value simply because the value is uncertain or difficult to quantify."[3]

Q. What is your response?

A. First, as a general matter, I agree that more granular data is preferable to less granular data, and that it is should be provided where reasonably available.

[2] RNW, OSEIA, NWEC-SEED/100, O'Brien/4.

[3] TASC/100, Gilfenbaum/4.

However, I do not agree that utilities should be ordered to provide data for all inputs, regardless of the burden or cost involved. Moreover, in specific cases, it may be appropriate for the utility to assign a "zero" value for an element.

Q. Have you already provided testimony regarding certain elements proposed by Mr. Olsen for which Idaho Power may not be able to provide data?

A. Yes. In my Response Testimony, I explained that the Company does not yet have a method for determining the impact of Market Price Response. The Company assumes that this will be a topic of discussion in the utility-specific proceedings.

Q. Have you provided testimony regarding elements that you believe should be valued at zero for Idaho Power?

A. Yes. In my Response Testimony, I explained that the values for Renewable Portfolio Standard compliance should be set at zero for Idaho Power because the Company's obligations are not applicable until 2025, and in any event, the Company already has more energy from qualifying resources than is necessary to comply.[4] In addition, I explained that Hedge Value should be set at zero because the Company's hedging strategy is a prescribed process and will not be impacted by the purchase of solar generation.[5] Finally, the value for Environmental Compliance should be set at zero because the Company is not currently subject to compliance costs for carbon, and future costs cannot be determined.[6]

Q. Can the Company make any hourly data available?

A. Yes. In determining the marginal cost of energy the Company proposes to use the value of energy as determined by its incremental cost integrated resource planning methodology (ICIRP). This methodology, approved by both this Commission and

[4] Idaho Power/100, Youngblood/12.

[5] Idaho Power/100, Youngblood/13-14.

[6] Idaho Power/100, Youngblood/14.

the Idaho Public Utilities Commission (IPUC), determines an hourly value of energy. Similarly, our proposed methodology for estimating the capacity contribution to peak of distributed solar generation recently addressed in UM 1719 would provide hourly input data. The Company agrees that using hourly data is preferable to less granular data where it is where reasonably available or can be acquired at a reasonable cost. However, the Company does not agree that utilities should be ordered to provide hourly data for all inputs, regardless of the burden or cost involved.

Q. How should the Commission resolve any disagreements over the availability of data for specific elements?

A. Any such disagreements should be resolved in the second phase of this docket in which the Commission considers the values for each utility using the adopted methodology.[7]

Q. Please summarize Mr. O'Brien's point regarding Ancillary Service.

A. Mr. O'Brien takes issue with the way in which the model proposed by Mr. Olsen addresses Ancillary Service. In particular, Mr. O'Brien takes issue with the model's bundling of Integration Impacts with Ancillary Service, and its assumption that both of these reflect costs, as opposed to benefits, associated with the RVOS. Mr. O'Brien claims that the Ancillary Service element was intended to capture positive values of solar, including frequency response, voltage support or peak shaving.

Q. What is your response?

A. As stated in my Response Testimony, Idaho Power does not consider solar resources to provide ancillary services, and views these components as strictly a cost. Staff Witness, Mr. Olson describes in his testimony that the calculation methodology for the Integration and Ancillary Services input element is the "$/MWH value provided by

[7] See Order 15-296 in which the Commission stated that in the second phase of this docket the Commission will examine values for each utility using the methodology adopted in phase one.

utilities that represents *the net incremental cost* of providing additional operating reserves, balancing services, and system operations required to integrate the solar resource."[8] Mr. O'Brien states that the ancillary services element was meant to capture the value of ancillary services, like frequency response, voltage support or peak shaving, especially "when combined with other technologies such as modern inverters or storage."[9] However, Mr. O'Brien doesn't offer offsetting the "benefit" of the ancillary services with the cost of including the other technologies. Nor do all installations of distributed solar provide a value associated with frequency response, or voltage support, or peak shaving if such a need does not exist for a particular feeder or geographic location. Idaho Power believes that it is important to consider not only the benefit of the resource, but also the cost incurred to include that resource. If ancillary services are to provide any "potential value" to our customers, as Mr. O'Brien suggests, they must be netted with the costs of providing those services. The RVOS model should not be used to "focus the market, policy and regulation on optimizing the RVOS" as Mr. O'Brien suggests. It should remain consistent with the Commission's direction in Order No. 15-296 that it would "only consider elements that could directly impact the cost of service to utility customers." The Company agrees with E3's original description for the costs of Integration and Ancillary Services as the net incremental cost of providing those services and recommends leaving them combined.

Q. Does this conclude your testimony?

A. Yes.

[8] Staff/200, Olson/32. (Emphasis added.)

[9] RNW, OSEIA, NWEC, NW SEED/100, O'Brien/8.