Calpine Solutions Exhibit 200
Witness: Kevin C. Higgins

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

REBUTTAL TESTIMONY OF KEVIN C. HIGGINS

<u>Introduction</u>

Q. Please state your name and business address.

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

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

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

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

A. Yes, I am.

<u>Overview and Conclusions</u>

Q. What is the purpose of your rebuttal testimony?

A. My Rebuttal Testimony responds to the Reply Testimony of PacifiCorp witness Michael G. Wilding in which Mr. Wilding opposes my proposal to adjust the calculation of the Schedule 294, 295, and 296 transition adjustments to reflect the current value of freed-up Renewable Energy Certificates ("RECs"). Mr. Wilding also opposes my alternative proposal in which PacifiCorp would transfer to the appropriate Electricity Service Supplier ("ESS") the RECs for which its customers are paying PacifiCorp.[1] Mr. Wilding opposes, as well, the variation on this concept that I presented, in which PacifiCorp would retire RECs either on behalf of direct access customers, or on behalf of a direct access customer's ESS, for the period corresponding to the calculation of a direct access customer's transition adjustment charges.

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

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

A. I offer the following primary conclusions and recommendations:

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

[1] This would allow the ESS, in turn, to retire the RECs for each compliance year and pass on that value to the customer

price of RECs being purchased by PacifiCorp through the 2016 Request for Proposals ("RFP") issued by the Company. Determining the value of RECs freed-up by direct access based on the average price of unstructured RECs sold by PacifiCorp in 2016 yields a value that is [redacted].

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

One option I urge the Commission to consider is to pursue these alternative approaches by ordering PacifiCorp to work with Staff and interested stakeholders to develop a protocol over the next year for transferring RECs and/or retiring RECs on behalf of ESSs for direct access customers. This collaborative effort could be conducted in conjunction with the Renewable Portfolio Standard ("RPS") rulemaking that is also anticipated in the upcoming year. Under this option, I recommend that the Commission approve the current valuation approach I have recommended for the 2018 TAM, with the understanding that it is expected to be replaced by a REC transfer/REC retirement model for the 2019 TAM. For any direct access customer, the REC transfer/REC retirement model would apply only for those years in which a transition adjustment calculation was applied to direct access service. For years in which a transition adjustment calculation no longer applied (i.e., for a given customer, after year 10 of the PacifiCorp 5-year opt-out program), PacifiCorp would have no obligation to transfer or retire any RECs.

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

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

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

<u>Response to Mr. Wilding Regarding REC Valuation</u>

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

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

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

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

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

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

[2] ORS 469A.052(1), 469A.065.

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

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

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

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

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

[3] Reply Testimony of Michael G. Wilding, pp. 52-53.

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

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

[4] 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.
[5] *See* Direct Testimony of Michael G. Wilding, pp. 35-36.

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

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

A. Based on the REC sales data reported by PacifiCorp in Utah Docket No. 17-035-14, the sales-weighted average value of unstructured RECs sold by the Company in 2016 was [redacted] per MWh.[6] [redacted].[7] Significantly, the [redacted] unstructured RECs that PacifiCorp sold in 2016 [redacted] RECs in the PacifiCorp territory in 2016.[8] [redacted]

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[6] 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.

[7] 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.

[8] 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.

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

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

A. PacifiCorp opposes both of these alternatives. One of Mr. Wilding's arguments is that transferring the RECs would result in "impermissible cost shifting" because the freed-up REC provides "little or no benefit to remaining customers" (because it must be banked), yet the direct access customer would receive the full value of the REC.[9]

Q. What is your response to this argument?

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

[9] Reply Testimony of Michael G. Wilding, pp. 53-54.

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

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

A. Yes. Mr. Wilding also argues that it is too complicated and administratively burdensome to transfer the RECs. One of the difficulties alleged by Mr. Wilding is deciding which RECs to transfer. Mr. Wilding claims that it would be administratively burdensome to appropriately identify and determine which RECs to transfer in order to ensure that cost-of-service customers are held harmless.[11]

Q. What is your response to this argument?

A. It seems PacifiCorp has fallen into the trap of allowing "the perfect to be the enemy of the good." In defending its position, the Company argues that:

> Theoretically, direct access customers have contributed to their pro rata share of RECs from each of the company's eligible renewable resources. Depending on the banking provisions applicable to each REC, different RECs will have different value to PacifiCorp and its customers from an RPS compliance perspective. Under the current incremental cost methodology, RECs also have varying levels

[10] OAR 860-038-0160(1).
[11] Id., p. 54.

of incremental costs associated with them, which impacts whether or not the company nears the four percent incremental cost cap.[12]

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

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

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

Q. How do you respond to this objection?

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

[12] Id., p. 54.

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

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

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

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

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

For instance, the Metropolitan Edison tariff provides as follows:

> 9. ALTERNATIVE ENERGY PORTFOLIO STANDARDS
>
> 9.1 Requirements. EGSs supplying retail load in the Company's service territory shall cooperate with the Company to ensure compliance with applicable requirements under the AEPS Act and related regulations. An EGS is required to meet AEPS Act requirements for its metered retail load as measured at the delivery point for each EGS Customer, provided, however, that the Company shall provide solar photovoltaic alternative energy credits to satisfy EGS AEPS solar photovoltaic requirements during the period June 1, 2015 to May 31, 2017. An EGS shall grant the Company permission to transfer solar photovoltaic alternative energy credits into the EGS's GATS account.

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

[13] 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.

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

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

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

[14] *See* Id., p. 55.

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

<u>Response to Mr. Wilding Regarding Schedule 200 Escalation</u>

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

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

In calculating the Schedule 296 Consumer Opt-Out charge, PacifiCorp escalates the projected Schedule 200 costs at an inflation rate. The disagreement between Calpine Solutions and PacifiCorp concerns the treatment of Schedule 200 costs in Years 6 through 10. I contend that Schedule 200 costs should <u>not</u> be escalated in Years 6 through 10 as calculated by PacifiCorp because the five-year opt-out customer will have already departed cost-of-service rates five years prior, and *incremental* fixed generation costs incurred during Years 6 through 10 should not be incurred on the departed customer's behalf. Rather, the opt-out charge for Years 6 through 10 should be limited to the generation investment that had been built for the departed customer's benefit. At the maximum, this would extend to the five-year planning horizon following the customer's departure (i.e., Years 1 through 5 of the opt-out period).

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

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

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

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

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

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

[15] UE 296, Order No. 15-394 at 12. Emphasis added.

can only support this contention by freezing the fixed generation costs in year five and excluding all generation costs incurred after year five."[16]

Q. What is your response to this point?

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

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

A. Yes. He goes on to assert that under PacifiCorp's calculation of the Consumer Opt-Out Charge, the generation assets are frozen in Year 10, not Year 5.[17]

Q. What is the significance of this statement?

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

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[16] Reply Testimony of Michael G. Wilding, p. 57.
[17] Id., p. 58.

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

Q. Does Mr. Wilding discuss this issue further?

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

[18] UE 296, Order No. 15-394 at 12. See excerpt on page 17 of this testimony.
[19] See my discussion four questions above.
[20] Reply Testimony of Michael G. Wilding, p. 59.

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

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

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

[21] 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.
[22] Id., p. 59.

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

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

[23] 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.

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:

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

[redacted]

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.

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.

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Dated August 2, 2017

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