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Public Utility Commission of Oregon  
P.O. Box 1088  
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**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 an electronic copy of Idaho Power Company's Initial Brief.

Please contact this office with any questions.

Very truly yours,

Wendy McIndoo  
Office Manager

Attachment

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**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'S  
INITIAL BRIEF**

In accordance with the August 10, 2016 ruling issued by Administrative Law Judge (“ALJ”) Sarah Rowe, Idaho Power Company (“Idaho Power” or “Company”) submits this Initial Brief to the Public Utility Commission of Oregon (“Commission”).

**I. INTRODUCTION**

On January 27, 2015, the Commission opened this docket to examine the resource value of solar (“RVOS”). The purpose of this current phase of the proceeding is to adopt a methodology that the utilities will use to calculate the RVOS. The utilities will apply the methodology to calculate a specific RVOS for their individual systems in a future phase.

To assist the parties and the Commission in this case, Commission Staff (“Staff”) retained Arne Olson of Energy and Environmental Economics to develop a methodology for valuing solar generation, consistent with the Commission’s direction. The resulting model—which Staff recommends the Commission adopt—represents a long-term marginal cost approach, incorporating time- and location-specific inputs.

Overall, Idaho Power agrees with Staff’s proposal. The Company believes that Mr. Olson’s methodology is consistent with the Commission’s policies, and will produce reasonable results. The model is flexible enough to accommodate data of different levels of granularity, and appropriately values only those elements that impact utility customer

1 rates. That said, the Company urges the Commission to use caution when applying the  
2 methodology for any specific purpose, to ensure that it appropriately addresses the  
3 characteristics of the specific solar generation at issue and the specific application of the  
4 value developed. In particular, the Company believes that Staff's proposed methodology  
5 would need to be adjusted to accurately calculate costs that are shifted to utility customers  
6 as a result of net metered solar projects. In addition, Idaho Power suggests several specific  
7 refinements to Staff's proposal, and specific recommendations for applying the methodology  
8 to the Company's unique circumstances.

9 **II. BACKGROUND**

10 In 2009, the legislature enacted House Bill ("HB") 3039, codified as ORS 757.365,  
11 which directed the Commission to establish pilot solar generation programs for the three  
12 major investor-owned electric utilities in Oregon, and required that the utilities offer  
13 production-based rates and incentives (volumetric incentive rates, or "VIR") for electricity  
14 delivered from solar photovoltaic energy for eligible participants in the pilot program.<sup>1</sup>

15 The statute mentions the calculation of the RVOS in three separate contexts: (1) after  
16 15 years of paying a customer with an eligible system at an incentive rate, the utility is  
17 directed to pay a rate equal to the RVOS; (2) if VIR rates "exceed the resource value," the  
18 systems participating in the program are not eligible for funding through the public purpose  
19 charge under ORS 757.612 or tax credits under ORS Chapter 469B; and (3) the  
20 Commission is required to file a report to the Legislative Assembly by January 1 of odd-  
21 numbered years to evaluate the effectiveness of the VIR Pilot Program and to estimate the

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24 <sup>1</sup> HB 3039 (2009). The legislature subsequently amended ORS 757.365 in 2010 to specify allocation  
25 of program capacity between small and medium sized systems, and again amended ORS 757.365  
26 in 2013 to add a requirement to report to the Legislative Assembly regarding the effectiveness of the  
VIR program, the cost to customers, and the RVOS. HB 3690 (2010); HB 2893 (2013).

1 program cost to retail customers as well as the resource value of solar energy.<sup>2</sup> Accordingly,  
2 the Commission opened this docket to investigate the resource value of solar generation.

3 ALJ Rowe divided the proceeding into three parts: (1) investigation regarding the  
4 resource value of solar; (2) investigation regarding fixed costs and the extent of cost-shifting  
5 from net-metering, if any; and (3) investigation regarding reliability impacts of solar on the  
6 grid.<sup>3</sup> The current focus of UM 1716 is the appropriate methodology for determining the  
7 RVOS, and then the Commission will later consider the inputs to the RVOS model as applied  
8 by the individual utilities.<sup>4</sup>

9 In Staff's initial comments in this docket, Staff described specific elements that it  
10 recommended the Commission adopt for use in a methodology by which the RVOS would  
11 be calculated.<sup>5</sup> The Commission declined to prescribe particular elements, but did direct  
12 Staff to include only those elements that directly impact the cost of service to utility  
13 customers.<sup>6</sup>

