

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF THE STATE OF OREGON**

**In the Matter of PacifiCorp, dba )  
Pacific Power ) Docket No. UE-323  
2018 Transition Adjustment )  
Mechanism )**

**Rebuttal Testimony of Kevin C. Higgins**

**on behalf of**

**Calpine Energy Solutions, LLC**

**August 2, 2017**

1                                   **REBUTTAL TESTIMONY OF KEVIN C. HIGGINS**

2

3    **Introduction**

4    **Q.     Please state your name and business address.**

5    A.           My name is Kevin C. Higgins. My business address is 215 South State  
6           Street, Suite 200, Salt Lake City, Utah, 84111.

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

8    A.           I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies  
9           is a private consulting firm specializing in economic and policy analysis  
10          applicable to energy production, transportation, and consumption.

11   **Q.     Are you the same Kevin C. Higgins who previously filed Opening Testimony**  
12          **in this proceeding on behalf of Calpine Energy Solutions, LLC (“Calpine**  
13          **Solutions”)?**

14   A.           Yes, I am.

15

16   **Overview and Conclusions**

17   **Q.     What is the purpose of your rebuttal testimony?**

18   A.           My Rebuttal Testimony responds to the Reply Testimony of PacifiCorp  
19           witness Michael G. Wilding in which Mr. Wilding opposes my proposal to adjust  
20           the calculation of the Schedule 294, 295, and 296 transition adjustments to reflect  
21           the current value of freed-up Renewable Energy Certificates (“RECs”). Mr.  
22           Wilding also opposes my alternative proposal in which PacifiCorp would transfer  
23           to the appropriate Electricity Service Supplier (“ESS”) the RECs for which its

1 customers are paying PacifiCorp.<sup>1</sup> Mr. Wilding opposes, as well, the variation on  
2 this concept that I presented, in which PacifiCorp would retire RECs either on  
3 behalf of direct access customers, or on behalf of a direct access customer's ESS,  
4 for the period corresponding to the calculation of a direct access customer's  
5 transition adjustment charges.

6 I also respond to Mr. Wilding's opposition to my contention that in  
7 calculating the Schedule 296 Consumer Opt-Out charge, Schedule 200 costs  
8 should not be escalated in Years 6 through 10, but rather should *decline* in each of  
9 those years to reflect the decline in the Company's return on generation rate base  
10 attributable to the departed customers' loads, due to the effects of increased  
11 accumulated depreciation and amortization.

12 **Q. What are the primary conclusions and recommendations in your Rebuttal**  
13 **Testimony?**

14 A. I offer the following primary conclusions and recommendations:

15 PacifiCorp's proposal to recognize a credit for the value of freed-up RECs  
16 represents progress in concept when compared to the Company's previous  
17 opposition to any kind of REC credit for direct access customers. However, the  
18 Company's proposal to credit direct access customers with the greatly-discounted  
19 value of RECs displaced in the future does not adequately address the double  
20 payment for RECs to which direct access customers are subject at the present  
21 time. As I recommended in my Opening Testimony, this valuation is more  
22 reasonably made either using the price of RECs recently sold by PacifiCorp or the

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<sup>1</sup> This would allow the ESS, in turn, to retire the RECs for each compliance year and pass on that value to the customer

1 price of RECs being purchased by PacifiCorp through the 2016 Request for  
2 Proposals (“RFP”) issued by the Company. Determining the value of RECs  
3 freed-up by direct access based on the average price of unstructured RECs sold by  
4 PacifiCorp in 2016 yields a value that is [REDACTED]  
5 [REDACTED]  
6 [REDACTED].

7 In light of the ongoing disagreement regarding REC valuation between  
8 Calpine Solutions and PacifiCorp, the Commission should give strong  
9 consideration to adopting an alternative approach in which the RECs freed-up by  
10 direct access are either transferred to the ESS or retired for the benefit of the  
11 direct access customers who are paying for them. These alternative approaches  
12 make the REC valuation exercise unnecessary and eliminate the major point of  
13 contention between the parties on this issue.

14 One option I urge the Commission to consider is to pursue these  
15 alternative approaches by ordering PacifiCorp to work with Staff and interested  
16 stakeholders to develop a protocol over the next year for transferring RECs and/or  
17 retiring RECs on behalf of ESSs for direct access customers. This collaborative  
18 effort could be conducted in conjunction with the Renewable Portfolio Standard  
19 (“RPS”) rulemaking that is also anticipated in the upcoming year. Under this  
20 option, I recommend that the Commission approve the current valuation approach  
21 I have recommended for the 2018 TAM, with the understanding that it is expected  
22 to be replaced by a REC transfer/REC retirement model for the 2019 TAM. For  
23 any direct access customer, the REC transfer/REC retirement model would apply

1 only for those years in which a transition adjustment calculation was applied to  
2 direct access service. For years in which a transition adjustment calculation no  
3 longer applied (i.e., for a given customer, after year 10 of the PacifiCorp 5-year  
4 opt-out program), PacifiCorp would have no obligation to transfer or retire any  
5 RECs.

