BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

In the Matter of PACIFICORP	)	UE 323
	)	
PacifiCorp 2018 Transition Adjustment Mechanism	)	
	)	
	)	

CALPINE ENERGY SOLUTIONS, LLC'S RESPONSE BRIEF

REDACTED

SEPTEMBER 26, 2017

TABLE OF CONTENTS

Page

I. INTRODUCTION AND SUMMARY 1

II. REGULATORY BACKGROUND 2

A. Oregon's Direct Access Law and Regulations. 2

B. PacifiCorp's Direct Access Programs 4

1. PacifiCorp's One-Year (Schedule 294) and Three-Year (Schedule 295) Programs 4

2. PacifiCorp's Five-Year Program (Schedule 296) 5

III. LEGAL STANDARD....................7

IV. ARGUMENT....................7

A. The Commission Should Adopt Calpine Solutions' Proposals to Account for the Stranded Benefit of Freed-Up RECs....................7

1. Freed-Up RECs Are Stranded Benefits. 8

2. Calpine Solutions' Proposed REC Credit Based on REC Sales Is Reasonable and Conservative. 9

3. PacifiCorp's Proposed REC Credit Unreasonably Assumes RECs Have No Value Until 2028....................11

4. The Commission Should Direct the Parties to Develop a Mechanism to Directly Transfer or Retire Freed-Up RECs for the Direct Access Customers 13

B. The Commission Should Require PacifiCorp to Properly Account for the Impact of Accumulated Depreciation in Calculation of PacifiCorp's Fixed Generation Costs in the Consumer Opt-Out Charge for the Five-Year Program 14

1. Transition Charges for New Generation Investments Made Up to 10 Years After a Permanent Opt-Out Election Violate Oregon's Direct Access Law 14

2. PacifiCorp's Consumer Opt-Out Charge Unreasonably Charges Direct Access Customers for New Generation Investments Made Six to 10 Years After the Customer Commits Not to Use PacifiCorp's Generation Resources 16

3. PacifiCorp Failed to Fully Comply with the Commission's Directive to Provide Relevant Historical Data, but the Data Provided Further Supports Calpine Solutions' Argument 20

4. The Commission Has an Ongoing Obligation to Change Rates 27

V. CONCLUSION 27

TABLE OF AUTHORITIES

Page

Cases

American Can Co. v. Davis,
28 Or App 207, 559 P2d 898 (1977) 27

Shuler v. Distrib. Trucking Co.,
164 Or App 615, 994 P2d 167 (1999), *rev den* 330 Or 375 (2000) 15

Statutory Provisions

ORS 469A.052(1)(b) 8

ORS 469A.065 8

ORS 756.040(1) 7

ORS 757.210(1)(a) 7

ORS 757.600(6) 3

ORS 757.600(10) 3, 9

ORS 757.600(16) 3

ORS 757.600(31) 3, 14, 15

ORS 757.600(32) 3

ORS 757.600(35) 3, 15, 26

ORS 757.601(1) 3

ORS 757.607(1) 3

ORS 757.607(2) 3, 14

ORS 757.646(1) 3

ORS 757.649(1)(a) 3

Or Laws 1999, ch 865 3

Administrative Rules

OAR 330-160-0015(16) 9

OAR 860-001-0480(5) 25

OAR 860-038-0005(41) 3, 4, 15, 17

OAR 860-038-0080(5) 4

OAR 860-038-0080(6) 4

OAR 860-038-0140(1) 4

OAR 860-038-0140(2) 15

OAR 860-038-0160(1) 3, 9, 13

Administrative Decisions

In the Matter of PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism,
OPUC Order No. 16-482 (Dec. 20, 2016) 12, 20, 26

In the Matter of PacifiCorp, dba Pacific Power, Petition for Approval of the 2017 PacifiCorp Inter-Jurisdictional Allocation Protocol,
OPUC Order No. 16-319 (Aug. 23, 2016) 5

In the Matter of PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism,
OPUC Order No. 15-394 (Dec. 11, 2015) 19

In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-Out,
OPUC Order No. 15-060 (Feb. 24, 2015) 5, 15

Re PacifiCorp Application for Policy Determination for Sale of Renewable Energy Credits,
OPUC Order No. 11-512 (Dec. 20, 2011) 12