### 14 **III. STAFF'S PROPOSED RVOS METHODOLOGY AND MODEL**

15 Staff's proposed RVOS methodology is designed to calculate the long-term marginal  
16 costs that utilities will avoid through the acquisition of mass market solar generation.<sup>7</sup> The  
17 model prescribes specific calculations to arrive at hourly values for each discrete element,  
18 and uses those values to produce an hourly avoided cost profile for each year of the  
19 economic life of the solar photovoltaic system, which is assumed to be 25 years.<sup>8</sup> The model

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21 <sup>2</sup> ORS 757.365.

22 <sup>3</sup> *In the Matter of Pub. Util. Comm'n of Or. Investigation to Determine the Resource Value of Solar*,  
Docket No. UM 1716, Prehearing Conference Memorandum at 1-2 (Nov. 9, 2015). The Commission  
23 subsequently closed the third investigation regarding reliability impacts of solar on the grid. Order  
No. 16-074 at 1 (Feb. 29, 2016).

24 <sup>4</sup> *In the Matter of Pub. Util. Comm'n of Or. Investigation to Determine the Resource Value of Solar*,  
Docket No. UM 1716, Order No. 15-296 at 2 (Sept. 28, 2015).

25 <sup>5</sup> *In the Matter of Pub. Util. Comm'n of Or. Investigation to Determine the Resource Value of Solar*,  
Docket No. UM 1716, Staff's Comments at 1 (July 15, 2015).

26 <sup>6</sup> Order No. 15-296 at 2.

<sup>7</sup> Staff/200, Olson/13.

<sup>8</sup> Staff/100, Dolezel/5.

1 is flexible in that it can accommodate more or less granular data, which is important because  
2 not all utilities have hourly data available for all elements.

3 Based on the Commission’s direction to limit the model elements to those that impact  
4 the cost of service to utility customers, Staff’s model values the following ten elements:

- 5 • Energy;
- 6 • Generation Capacity;
- 7 • Line Losses;
- 8 • Transmission and Distribution (“T&D”) Capacity;
- 9 • Renewable Portfolio Standard (“RPS”) Compliance;
- 10 • Integration and Ancillary Services;
- 11 • Administration;
- 12 • Market Price Response;
- 13 • Hedge Value; and
- 14 • Environmental Compliance.<sup>9</sup>

15 **IV. DISCUSSION**

16 **A. Idaho Power Generally Supports Staff’s Proposed RVOS Methodology and**  
17 **Model.**

18 Overall, Idaho Power supports Staff’s proposal.<sup>10</sup> The methodology represents a  
19 reasonable response to the Commission’s directive to establish a RVOS methodology  
20 applicable to small mass market solar generation. The Company agrees that, in the specific  
21 context of the Commission directives at issue in this docket, a time- and location-specific  
22 marginal cost approach is appropriate.<sup>11</sup> Moreover, the Company is comfortable with the  
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24 <sup>9</sup> Staff/100, Dolezel/4-5.

25 <sup>10</sup> Idaho Power/100, Youngblood/9.

26 <sup>11</sup> Idaho Power/100, Youngblood/9.

1 algebraic formulas that Staff and Mr. Olson have proposed to use in the model. In addition,  
2 Idaho Power supports the adoption of a model that is flexible and adaptable to the use of  
3 more or less granular data, and the proposed model accomplishes this objective.<sup>12</sup> Finally,  
4 Idaho Power agrees that Staff has correctly included only those elements that may impact  
5 the cost of service to customers, consistent with the Commission's direction.<sup>13</sup>

6 **B. Idaho Power's Comments on Model Elements.**

7 Idaho Power generally agrees that Staff has identified the appropriate elements to be  
8 valued based upon the Commission's stated objectives in this case. In this section, the  
9 Company proposes some refinements, suggestions for application of the elements to Idaho  
10 Power, and responds to arguments made by other parties regarding the elements.