6 Turning to the issue of the Consumer Opt-Out Charge and the escalation  
7 of Schedule 200 costs in the calculation of that charge, I conclude that increasing  
8 Schedule 200 at the rate of inflation, i.e., holding Schedule 200 constant in real  
9 terms, does not support Mr. Wilding's claim that direct access customers do not  
10 pay for incremental generation under PacifiCorp's approach. Indeed the opposite  
11 is true, as Mr. Wilding tacitly admits when he agrees elsewhere in his Rebuttal  
12 Testimony that under PacifiCorp's calculation of the Consumer Opt-Out Charge,  
13 the generation assets are frozen in Year 10, not Year 5.

14 Further, Mr. Wilding's claim that the use of an inflation adjustment in  
15 Years 6 through 10 in the calculation of the Consumer Opt-Out Charge is not  
16 intended to account for new generation is inconsistent with the facts contained in  
17 Mr. Wilding's Direct Testimony. As I explained in my Opening Testimony, the  
18 time series information presented by Mr. Wilding in his Direct Testimony makes  
19 no attempt to exclude incremental generation investment. Indeed, incremental  
20 generation investment is the primary driver behind the growth in PacifiCorp's  
21 fixed generation costs over the 2006-2015 period. Even prior to my exclusion of  
22 incremental generation investment from the analysis, the compound annual  
23 growth rate of the Company's fixed generation cost was only 1.4% per year from

1 2010 to 2015, which is materially less than the inflation rate of 2.5% being used  
2 by the Company to escalate the fixed generation costs included in the Consumer  
3 Opt-Out Charge in years 6-10. Then, when incremental generation capital  
4 additions are removed from the analysis, PacifiCorp's Oregon-allocated fixed  
5 generation costs *decline* on a per-MWh basis, as I have consistently contended  
6 they should. These factual results demonstrate that Mr. Wilding is incorrect to  
7 claim that the inflation adjustment in years 6 through 10 is not intended to account  
8 for new generation.

9

10 **Response to Mr. Wilding Regarding REC Valuation**

11 **Q. Briefly summarize the disagreement between you and the Company on the**  
12 **issue of how to credit the value of freed-up RECs in the calculation of the**  
13 **transition adjustment for direct access customers.**

14 A. In the past several TAM proceedings I have advocated on behalf of  
15 Calpine Solutions that there should be a credit for freed-up RECs in the  
16 calculation of the transition adjustment for direct access customers, while  
17 PacifiCorp has opposed such a credit. In this proceeding, however, PacifiCorp  
18 has agreed that a REC credit is appropriate. PacifiCorp calculates the credit based  
19 on the value of RECs displaced in a future year (2028), discounted back to the  
20 present time. I disagree that the REC valuation should be based on a discounted  
21 future value; instead, it should reflect the current value of RECs, determined  
22 either from the value of RECs that PacifiCorp sells to third parties or the value of

1 RECs that PacifiCorp is purchasing from third parties following the RFP the  
2 Company issued in 2016.

3 **Q. By way of background, please explain why a REC credit for direct access**  
4 **customers is appropriate.**

5 A. The Oregon RPS is applicable to both cost-of-service and direct access  
6 service. When a customer switches to direct access, PacifiCorp's RPS obligation  
7 is reduced proportionately. Thus, just as the electric energy is freed up when the  
8 customer moves to direct access, the RECs are also freed up. The freed-up RECs  
9 are banked for future use by PacifiCorp's cost-of-service customers.

10 When direct access customers purchase power from an ESS, the energy  
11 provided by the ESS must meet RPS requirements, which at present require that  
12 15% of supply come from qualifying renewable electricity when serving in the  
13 PacifiCorp territory.<sup>2</sup> But at the same time, direct access customers still pay for  
14 the renewable energy that PacifiCorp has acquired to meet the RPS for its cost-of-  
15 service customers. The payments from direct access customers to PacifiCorp  
16 occur because the Company recovers its RPS-related costs both through Schedule  
17 200, through which the fixed costs of utility-owned renewable generation are  
18 recovered, and Schedule 201, through which power purchases of RPS-eligible  
19 resources are recovered. Direct access customers are charged directly for  
20 Schedule 200 and also pay for the difference between Schedule 201 costs and the  
21 value of the freed-up power, as calculated through the transition adjustment  
22 calculation.

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<sup>2</sup> ORS 469A.052(1), 469A.065.

1           In paying both the ESS and PacifiCorp for RPS power, direct access  
2 customers are paying twice to meet RPS requirements. There is no dispute that  
3 such a double payment occurs; the disagreement centers on how best to remedy  
4 this problem.