In the Matter of Portland General Electric Co.: 2012 Annual Power Cost Update,
OPUC Order No. 11-432 (Nov. 2, 2011) 7

In the Matter of Pub. Util. Comm'n of Or.: Investigation Into Integrated Resource Planning, OPUC Order No. 07-002 (Jan. 8, 2007) 5, 6

Other Sources

Davis, *Administrative Law Text*, § 18.01 (3d ed. 1972) 27

Gregory N. Basheda, et al, *The FERC, Stranded Cost Recovery and Municipalization*, 19 ENERGY L J 351 (1998) 17

OPUC Status Report on Electricity Restructuring (July 2016), available at http://www.puc.state.or.us/electric_restruc/statrpt/2016/June_2016_Status_Report.pdf....1

Or. Atty. Gen. Opin. No. 6454, 1992 WL 526799 (June 8, 1992) 27

I. INTRODUCTION AND SUMMARY

Calpine Energy Solutions LLC ("Calpine Solutions") hereby files with the Public Utility Commission of Oregon ("OPUC") its response brief in the above-captioned proceeding. Although other intervenors primarily focus on net power costs for cost-of-service customers in PacifiCorp's annual transition adjustment mechanism ("TAM") dockets, Calpine Solutions actively participates in the TAM to address the rates PacifiCorp may charge direct access customers who purchase generation from an electricity service supplier ("ESS").

Oregon law has long provided that customers should have access to retail alternatives through Oregon's direct access law, and many customers have recently expressed interest in such retail alternatives. However, PacifiCorp's transition adjustment charges have created an economic barrier to direct access, and even after implementation of PacifiCorp's new five-year opt-out program, participation in direct access in PacifiCorp's service territory remains at an extremely low level of 3.5 percent of eligible load.[1]

Calpine Solutions submits two proposals in this docket to improve the calculation of the transition charges and mitigate the unreasonable economic barrier to direct access that currently exists in PacifiCorp's service territory:

- *First*, the Schedule 294 (one-year program), 295 (three-year program) and 296 (five-year program) transition charges should be reduced to reflect the value of freed-up renewable energy certificates ("RECs"). Unlike past years, PacifiCorp agrees that a REC credit is warranted in this proceeding, and the only dispute concerns valuation. The Commission should adopt Calpine Solutions' proposed

[1] Calpine Solutions/101, Higgins/1 (containing OPUC Status Report on Electricity Restructuring (July 2016)).

REC valuation using the price of RECs recently sold by PacifiCorp. Additionally, as PacifiCorp, Staff and Calpine Solutions all agree, the Commission should direct the parties to engage in generic workshops to devise a mechanism to transfer the freed-up RECs to the ESS or the direct access customer to resolve the controversial REC valuation issue on a long-term basis.

- *Second*, in calculating the transition charges assessed in the five-year program, PacifiCorp should not *escalate* its projected fixed generation costs in Schedule 200 for a full 10 years after the customer commits not to use PacifiCorp's generation resources. Rather, under Oregon law, fixed generation investments attributed to the participant in the five-year program should be frozen after year five (at the latest), and projected Schedule 200 costs should therefore decline each year from year six through year 10 to reflect the effects of increased accumulated depreciation and declining returns on those previously made investments. Although this issue is currently on appeal from the UE 296 TAM, the Commission should correct this legally erroneous miscalculation of the consumer opt-out charge based on the record developed in this proceeding.

II. REGULATORY BACKGROUND

A. Oregon's Direct Access Law and Regulations

Under a retail direct access program, the direct access customer continues to use the utility's distribution system but obtains energy from another retail supplier. Initially enacted in 1999, Oregon's direct access law ("S.B. 1149") specifically instructs the Commission to develop policies to "eliminate barriers to the development of a competitive retail market structure[.]"

ORS 757.646(1). In its findings supporting the legislation, the legislative assembly declared that "retail electricity consumers that want and have the technical capability should be allowed, either on their own or through aggregation, to take advantage of competitive electricity markets as soon as is practicable." Or Laws 1999, ch 865. The direct access law requires that all nonresidential retail customers be allowed direct access to competitive markets by purchasing generation services from a Commission-certified ESS. ORS 757.600(6), (16), 757.601(1), 757.649(1)(a).