11 **1. Energy.**

12 Staff defines the energy element as the hourly marginal cost of energy including fuel  
13 (and associated fuel transportation costs), variable operations and maintenance, labor, and  
14 all other variable costs.<sup>14</sup> To determine the marginal cost of energy for the Company, Idaho  
15 Power recommends that it use the Incremental Cost Integrated Resource Planning  
16 methodology ("ICIRP"), which has been approved by this Commission and the Idaho Public  
17 Utilities Commission for determining avoided costs rates for qualifying facilities that exceed  
18 the standard rate eligibility cap.<sup>15</sup> The ICIRP methodology compares the hourly generation  
19 profile of a solar resource to the utility's resource stack being used to serve load in each  
20 hour, and assigns the cost of the utility's highest cost displaceable resource operating during  
21 the hours the solar resource provides generation.<sup>16</sup> Idaho Power recommends using the

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23 <sup>12</sup> Idaho Power/100, Youngblood/9.

24 <sup>13</sup> Order No. 15-296 at 2.

24 <sup>14</sup> Staff/200, Olson/30.

25 <sup>15</sup> Idaho Power/100, Youngblood/10-11.

25 <sup>16</sup> Idaho Power/100, Youngblood/11.

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1 ICIRP to value energy because it will provide a consistent determination of the value of a  
2 solar resource on an hourly basis for all such resources on the Company's system.<sup>17</sup>

3 CUB proposes that the model give extra consideration to the value of solar generation  
4 in those years when hydropower generation is extremely low.<sup>18</sup> The Company agrees that  
5 solar generation may provide extra value to utility customers in years of low hydropower  
6 generation.<sup>19</sup> However, it is also true that solar generation will provide less value to utility  
7 customers in years of abundant hydro generation.<sup>20</sup> For that reason, Idaho Power agrees  
8 with Staff that inputs to the model should reflect a full range of possible hydro conditions.<sup>21</sup>  
9 The Company recommends using either a median hydro condition, in a similar way as the  
10 Company would value potential resources through its long range integrated resource  
11 planning ("IRP") process, or alternatively, the RVOS could be evaluated over all available  
12 water years, as the Company does in determining the average net power supply costs  
13 included in base rates.<sup>22</sup> Either approach would take into account realistic operating  
14 scenarios, rather than focusing on a single extreme water year.<sup>23</sup>

## 15 **2. Generation Capacity.**

16 Staff defines the generation capacity element as the annual carrying cost of new  
17 generation capacity allocated to hours of the year using hourly normalized capacity value  
18 allocators.<sup>24</sup> To determine the value of generation capacity for the Company, Idaho Power  
19 proposes that it use the same methodology for estimating capacity contribution for its IRP,  
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21 <sup>17</sup> Idaho Power/100, Youngblood/11.

22 <sup>18</sup> CUB/100, Jenks-Hanhan/5-6.

23 <sup>19</sup> Idaho Power/200, Youngblood/2.

24 <sup>20</sup> Idaho Power/200, Youngblood/2.

25 <sup>21</sup> Staff/400, Olson/16; Idaho Power/200, Youngblood/2.

26 <sup>22</sup> Idaho Power/200, Youngblood/3.

<sup>23</sup> Idaho Power/200, Youngblood/3.

<sup>24</sup> Staff/200, Olson/30.

1 and to use the methodology from UM 1719 to estimate distributed solar generation's  
2 contribution to peak.<sup>25</sup>

3 Staff's opening testimony stated that the capacity value would be zero in years of  
4 resource sufficiency. However, Mr. Olson later stated that he had made a mistake and that  
5 in the year(s) before capacity deficiency, the capacity value should not be zero as previously  
6 stated, but instead should be equal to fixed operations and maintenance expense.<sup>26</sup> Idaho  
7 Power previously stated that it supported Staff's zero value for capacity in near term years  
8 and continues to support that position. The Company believes that there is no value for  
9 additional capacity during times when the Company is already capacity sufficient, and  
10 therefore there would be no deferrable capacity investments.<sup>27</sup>

11 The Alliance for Solar Choice ("TASC") expresses concern that including demand side  
12 resources may impact the determination of the first year of resource deficiency.<sup>28</sup> Mr. Olson  
13 testifies that he agrees that inclusion or exclusion of demand side resources, specifically,  
14 behind the meter solar, in the load forecast can have a significant impact on determining the  
15 first year resource deficiency—or what he calls the resource balance year.<sup>29</sup> Mr. Olson  
16 states: "If solar resources are included in the load forecast, this will push the resource  
17 balance year further into the future which will in turn decrease the generation capacity  
18 element of the RVOS."<sup>30</sup> To avoid the circularity issue, Mr. Olson recommends that "any  
19 solar resources whose compensation is tied to the RVOS should be excluded from the  
20 utility's forecast of the resource balance year."<sup>31</sup> While Idaho Power recognizes it may be  
21 inappropriate to create a methodology that does not account for capacity contribution in the  
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23 <sup>25</sup> Idaho Power/100, Youngblood/11.