5 **Q. What rationale does PacifiCorp offer for using a discounted future value to**  
6 **set the REC valuation today?**

7 A.           The Company argues that because the freed-up RECs are banked (per  
8 Commission requirement), and the Company has sufficient RECs to meet its RPS  
9 obligations for the next several years, the freed-up RECs serve only to delay the  
10 Company's need to acquire RECs starting in 2028. Consequently, PacifiCorp  
11 calculates the value of RECs free-up by direct access in 2018 based on the  
12 deferral of RECs in 2028, discounted back to the present. The Company argues  
13 that its approach is consistent with the Commission's findings in Order No. 16-  
14 482.<sup>3</sup>

15 **Q. Why do you believe the Company's valuation approach is unreasonable?**

16 A.           As I pointed out in my Opening Testimony, by valuing today's freed-up  
17 RECs strictly on the basis of the displacement of RECs that would be acquired by  
18 the Company in the distant future, i.e., 2028, direct access customers are unfairly  
19 disadvantaged. Direct access customers must pay their ESS for RPS-compliant  
20 service at *current* prices, and are also paying PacifiCorp for a pro rata share of the  
21 Company's RPS-compliant service at *current* rates – not a discounted rate based

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<sup>3</sup> Reply Testimony of Michael G. Wilding, pp. 52-53.



1 on costs eleven years in the future.<sup>4</sup> In addition, direct access customers on the  
2 one-year and three-year programs pay for Schedule 203, the Renewable Resource  
3 Deferral Supply Service Adjustment, which recovers the costs of RECs that were  
4 purchased following PacifiCorp's 2016 RFP, which funds the acquisition of  
5 incremental RPS-eligible resources. Further, in this proceeding, PacifiCorp is  
6 proposing that new customers entering the five-year program pay for Schedule  
7 203 as well.<sup>5</sup> The Company's proposal to credit direct access customers with the  
8 greatly-discounted value of RECs displaced in the future does not adequately  
9 address the double payment for RPS-compliant service to which direct access  
10 customers are subject at the present time.

11 Moreover, with PacifiCorp actively selling and buying RECs at the current  
12 time, it is incongruous that the RECs freed-up from direct access are not valued  
13 using these current transactions as a measurement of their value. Instead, the  
14 Company offers a rationale for using a discounted future value that is predicated  
15 on the forced banking of the freed-up RECs. Yet, as I noted in my Opening  
16 Testimony, the Commission's requirement that PacifiCorp bank excess RECs for  
17 future use was not directed specifically to RECs freed-up by direct access  
18 customers nor is there any reason to believe that the Commission intends as a  
19 matter of public policy for direct access customers to subsidize future cost-of-  
20 service customers by requiring direct access customers to provide surplus RECs  
21 to cost-of-service customers at a significant discount. Rather, it appears that

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<sup>4</sup> In *addition*, participants in the five-year opt-out program must pay the Consumer Opt-Out Charge, which recovers projected Schedule 200 costs for Years 6 through 10, net of projected net power costs savings attributed to the departed opt-out load.

<sup>5</sup> See Direct Testimony of Michael G. Wilding, pp. 35-36.

1 direct access customers are simply being collaterally harmed as a side effect of  
2 the Commission’s broader policy of requiring PacifiCorp to bank surplus RECs.  
3 This harm can be rectified by simply crediting direct access customers with  
4 today’s value of RECs, either by valuing them using the price of RECs recently  
5 sold by PacifiCorp or the price of RECs recently purchased by PacifiCorp through  
6 its RFP.

7 **Q. What is the current value of RECs, based on the price of RECs recently sold**  
8 **by PacifiCorp?**

9 A. Based on the REC sales data reported by PacifiCorp in Utah Docket No.  
10 17-035-14, the sales-weighted average value of unstructured RECs sold by the  
11 Company in 2016 was [REDACTED]  
12 per MWh.<sup>6</sup> [REDACTED]  
13 [REDACTED]  
14 [REDACTED].<sup>7</sup> Significantly, the [REDACTED]  
15 [REDACTED] unstructured RECs that PacifiCorp sold in 2016 [REDACTED]  
16 [REDACTED]  
17 [REDACTED] RECs in the PacifiCorp territory in  
18 2016.<sup>8</sup> [REDACTED]  
19 [REDACTED]

<sup>6</sup> See Calpine Solutions Confidential Exhibit 201. Note average the REC sales price reported here includes the Company’s sales estimates for November 2016 and December 2016.

<sup>7</sup> Derivation: PacifiCorp’s proposed REC credit is [REDACTED] for each MWh of direct access load for the one-year program in 2018. This amount divided by the 15% 2018 RPS requirement = [REDACTED] REC valuation in 2018.

<sup>8</sup> This calculation is based on PacifiCorp’s 2016 direct access sales of [REDACTED] multiplied by the 15% RPS requirement. Source: PacifiCorp Confidential Response to Calpine Solutions Data Request 1.3, attached as Calpine Solutions Confidential Exhibit 202.

1 [REDACTED], the average price of the former would serve as reasonable  
2 measurement of the current value of the latter.