The law further addresses stranded generation resources. It characterizes stranded costs as "uneconomic utility investments," which are defined, in the past tense, as certain investments "that *were* prudent at the time the obligations *were* assumed but the full costs of which *are no longer* recoverable *as a direct result of* [*direct access*], absent transition charges." ORS 757.600(35) (emphasis added). But the law also contemplated stranded benefits, which are characterized as "economic utility investments." ORS 757.600(10). The law allows the Commission to apply "transition charges" or provide "transition credits" to a customer who departs from the incumbent electric company's traditional generation offering to recover or return the value of stranded generation investments. *See* ORS 757.600(31) & (32), 757.607(2). If necessary to prevent "unwarranted shifting of costs," the Commission may assess direct access customers with such transition charges for past investments. *See* ORS 757.607(1).

The Commission's administrative rules provide that direct access customers "will receive a transition credit or pay a transition charge equal to 100 percent of the net value of the Oregon share of all [investments] as determined pursuant to an auction, an administrative valuation, or an ongoing valuation." OAR 860-038-0160(1). The rules further require that PacifiCorp use the "ongoing valuation" method, which determines the "transition costs or benefits for a generation asset by comparing the value of the asset output at projected market prices for a defined period to an estimate of the revenue requirement of the asset for the same time period." OAR 860-038-0005(41); *see also* OAR 860-038-0080(5)-(6), 860-038-0140(1). The design logic in this approach places departing direct access customers in an economically "break even" position with respect to the choice of direct access service, while at the same time holding non-participating customers harmless. Calpine Solutions/100, Higgins/9-10.

B. PacifiCorp's Direct Access Programs

Prior to the 2016 shopping year, customers in PacifiCorp's service territory had a choice between one-year and three-year programs, under which the customer is never able to cease paying for PacifiCorp's generation resources. However, this is the third year that PacifiCorp's five-year program will provide the opportunity for eligible customers to enter into a permanent opt-out program and eventually stop paying PacifiCorp for generation resources.

1. PacifiCorp's One-Year (Schedule 294) and Three-Year (Schedule 295) Programs

PacifiCorp's one-year and three-year programs implement a perpetual ongoing valuation rate structure. PacifiCorp's transition adjustment equals the difference between PacifiCorp's net power cost (as reflected in Schedule 201)[2] and the estimated market value of the electricity that is freed up when a customer chooses direct access service, as calculated in GRID. Calpine Solutions/100, Higgins/12-13. However, even though PacifiCorp's transition adjustment results in a credit to the customer, PacifiCorp's direct access customers must continue to pay for the

[2] Schedule 201's "net power costs" include long-term power purchase contracts, short-term market purchases, and fuel for power generation; whereas Schedule 200's "fixed generation costs" include the costs of PacifiCorp-owned power plants placed in rate base upon which PacifiCorp is allowed to earn its authorized rate of return. Calpine Solutions/100, Higgins/11.

Company's fixed-generation costs through Schedule 200. *Id*. The end result is that the one-year or three-year program participant pays substantial amounts to PacifiCorp for generation resources the customer does not use. *See id.* at 12-13 (noting that the 2018 one-year program participant on Schedule 48-P will pay PacifiCorp $28.63 per megawatt-hour ("MWh") on Schedule 200 but is projected to only receive a transition credit of $8.07 per MWh during heavy load hours and an average credit of $5.58 per MWh during light load hours).

Additionally, the one-year and three-year program participants will pay the ESS for generation supply and pay PacifiCorp for delivery service. *Id.* at 7-8. At the conclusion of the one-year or three-year term, the customer returns to cost-of-service or elects a new one-year or three-year term. Under this regime, the customer never stops paying for PacifiCorp's generation resources. *Id.*

2. PacifiCorp's Five-Year Program (Schedule 296)

In contrast to the one-year and three-year programs, PacifiCorp's five-year program allows customers to eventually migrate to 100 percent market prices without any remaining obligations to PacifiCorp for generation resources. *Id.* at 8. The customers in the five-year program must provide four years' advance notice to return to PacifiCorp's cost-of-service rates for generation resources. *In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-Out*, OPUC Order No. 15-060, at 12-13 (Feb. 24, 2015). The program is therefore effectively a permanent opt-out program, and PacifiCorp does not plan to serve the customer's load. *See In the Matter of PacifiCorp, dba Pacific Power, Petition for Approval of the 2017 PacifiCorp Inter-Jurisdictional Allocation Protocol*, OPUC Order No. 16-319, at App. A at 8-9 (Aug. 23, 2016); *In the Matter of Pub. Util. Comm'n of Or.:*

Investigation Into Integrated Resource Planning, OPUC Order No. 07-002, at 19 (Jan. 8, 2007).