24 <sup>26</sup> Staff/400, Olson/5.

25 <sup>27</sup> Idaho Power/100, Youngblood/11.

26 <sup>28</sup> TASC/100, Gilfenbaum/7.

<sup>29</sup> Staff/400, Olson/15.

<sup>30</sup> Staff/400, Olson/15.

<sup>31</sup> Staff/400, Olson/15.



1 resource value, Idaho Power’s position is that these behind the meter solar resources should  
2 not be excluded from the resource sufficiency determination precisely because they are  
3 resources which would in fact impact and push out the Company’s resource deficiency.  
4 Other adjustments to the resource value, or compensation, may be necessary to assure that  
5 solar generation projects receive compensation for needed and provided capacity, while  
6 also recognizing their impact to the Company’s resource sufficiency determination.

7 **3. Line Losses.**

8 This element considers the loss of energy in the transmission and distribution process  
9 that are avoided through distributed solar generation.<sup>32</sup> Idaho Power recommends that the  
10 system loss input in the model may need to be modified to increase the number of seasons  
11 and time periods to represent a utility’s seasonal loss variability over a year.<sup>33</sup>

12 **4. T&D Capacity.**

13 This element measures the benefit solar generation can provide in allowing the utility  
14 to defer upgrades to its transmission and/or distribution systems.<sup>34</sup> Idaho Power agrees that  
15 this element should be considered, but points out that the value may vary significantly  
16 among the utilities, **and** may vary within a particular utility’s system.<sup>35</sup> For example,  
17 investments caused by high growth in one part of the utility’s system may not suggest that  
18 investments may be deferred in low-growth areas.<sup>36</sup> For example, because Idaho Power’s  
19 system is primarily rural, adding solar in many areas may not result in deferred T&D  
20 investments.<sup>37</sup> Additionally, a utility may not have a growth-related T&D deferral for several

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23 <sup>32</sup> Staff/200, Olson/31.  
24 <sup>33</sup> Idaho Power/100, Youngblood/11.  
25 <sup>34</sup> Staff/200, Olson/31.  
26 <sup>35</sup> Idaho Power/100, Youngblood/12.  
<sup>36</sup> Idaho Power/100, Youngblood/12.  
<sup>37</sup> Idaho Power/100, Youngblood/12.

1 years into the future.<sup>38</sup> To account for the potential lack of growth-related T&D investment  
2 in some areas of a utility's system or delays in T&D investment, Idaho Power recommends  
3 including a "T&D deficiency year," which would identify the year in which an investment  
4 value accruing to solar output would begin to accrue, similar to the resource deficiency year  
5 for generation capacity.<sup>39</sup> In sum, Idaho Power cautions that no single approach to valuing  
6 T&D capacity should be adopted for all utilities.<sup>40</sup>

7 **5. RPS Compliance.**

8 The RPS Compliance element is intended to capture the quantity of RPS purchases  
9 that are avoided for every unit of solar generation.<sup>41</sup> Idaho Power recommends that the  
10 RPS compliance value allow for utilities to account for their RPS compliance position, and  
11 in Idaho Power's case, the RPS compliance element should be valued at zero.<sup>42</sup> Idaho  
12 Power has no RPS compliance obligation until 2025, and the Company already has  
13 developed or procured more than sufficient resources to satisfy its forthcoming RPS  
14 compliance obligation.<sup>43</sup>

15 In response to PGE's comments regarding the RPS element, TASC points out that  
16 solar may contribute to meeting a utility's RPS obligation by reducing the utility's overall  
17 retail load.<sup>44</sup> For Idaho Power, reducing overall retail load would not provide a quantifiable  
18 RPS benefit because, as stated previously, Idaho Power can already meet its RPS

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20 <sup>38</sup> Idaho Power/100, Youngblood/12.

21 <sup>39</sup> Idaho Power/100, Youngblood/12.

22 <sup>40</sup> Idaho Power/100, Youngblood/12.