3 **Q. What is PacifiCorp’s response to your alternative proposals in which**  
4 **PacifiCorp either would transfer to the appropriate ESS the RECs for which**  
5 **its customers are paying PacifiCorp or retire the freed-up RECs either on**  
6 **behalf of direct access customers or on behalf of a direct access customer’s**  
7 **ESS?**

8 A. PacifiCorp opposes both of these alternatives. One of Mr. Wilding’s  
9 arguments is that transferring the RECs would result in “impermissible cost  
10 shifting” because the freed-up REC provides “little or no benefit to remaining  
11 customers” (because it must be banked), yet the direct access customer would  
12 receive the full value of the REC.<sup>9</sup>

13 **Q. What is your response to this argument?**

14 A. The premise of this argument is that because the REC transfer would  
15 allow the direct access customer to retain the benefit of the RECs (that they have  
16 paid for!) it must somehow be harmful to bundled customers. Yet one of the  
17 fallacies of this argument is that PacifiCorp also insists that the current value of  
18 freed-up RECs is negligible – that is, until Calpine Solutions suggests that the  
19 freed-up RECs could simply be transferred for the benefit of the direct access  
20 customer, at which point the RECs somehow become *too valuable* to transfer  
21 without negatively impacting bundled customers. PacifiCorp cannot have it both  
22 ways. Freed-up RECs cannot simultaneously be too negligible in value to  
23 compensate direct access customers at the current REC market price, while at the

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<sup>9</sup> Reply Testimony of Michael G. Wilding, pp. 53-54.

1 same time being *too valuable* to directly transfer for the benefit of the direct  
2 access customer. Moreover, there is no equitable basis for asserting in the first  
3 place that bundled customers should have a priority claim on the RECs that direct  
4 access customers paid for. The Commission's direct access rules provide that the  
5 customer's transition adjustment rate should include credit for the "100 percent of  
6 the net value" of "all economic utility investments and all uneconomic utility  
7 investments,"<sup>10</sup> which in the case of renewable resources should include the full  
8 value of freed-up RECs.

9 **Q. Does Mr. Wilding offer additional reasons for opposing a transfer of the**  
10 **RECs?**

11 A. Yes. Mr. Wilding also argues that it is too complicated and  
12 administratively burdensome to transfer the RECs. One of the difficulties alleged  
13 by Mr. Wilding is deciding which RECs to transfer. Mr. Wilding claims that it  
14 would be administratively burdensome to appropriately identify and determine  
15 which RECs to transfer in order to ensure that cost-of-service customers are held  
16 harmless.<sup>11</sup>

17 **Q. What is your response to this argument?**

18 A. It seems PacifiCorp has fallen into the trap of allowing "the perfect to be  
19 the enemy of the good." In defending its position, the Company argues that:  
20 Theoretically, direct access customers have contributed to their pro rata share of  
21 RECs from each of the company's eligible renewable resources. Depending on  
22 the banking provisions applicable to each REC, different RECs will have different  
23 value to PacifiCorp and its customers from an RPS compliance perspective.  
24 Under the current incremental cost methodology, RECs also have varying levels

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<sup>10</sup> OAR 860-038-0160(1).

<sup>11</sup> *Id.*, p. 54.

1 of incremental costs associated with them, which impacts whether or not the  
2 company nears the four percent incremental cost cap.<sup>12</sup>

3 This litany of supposed roadblocks belies the fact that if direct access  
4 customers had remained with PacifiCorp for their bundled service, then  
5 PacifiCorp would have had to retire the very same incremental RECs that Mr.  
6 Wilding claims are so difficult to identify for the purpose of a REC transfer.  
7 Logically, the number of RECs that would be transferred is the difference in  
8 PacifiCorp REC retirements that would occur in the “with direct access” case  
9 relative to the “without direct access” case. The barriers to a REC transfer cited  
10 by PacifiCorp strike me as eminently solvable.

11 **Q. What objections does the Company raise in opposition to retiring RECs on**  
12 **behalf of an ESS?**

13 A. Mr. Wilding states that PacifiCorp is not comfortable putting itself in the  
14 position of demonstrating RPS compliance to the Commission on behalf of  
15 another entity.

16 **Q. How do you respond to this objection?**

17 A. One means to address this objection is for PacifiCorp to transfer the RECs  
18 to the ESS, as I proposed in my first alternative. Under such an approach,  
19 PacifiCorp and the ESS would first agree on the load associated with the  
20 compliance obligation, which can occur sometime after the year-end close. When  
21 the load obligation is agreed upon, the Company would transfer the number of  
22 RECs necessary to meet the compliance obligation to the ESS’s Western  
23 Renewable Energy Generation Information System (“WREGIS”) account inbox

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<sup>12</sup> Id., p. 54.

1 and the ESS would accept the REC transfer. PacifiCorp would only be required  
2 to transfer the number of RECs necessary to meet the RPS obligation in that year  
3 for the customers still paying transition charges for the year in question, which is  
4 a load amount (kWh) that would be known to PacifiCorp, since the Company  
5 would have charged those customers transition charge rates for each kWh.

6 In my second alternative, PacifiCorp could create subaccounts in  
7 WREGIS and retire RECs on behalf of the ESSs for RPS compliance. PacifiCorp  
8 would identify the load associated with the ESSs in its RPS Report to the  
9 Commission. After Commission approval of the Company's RPS Report,  
10 PacifiCorp would submit a follow-up compliance filing showing it retired the  
11 RECs in the different ESS subaccounts. The ESSs would reduce their total RPS  
12 compliance load by the amounts that PacifiCorp has identified in its RPS report  
13 and the ESSs would only show RPS compliance on the remaining load, such as  
14 load the ESS serves in another utility's service territory, or fully departed load in  
15 PacifiCorp's five-year program that paid no transition charges for the actual or  
16 projected costs of PacifiCorp's renewable resources for the compliance year in  
17 question.

18 In either scenario, although PacifiCorp would be required to follow certain  
19 steps, including in one case, retiring RECs on behalf of the ESS, the Company  
20 would not be required to *demonstrate RPS compliance* to the Commission *on*  
21 *behalf of another entity*.

22 In my Opening Testimony I described a number of situations in which  
23 Oregon utilities, including PacifiCorp, retire RECs on behalf of other parties.

1           Additionally, other states have adopted practices to allow for the direct transfer of  
2           environmental attributes similar to RECs on behalf of direct access customers.  
3           For example, Pennsylvania has an Alternative Energy Portfolio Standard  
4           (“AEPS”), which includes solar photovoltaic generation requirements. Just like in  
5           Oregon, the AEPS is applicable to Electric Generation Suppliers (“EGSs”), which  
6           are the equivalent of Oregon ESSs. Similar to the alternative I am proposing in  
7           this case, Pennsylvania utilities have arranged to transfer solar photovoltaic  
8           credits into the Generation Attribute Tracking System (“GATS”)<sup>13</sup> accounts of  
9           EGSs to satisfy the EGS AEPS solar photovoltaic requirements.

10                       For instance, the Metropolitan Edison tariff provides as follows:

11           **9. ALTERNATIVE ENERGY PORTFOLIO STANDARDS**

12           **9.1 Requirements.** EGSs supplying retail load in the Company's service territory  
13           shall cooperate with the Company to ensure compliance with applicable  
14           requirements under the AEPS Act and related regulations. An EGS is required to  
15           meet AEPS Act requirements for its metered retail load as measured at the  
16           delivery point for each EGS Customer, provided, however, that the Company  
17           shall provide solar photovoltaic alternative energy credits to satisfy EGS AEPS  
18           solar photovoltaic requirements during the period June 1, 2015 to May 31, 2017.  
19           An EGS shall grant the Company permission to transfer solar photovoltaic  
20           alternative energy credits into the EGS’s GATS account.

21                       In light of the ongoing disagreement regarding REC valuation, i.e.,  
22           whether to use current value or discounted future value, the Commission should  
23           give strong consideration to adopting this type of common sense and direct  
24           approach, in which the RECs are transferred or retired for the benefit of the direct  
25           access customers who are paying for them. These approaches resolve the inequity  
26           of double RPS payments by direct access customers by directly transferring the

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<sup>13</sup> GATS is a system that tracks the attributes of generation sold into and out of retail markets in the PJM Interconnection. It performs a function similar to WREGIS in the western U.S.

1 RECs, making the REC valuation exercise unnecessary and thereby eliminating  
2 the major point of contention between the parties on this issue.

3 **Q. Given the concerns raised by PacifiCorp regarding the alternative REC**  
4 **transfer and REC retirement approaches you have proposed, do you have**  
5 **any suggestions about how to proceed?**

6 A. Yes. One option would be for the Commission to determine that the REC  
7 transfer and/or REC retirement approaches I described above are preferred  
8 solutions to this problem. Accordingly, the Commission could order PacifiCorp  
9 to work with Staff and interested stakeholders to develop a protocol over the next  
10 year for transferring RECs and/or retiring RECs on behalf of ESSs for direct  
11 access customers. This effort could be conducted in conjunction with the RPS  
12 rulemaking that I understand is also expected to take place in the upcoming year.  
13 This collaborative process could also address the specific issue of transferring or  
14 retiring bundled RECs on behalf of ESSs for direct access customers, which is  
15 relevant starting in 2021, and which would respond to another concern raised by  
16 Mr. Wilding.<sup>14</sup> In the meantime, I recommend that the Commission approve the  
17 current valuation approach I have recommended for the 2018 TAM, with the  
18 understanding that it is expected to be replaced by a REC transfer/REC retirement  
19 model for the 2019 TAM. For any direct access customer, the REC transfer/REC  
20 retirement model would apply only for those years in which a transition  
21 adjustment calculation was applied to direct access service. For years in which a  
22 transition adjustment calculation no longer applied (i.e., for a given customer,

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<sup>14</sup> See Id., p. 55.



1 after year 10 of the PacifiCorp 5-year opt-out program), PacifiCorp would have  
2 no obligation to transfer or retire any RECs.