23 <sup>41</sup> Staff/200, Olson/32.

24 <sup>42</sup> Idaho Power/100, Youngblood/12.

25 <sup>43</sup> Idaho Power/100, Youngblood/12; Idaho Power/200, Youngblood/4. Mr. Olson disagrees with the  
26 Company's conclusion that it should assign a zero value to the RPS compliance element, and instead  
recommends that the Company should assess the RPS compliance obligation beginning in 2025.  
Staff/400, Olson/13. Mr. Olson appears to misapprehend the Company's position. Because Idaho  
Power has already satisfied its needs for RPS compliance, the contribution of mass market solar  
adds no value.

<sup>44</sup> TASC/200, Gilfenbaum/14.

1 obligations without reducing retail load or adding new RPS-compliant resources.<sup>45</sup> As a  
2 result, the model should operate to allow Idaho Power to account for its anticipated RPS  
3 compliance position, which would reflect a zero value for RPS compliance.

4 **6. Integration and Ancillary Services.**

5 Staff defines the integration and ancillary services elements as the value **provided by**  
6 **the utility** of the net incremental cost of providing additional operating reserves, balancing  
7 services, and system operations required to integrate the solar resource.<sup>46</sup> Renewable  
8 Northwest, Oregon Solar Energy Industries Association, NW Energy Coalition, and  
9 Northwest Sustainable Energy for Economic Development (collectively, “Joint Parties”),  
10 TASC, and the Oregon Department of Energy (“ODOE”) recommend splitting the integration  
11 and ancillary services element into two separate elements to account for the possibility that  
12 solar may provide ancillary services benefits.<sup>47</sup> Idaho Power disagrees. It is true that solar  
13 generators **may** be able to provide ancillary services under some circumstances. However,  
14 as noted by Staff, the distribution systems of Oregon utilities are not capable of extracting  
15 ancillary services such as frequency response, voltage support, or peak shaving from  
16 distributed generation solar photovoltaic systems.<sup>48</sup> Moreover, as explained by Mr. Olson,  
17 a system capable of providing ancillary services would likely have a different production  
18 profile than the mass market solar for which the model is intended that therefore would need  
19 to be valued using a separate methodology.<sup>49</sup> For the foregoing reasons, there is no reason  
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22 <sup>45</sup> Idaho Power/100, Youngblood/12; Idaho Power/200, Youngblood/4.

23 <sup>46</sup> Staff/200, Olson/32.

24 <sup>47</sup> RNW, OSEIA, NWECA, NW SEED/100, O'Brien/7-8; TASC/200, Gilfenbaum/16-17; ODOE/200,  
Broad and DelMar/7.

25 <sup>48</sup> Staff/300, Dolezel/5.

26 <sup>49</sup> Staff/400, Olson/6.

1 to disaggregate integration and ancillary services for mass market solar at this time, and  
2 ancillary services should be viewed as a cost rather than a benefit.<sup>50</sup>

3 **7. Administration.**

4 Staff defines the administration element as the value provided by the utility that  
5 represents the cost of interconnecting solar generators and any ongoing administrative  
6 costs such as billing, which is a uniform value across all hours of the year.<sup>51</sup> The Company  
7 has not yet developed a recommendation for determining administration expense, and  
8 expects that this issue will be discussed further during the second phase determining the  
9 utility-specific inputs to the model.<sup>52</sup>

10 **8. Market Price Response.**

11 Staff defines the market price response element as the estimated impact on Mid-  
12 Columbia price under a specified solar penetration (\$/MWh) multiplied by utility net market  
13 purchases or sales (MWh).<sup>53</sup> Idaho Power does not currently evaluate the impact of new  
14 solar generation on market price response, and is unclear as to how this market price  
15 response will be quantified. It is also important to note that the quantification and  
16 consideration of a market price response element for Idaho Power may produce a result of  
17 increased net costs as lower market energy prices would generally lead to decreased  
18 surplus sales values. Idaho Power expects that this issue will be further refined during the  
19 discussion of utility-specific inputs to the model.<sup>54</sup>

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23 <sup>50</sup> Idaho Power/100, Youngblood/13.

24 <sup>51</sup> Staff/200, Olson/33.

25 <sup>52</sup> Idaho Power/100, Youngblood/13.

26 <sup>53</sup> Staff/200, Olson/33.