3

4 **Response to Mr. Wilding Regarding Schedule 200 Escalation**

5 **Q. What is the basic disagreement between Calpine Solutions and PacifiCorp**  
6 **over the escalation of Schedule 200 costs?**

7 A. Schedule 200 recovers PacifiCorp's non-net-power-cost-related generation  
8 costs. The Consumer Opt-Out Charge is included as part of Schedule 296, which  
9 is levied on direct access customers participating in the five-year opt-out program.  
10 For any customer embarking on the five-year opt-out program, the Consumer  
11 Opt-Out Charge brings forward, into Years 1 through 5 of Schedule 296, the  
12 projected Schedule 200 costs for Years 6 through 10, net of projected net power  
13 costs savings attributed to the departed opt-out load.

14 In calculating the Schedule 296 Consumer Opt-Out charge, PacifiCorp  
15 escalates the projected Schedule 200 costs at an inflation rate. The disagreement  
16 between Calpine Solutions and PacifiCorp concerns the treatment of Schedule  
17 200 costs in Years 6 through 10. I contend that Schedule 200 costs should not be  
18 escalated in Years 6 through 10 as calculated by PacifiCorp because the five-year  
19 opt-out customer will have already departed cost-of-service rates five years prior,  
20 and *incremental* fixed generation costs incurred during Years 6 through 10 should  
21 not be incurred on the departed customer's behalf. Rather, the opt-out charge for  
22 Years 6 through 10 should be limited to the generation investment that had been  
23 built for the departed customer's benefit. At the maximum, this would extend to

1 the five-year planning horizon following the customer's departure (i.e., Years 1  
2 through 5 of the opt-out period).

3 If, as I argue, the opt-out charge for Years 6 through 10 is limited to the  
4 generation investment that had been built for the departed customer's benefit, then  
5 the Schedule 200 costs used in the calculation of the Consumer Opt-Out Charge  
6 should *decline* each year from Year 6 through Year 10. This decline would  
7 reflect the decline in the Company's return on generation rate base attributable to  
8 the departed customers' loads, due to the effects of increased accumulated  
9 depreciation and amortization. The effects of this decline in return should be  
10 passed through to the Consumer Opt-Out charge in the Schedule 296 transition  
11 adjustment.

12 In UE 296, the Commission rejected my recommendation on this issue,  
13 stating:

14 We have previously addressed the claim that the customer opt-out charge should  
15 be reduced to reflect a more accurate estimate of fixed generation costs. Noble  
16 Solutions has produced no new evidence or argument to persuade us to change  
17 our position (sic). *PacifiCorp explains that incremental generation is not added*  
18 *after year five*. PacifiCorp also explains that, in real (inflation-adjusted) terms, the  
19 fixed generation costs are held constant through year 10. As we did in previous  
20 orders, we find it reasonable to assume that fixed generation costs will increase at  
21 the rate of inflation after year five.<sup>15</sup>

22 Calpine Solutions has appealed this decision to the Oregon Court of Appeals.

23 **Q. How has Mr. Wilding responded to your arguments in his Reply Testimony?**

24 A. Mr. Wilding correctly restates my contention that the historical fixed  
25 generation costs presented in his Direct Testimony demonstrate that Schedule 200  
26 costs should decline in Years 6 through 10. Mr. Wilding then states that "Calpine

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<sup>15</sup> UE 296, Order No. 15-394 at 12. Emphasis added.

1 can only support this contention by freezing the fixed generation costs in year five  
2 and excluding all generation costs incurred after year five.”<sup>16</sup>

3 **Q. What is your response to this point?**

4 A. I agree with this point, as it is a fundamental element of my argument. My  
5 argument is that if the Consumer Opt-Out Charge for Years 6 through 10 is  
6 limited to the generation investment that had been built for the departed  
7 customer’s benefit, which it *should* be, then mathematically, Schedule 200 costs  
8 will decline in Years 6 through 10. As Mr. Wilding notes, I demonstrated this  
9 point in my Opening Testimony. That is, when incremental generation capital  
10 additions are removed from Mr. Wilding’s analysis of fixed generation costs, then  
11 PacifiCorp’s Oregon-allocated fixed generation costs decline on a per MWh basis  
12 from 2008-2013.

13 **Q. Does Mr. Wilding elaborate on this point in his response?**

14 A. Yes. He goes on to assert that under PacifiCorp’s calculation of the  
15 Consumer Opt-Out Charge, the generation assets are frozen in Year 10, not Year  
16 5.<sup>17</sup>

17 **Q. What is the significance of this statement?**

18 A. This statement is significant because it is consistent with my contention  
19 that the escalation of Schedule 200 costs from Years 6 through 10 in the  
20 calculation of the Consumer Opt-Out Charge implicitly assumes that departed  
21 direct access customers are held responsible for incremental fixed generation  
22 costs incurred six to ten years *after* they have departed from cost-of-service rates.

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<sup>16</sup> Reply Testimony of Michael G. Wilding, p. 57.

<sup>17</sup> *Id.*, p. 58.

1 I maintain that holding these departed customers responsible for such new costs is  
2 unreasonable. Moreover, in rejecting my argument on this point in UE 267, the  
3 Commission also appeared to rely on PacifiCorp's assertion that "incremental  
4 generation is not added after year five."<sup>18</sup> Now PacifiCorp appears to be  
5 distancing itself from its prior assertion.