<sup>54</sup> Idaho Power/100, Youngblood/13.

1           **9. Hedge Value.**

2           Staff defines the hedge value element as the fixed percentage multiplied by the  
3 avoided cost of energy that represents the cost of utility hedging that is not already included  
4 in the estimate for the energy value element.<sup>55</sup> Idaho Power’s hedging strategy is prescribed  
5 in its Risk Management Policy Manual, and does not vary with the addition of new distributed  
6 solar generation resources.<sup>56</sup> Accordingly, the hedging value for Idaho Power should be  
7 zero.<sup>57</sup>

8           **10. Environmental Compliance.**

9           This element represents the value that solar generation provides the utility through the  
10 avoidance of costs incurred to comply with laws designed to curb, limit or prohibit carbon  
11 emissions.<sup>58</sup> Idaho Power’s customers are not currently bearing any costs related to carbon  
12 emissions.<sup>59</sup> Moreover, the Company cannot determine any future compliance costs with  
13 any degree of accuracy at this time.<sup>60</sup> For these reasons, the Company recommends setting  
14 the value for environmental compliance at zero.<sup>61</sup> That said, while Idaho Power is  
15 concerned that addressing the environmental compliance value would be speculative at this  
16 point, the Company is open to Staff’s recommended approach of revisiting this issue in the  
17 second phase of this proceeding.<sup>62</sup>

18           **C. The Elements in the Proposed RVOS Methodology are Appropriate, and the**  
19           **Commission Should Reject the Recommendations to Include Additional**  
20           **Elements.**

21           Idaho Power agrees with Staff that the ten elements identified in Staff’s proposed  
22 model are appropriate, and that the Commission should not include elements in the model

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23           <sup>55</sup> Staff/200, Olson/33.

24           <sup>56</sup> Idaho Power/100, Youngblood/13-14.

25           <sup>57</sup> Idaho Power/100, Youngblood/14.

26           <sup>58</sup> Staff/200, Olson/33.

<sup>59</sup> Idaho Power/100, Youngblood/14.

<sup>60</sup> Idaho Power/100, Youngblood/14.

<sup>61</sup> Idaho Power/100, Youngblood/14.

<sup>62</sup> Staff/300, Dolezel/7.

1 that are not applicable to existing utility systems in Oregon or which are not directly linked  
2 to the cost of service to utility customers. Accordingly, the Commission should reject the  
3 recommendations to include an element for reliability, resiliency, and security and to create  
4 a placeholder element for societal benefits.

5 **1. It is Unnecessary to Include an Element for Reliability, Resiliency, and**  
6 **Security.**

7 Joint Parties, TASC, and ODOE all urge the Commission to include an element to  
8 account for the reliability, resiliency, and security benefits provided by solar.<sup>63</sup> This  
9 recommendation is primarily based on the potential application of solar generation coupled  
10 with energy storage or advanced inverters, or in potential microgrid applications of solar.<sup>64</sup>  
11 Yet, at this time, most mass market solar resources in Oregon are not installed with these  
12 capabilities, and there are no known customer microgrid systems in Oregon.<sup>65</sup> Because the  
13 analysis of mass market systems is the intended application of the RVOS model, it would  
14 be inappropriate to include an element to reflect potential benefits not actually provided by  
15 those systems.<sup>66</sup>

16 Additionally, ODOE argues that solar generation *could* provide resiliency benefits  
17 during emergencies, such as solar energy at an emergency shelter or critical utility  
18 operations center.<sup>67</sup> Mr. Olson correctly points out that the value provided by solar during  
19 an outage accrues to the solar owner, not to utility customers.<sup>68</sup> Accordingly, this potential  
20 value is appropriately excluded based on the Commission's direction to only include values

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22 <sup>63</sup> RNW, OSEIA, NWECA, NW SEED/100, O'Brien/4-5; TASC/200, Gilfenbaum/1; ODOE/200, Broad  
23 and DelMar/5-7.

24 <sup>64</sup> RNW, OSEIA, NWECA, NW SEED/100, O'Brien/5-6; ODOE/200, Broad and DelMar/6-7.

25 <sup>65</sup> PGE/200, Brown-Murtaugh/2.

26 <sup>66</sup> Staff/300, Dolezel/5.

<sup>67</sup> ODOE/200, Broad and DelMar/6.

<sup>68</sup> Staff/400, Olson/12.

1 that impact the cost of service to utility customers.<sup>69</sup> Therefore, Idaho Power agrees with  
2 Mr. Olson’s conclusion that it would be inappropriate to include an element for reliability,  
3 resiliency, and security in the RVOS model for mass market solar.<sup>70</sup>

4 **2. It is Unnecessary to Create a Placeholder Element for Societal Benefits.**

5 TASC recommends creating a placeholder for valuation of certain societal benefits,  
6 despite the fact that such benefits do not directly impact the cost of service for utility  
7 customers.<sup>71</sup> TASC suggests that ORS 757.300 requires the Commission to consider  
8 societal benefits if the model is to be applied to net metering.<sup>72</sup> Idaho Power agrees with  
9 Staff that the statutory provision upon which TASC relies allows the Commission to consider  
10 environmental and public policy benefits of net metering systems, but has no direct bearing  
11 on the Commission’s direction in Order No. 15-296 to exclude such considerations from the  
12 RVOS methodology.<sup>73</sup> Furthermore, adopting placeholders at this time may generate  
13 unnecessary controversy and create confusion as to whether the Commission intended to  
14 consider non-cost of service based elements. Accordingly, Idaho Power urges the  
15 Commission to reject TASC’s recommendation.

16 **D. The Model is Appropriately Flexible to Accommodate Varying Levels of**  
17 **Granularity of Utility Data.**

18 The RVOS model contemplates using hourly and location-specific data for individual  
19 elements to generate an hourly avoided cost profile.<sup>74</sup> However, not all utilities will have  
20 access to such granular data for all avoided cost elements.<sup>75</sup> In such circumstances, Staff

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<sup>69</sup> Staff/400, Olson/12.

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<sup>70</sup> Staff/400, Olson/11.

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<sup>71</sup> TASC/100, Gilfenbaum/4.

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<sup>72</sup> TASC/100, Gilfenbaum/4-5.

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<sup>73</sup> Staff/300, Dolezel/6.

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<sup>74</sup> Staff/100, Dolezel/5.

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<sup>75</sup> Idaho Power/200, Youngblood/3-4.

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1 proposes that proxy information be used. For instance, Mr. Olson proposes that if a utility  
2 does not have location-specific distribution deferral estimates, the utility should instead use  
3 a system-wide average based on the utility's marginal cost of service study.<sup>76</sup> Similarly,  
4 Olson proposes that if a utility does not have available an estimate of the potentially  
5 deferrable distribution system investments, it should use an average of all growth-related  
6 distribution system investments.<sup>77</sup> Idaho Power agrees with Mr. Olson's recommendations,  
7 and concurs that use of a system average in lieu of more granular data should be a  
8 reasonable proxy. However, it will be necessary to consider whether the use of proxy data  
9 will produce reasonably accurate results.

10 Both TASC and the Joint Parties advocate for the use of granular data as inputs to the  
11 model, and TASC has suggested that if no data is available for particular avoided cost  
12 elements, the Commission should find that the assessment of RVOS is incomplete and  
13 inadequate.<sup>78</sup> TASC and Mr. Olson have also stated that utilities should not assume a zero  
14 value for inputs for which no data is available.<sup>79</sup> Idaho Power does not disagree. However,  
15 there are circumstances in which use of a zero value may be appropriate. Specifically, the  
16 use of a zero value is justified when the evidence suggests that the value to the utility *is*  
17 *actually zero*. This view is consistent with Mr. Olson's recommendation that a utility should  
18 use a zero value for distribution system deferral value only if it presents evidence based on  
19 a detailed study that there are no distribution system investments that could be deferred  
20 with sufficient customer owned solar.<sup>80</sup>

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<sup>76</sup> Staff/400, Olson/9.

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<sup>77</sup> Staff/400, Olson/9.

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<sup>78</sup> RNW, OSEIA, NWEA, NW SEED/100, O'Brien/4; TASC/100, Gilfenbaum/4.

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<sup>79</sup> TASC/100, Gilfenbaum/4; Staff/400, Olson/9.

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<sup>80</sup> Staff/400, Olson/9.