6 **Q. Does Mr. Wilding discuss this issue further?**

7 A. Yes. In a question and answer provided on pages 58-59 of his Reply  
8 Testimony, Mr. Wilding acknowledges that PacifiCorp previously testified that  
9 the inflation escalator used for Years 6 through 10 did not account for incremental  
10 generation investment. But then Mr. Wilding goes on to assert that the year-over-  
11 year increases in historical fixed generation costs shown in his analysis are  
12 somehow not caused by incremental investment. This claim is puzzling because  
13 he acknowledged several pages earlier in his testimony that if the fixed generation  
14 assets are frozen in Year 5, then the Schedule 200 costs do indeed decline.<sup>19</sup> Mr.  
15 Wilding tries to clarify this claim by asserting: "For years six through 10, the  
16 direct access customer does not pay incremental generation, because Schedule  
17 200 is held constant in real terms."<sup>20</sup> But as I demonstrated in my Opening  
18 Testimony, if incremental generation is removed, Schedule 200 costs *decline* in  
19 *nominal* terms. And if Schedule 200 costs decline in nominal terms, they *decline*  
20 *even faster in real* terms, that is, when compared to other prices with the effects of

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<sup>18</sup> UE 296, Order No. 15-394 at 12. See excerpt on page 17 of this testimony.

<sup>19</sup> See my discussion four questions above.

<sup>20</sup> Reply Testimony of Michael G. Wilding, p. 59.

1 overall inflation removed.<sup>21</sup> In short, increasing Schedule 200 at the rate of  
2 inflation, i.e., holding Schedule 200 constant in real terms, does not support Mr.  
3 Wilding's claim that direct access customers do not pay for incremental  
4 generation. Indeed the opposite is true, as Mr. Wilding tacitly admitted when he  
5 agreed that under PacifiCorp's calculation of the Consumer Opt-Out Charge, the  
6 generation assets are frozen in Year 10, not Year 5.

7 Finally, Mr. Wilding makes the assertion that, "The use of an inflation  
8 escalator in the Consumer Opt-Out Charge in years one through five is not  
9 intended to account for new generation, just as the inflation adjustment in years  
10 six through 10 is not intended to account for new generation."<sup>22</sup> This claim is  
11 inconsistent with the facts contained in Mr. Wilding's Direct Testimony.

12 As I explained in my Opening Testimony, the time series information  
13 presented in Exhibit PAC/110 makes no attempt to exclude incremental  
14 generation investment. Indeed, incremental generation investment is the primary  
15 driver behind the growth in PacifiCorp's fixed generation costs over the 2006-  
16 2015 period covered in Exhibit PAC/110. Even prior to excluding incremental  
17 generation investment from the analysis, the compound annual growth rate of the  
18 Company's fixed generation cost was only 1.4% per year from 2010 to 2015,  
19 which is materially less than the inflation rate of 2.5% being used by the  
20 Company to escalate the fixed generation costs included in the Consumer Opt-Out

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<sup>21</sup> The real price change = the nominal price change minus the inflation rate. For example, if a price declines 2.5% in nominal terms and overall inflation is 2%, then the price has declined 4.5% in real terms.

<sup>22</sup> Id., p. 59.

1 Charge in years 6-10.<sup>23</sup> Then, when incremental generation capital additions are  
2 removed from the analysis, which I showed in my Opening Testimony,  
3 PacifiCorp's Oregon-allocated fixed generation costs decline on a per-MWh  
4 basis. These factual results demonstrate that Mr. Wilding is incorrect to claim  
5 that the inflation adjustment in years 6 through 10 is not intended to account for  
6 new generation. To the contrary, new generation-related investment is the only  
7 available explanation for why Oregon fixed generation costs escalated over that  
8 time period.

9 **Q. Does this conclude your rebuttal testimony?**

10 A. Yes, it does.

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<sup>23</sup> The inflation rate used by the Company can be derived by calculating the growth rate embedded in the Schedule 200 column for 2022-2027 in Exhibit Calpine Solutions/103/Higgins/3.

**Docket No. UE 323**

**EXHIBIT**

**Calpine Solutions 201**

**PacifiCorp Response to Calpine Solutions Data Request 6.1**

UE 323 / PacifiCorp  
June 14, 2017  
Calpine Energy Solutions Data Request 6.1

**Calpine Energy Solutions Data Request 6.1**

Please provide Confidential Exhibits RMP MMW-1, RMP MMW-2, RMP MMW-3, and RMP MMW-4 that were filed by the Company in Utah PSC Docket No. 17-035-14.

**Response to Calpine Energy Solutions Data Request 6.1**

The Company objects to this request as not reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection, the Company responds as follows:

Please refer to Confidential Attachment Calpine Energy Solutions 6.1.

Confidential information is designated as Protected Information under Order No. 16-128 and may only be disclosed to qualified persons as defined in that order.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.



**The remaining pages of Calpine Solutions Exhibit 201 are subject to Protective Order No. 16-128 and provided only to those persons qualified to receive material subject to the Protective Order.**

**Docket No. UE 323**

**EXHIBIT**

**Calpine Solutions 202**

**PacifiCorp Response to Calpine Solutions Data Request 1.3**

UE 323 / PacifiCorp  
May 9, 2017  
Calpine Energy Solutions Data Request 1.3

### Calpine Energy Solutions Data Request 1.3

Please provide the following information regarding PacifiCorp's Oregon retail load in 2016, expressed in MWh, and indicate whether PacifiCorp's sales to Georgia Pacific-Camas are included in (a) and (b):

- (a) Total Oregon retail load excluding direct access.
- (b) Total Oregon retail load that was eligible for direct access.
- (c) Direct access load differentiated into the categories of (i) annual, (ii) three-year opt out, and (iii) five-year opt-out.

### Confidential Response to Calpine Energy Solutions Data Request 1.3

- (a) Total Oregon retail load excluding direct access for 2016 was 12,868,974 megawatt-hours (MWh). This includes sales to Georgia Pacific (GP) Camas.
- (b) Non-residential retail customers are eligible for direct access. PacifiCorp's Oregon non-residential retail load for 2016 was 7,386,905 (MWh). This includes actual sales to GP Camas.
- (c) Please refer to the Company's responses to subparts (i) through (iii) below:

[REDACTED]

- ii. PacifiCorp objects to this request as not reasonably calculated to lead to the discovery of admissible evidence. The load associated with a specific customer is not relevant to this proceeding. Without waiving this objection, the Company responds as follows:

[REDACTED]

- iii. PacifiCorp objects to this request as not reasonably calculated to lead to the discovery of admissible evidence. The load associated with a specific customer is not relevant to this proceeding. Without waiving this objection, the Company responds as follows:

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by attorney-client privilege or other applicable privileges or law may have been included in response to these data requests. Accordingly, PacifiCorp reserves its right to seek the return of any privileged or protected materials that may have been inadvertently disclosed, and respectfully advise that any inadvertent disclosure should not be considered a waiver of any applicable privileges or rights. PacifiCorp respectfully requests that you inform PacifiCorp immediately if you become aware of any such materials in these responses.

UE 323 / PacifiCorp  
May 9, 2017  
Calpine Energy Solutions Data Request 1.3



Confidential information is designated as Protected Information under Order No. 16-128 and may only be disclosed to qualified persons as defined in that order.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by attorney-client privilege or other applicable privileges or law may have been included in response to these data requests. Accordingly, PacifiCorp reserves its right to seek the return of any privileged or protected materials that may have been inadvertently disclosed, and respectfully advise that any inadvertent disclosure should not be considered a waiver of any applicable privileges or rights. PacifiCorp respectfully requests that you inform PacifiCorp immediately if you become aware of any such materials in these responses.

**The remaining pages of Calpine Solutions Exhibit 202 are subject to Protective Order No. 16-128 and provided only to those persons qualified to receive material subject to the Protective Order.**

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have served a true and correct copy of the confidential excerpts of the rebuttal testimony of Kevin Higgins in Docket No. UE 323 upon the following parties permitted to receive such testimony pursuant to Order No. 16-128 via U.S.P.S. Priority Mail and huddle electronically.

Jesse Cowell  
Davison Van Cleve  
333 SW Taylor St, Suite 400  
Portland, Oregon 97204

Bradley Mullins  
Mountain West Analytics  
333 SW Taylor St, Suite 400  
Portland, Oregon 97204

Michael Goetz  
Oregon Citizens' Utility Board  
610 SW Broadway, Suite 400  
Portland, Oregon 97205

Robert Jenks  
Oregon Citizens' Utility Board  
610 SW Broadway, Suite 400  
Portland, Oregon 97205

Katherine A. McDowell  
McDowell, Rackner & Gibson PC  
419 SW 11<sup>th</sup> Avenue, Suite 400  
Portland, Oregon 97205

Matthew McVee  
PacifiCorp  
825 NE Multnomah  
Portland, Oregon 97232

Travis Ritchie  
Sierra Club Environmental Law Program  
2101 Webster St, Suite 1300  
Oakland, California 94612

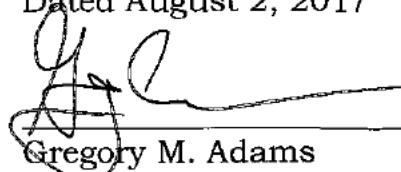
Alexa Zimbalist  
Sierra Club  
2101 Webster St, Suite 1300  
Oakland, California 94612

George Compton  
Public Utilities Commission of Oregon  
PO Box 1088  
Salem, Oregon 97308-1088

Scott Gibbens  
Public Utility Commission  
201 SE High St SE  
Salem, Oregon 97301

Summer Moser  
PUC Staff – Department of Justice  
1162 Court St NE  
Salem, Oregon 97301

Dated August 2, 2017



Gregory M. Adams  
Of Attorneys for Calpine Energy Solutions, LLC