1 **E. The Model Was Designed for a Limited Purpose, and Should be Reevaluated**  
2 **before it is Applied in Other Contexts.**

3 As Mr. Olson explains, the model was developed to produce a "25-year marginal,  
4 levelized value for a generic, small-scale solar resource installed in 2016."<sup>81</sup> Staff  
5 contemplates using the model to determine the RVOS for distributed generation,<sup>82</sup> but also  
6 recognizes that the Commission has not pre-judged the circumstances to which the model  
7 will be applied.<sup>83</sup> The Company agrees with Mr. Olson that the model was developed for a  
8 specific application—determining the RVOS for small-scale, mass market resources.<sup>84</sup> If  
9 the Commission is to apply the RVOS model to a different set of resources, such as utility  
10 scale solar or community solar,<sup>85</sup> different inputs to the model may need to be considered.<sup>86</sup>  
11 As a result, the parties will need to reevaluate the model if it is to be applied in a new context  
12 to ensure that the inputs accurately reflect attributes of the resource to be evaluated.

13 **F. The RVOS Model Should Not Be Applied to Net Metering Without Reevaluation**  
14 **of the Elements and Data Inputs.**

15 The Company is concerned about the potential application of the RVOS model to net  
16 metering.<sup>87</sup> In a future phase of this docket, the parties will use the RVOS to evaluate the  
17 level of cost shifting, if any, resulting from solar installations under each utility's net metering  
18 service.<sup>88</sup> In the Company's response testimony, Idaho Power clarified that the RVOS  
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20 <sup>81</sup> Staff/400, Olson/4 (emphasis in original).

21 <sup>82</sup> Staff/100, Dolezel/8.

22 <sup>83</sup> Staff/300, Dolezel/2-3.

23 <sup>84</sup> Staff/400, Olson/4.

24 <sup>85</sup> For example, PGE suggests that the RVOS methodology may be used to determine the value of  
25 utility scale solar or community solar. PGE also acknowledges that the RVOS may need to be  
26 adjusted to account for the specific attributes of each project, including possibly omitting certain  
inapplicable elements. PGE/100, Brown-Murtaugh/12.

<sup>86</sup> Staff/400, Olson/4-5; RNW, OSEIA, NWEA, NW SEED/200, O'Brien/6.

<sup>87</sup> Idaho Power/100, Youngblood/14.

<sup>88</sup> Prehearing Conference Memorandum at 1 (Nov. 9, 2015); Idaho Power/100, Youngblood/14.

1 should not be used in the quantification of net metering cost shifting.<sup>89</sup> The model may be  
2 appropriate for modeling a long term levelized cost, but not embedded costs.<sup>90</sup>

3 Mr. Olson clarified that the RVOS is intended to apply to marginal customer owned  
4 solar installed in 2016.<sup>91</sup> Accordingly, not all elements are appropriate for estimating the  
5 average value of all solar installations, as would be required for estimating the cost shift  
6 associated with existing systems.<sup>92</sup>

7 Mr. Olson explains that for application to net metering, the same elements would be  
8 included in the model, but that the inputs would need to be developed specifically for that  
9 purpose.<sup>93</sup> Idaho Power reiterates its concern about using this approach in a net metering  
10 cost shifting analysis. Customer rates are designed to collect embedded costs of providing  
11 service, and the RVOS model evaluates marginal costs, and in some instances future costs  
12 that may not yet exist. The application of the RVOS methodology in combination with cost  
13 shift evaluations of net metering may lead to an inequitable and/or inappropriate assignment  
14 of costs and benefits among customers. This issue will be more fully addressed in the next  
15 phase.

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24 <sup>89</sup> Idaho Power/100, Youngblood/14-15.

25 <sup>90</sup> Idaho Power/100, Youngblood/15.

26 <sup>91</sup> Staff/400, Olson/19.

<sup>92</sup> Staff/400, Olson/19.

<sup>93</sup> Staff/400, Olson/19.

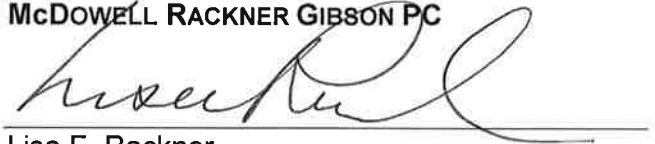
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**V. CONCLUSION**

Idaho Power respectfully requests that the Commission approve Staff's proposed model subject to the modifications to the elements proposed herein.

DATED: August 26, 2016.

**McDOWELL RACKNER GIBSON PC**



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