Schedule 296 consists of two major parts: (1) a five-year transition adjustment component that is nearly identical to the calculation of the Schedule 294 and 295 transition adjustments; and (2) a consumer opt-out charge, which brings forward into years one through five the projected Schedule 200 costs for years six through 10, net of projected net power cost savings attributed to the departed opt-out load. Calpine Solutions/100, Higgins/26. In addition to the Schedule 296 charge, the customer must also pay PacifiCorp the base Schedule 200 charge for the first five years, which may be updated in each rate case during that period. *Id*. From the effective date of the opt-out election forward, i.e., January 1, 2018 in the case of this year's TAM, the customer will also pay the ESS for generation supply and pay PacifiCorp for delivery service. *Id.* Although the one-year and three-year programs can theoretically result in a "break even" value proposition for the customer due to savings on market purchases through the ESS, the five-year program is guaranteed to result in a negative value proposition until the customer completes its five-year transition term. *Id.* a 26-28.

To illustrate the economic barrier, the record demonstrates that in the first year of the five-year program, a Schedule 48-P customer would pay an average of $28.63 per MWh for Schedule 200, while receiving a transition adjustment credit of only $2.99 per MWh, for a net charge of $25.64 per MWh, prior to considering the consumer opt-out charge. *Id.* at 27. Then, *in addition*, the customer would pay a consumer opt-out charge of $14.18 per MWh. *Id.* at 27-28. Based on PacifiCorp's sample charges, a participating customer opting out this year and using 100,000 MWh of energy per year (roughly the size of a 15 MW customer) would pay PacifiCorp $3,982,000 in 2018 alone for these collective transition charges. *Id.* at 28. The customer would continue to pay additional transition charges for the each of five years through 2022. These charges for PacifiCorp's generation that the customer does not use will exist prior to purchasing the generation supply and distribution service that will actually serve the customer's load from the ESS.

III. LEGAL STANDARD

Oregon law requires that rates assessed to direct access customers in each final Commission order be fair, just and reasonable and comply with applicable legal requirements. *See* ORS 756.040(1). The utility bears the burden of proof. ORS 757.210(1)(a); *In the Matter of Portland General Electric Co.: 2012 Annual Power Cost Update*, OPUC Order No. 11-432, at 3 (Nov. 2, 2011).

IV. ARGUMENT

The Commission should adopt Calpine Solutions' reasonable recommendations to prevent assessment of unjust and unreasonable rates to customers who wish to participate in direct access in PacifiCorp's service territory.

A. The Commission Should Adopt Calpine Solutions' Proposals to Account for the Stranded Benefit of Freed-Up RECs

Direct access customers should receive the benefit of RECs generated by PacifiCorp's Renewable Portfolio Standard ("RPS") resources paid for by the direct access customers. The transition adjustment calculation includes an assumed value of the freed-up *energy* produced from PacifiCorp's RPS portfolio, but in past years it has overlooked that those resources also generate valuable RECs that are ignored in the calculation made through GRID modeling. PacifiCorp agrees for the first time this year that a REC credit is warranted, but its proposed REC credit undervalues the stranded benefit that should be returned to the direct access customers.

Calpine Solutions' proposed REC credit is a conservative and reasonable way to compensate one-year, three-year, and five-year program participants for the value of the renewable attributes of freed-up energy. Additionally, regardless of the REC valuation used for this year's TAM, the Commission should direct the parties to develop a method of directly transferring or retiring the freed-up RECs on behalf of the direct access customers, as Staff and PacifiCorp also agree.

1. Freed-Up RECs Are Stranded Benefits

The legal and factual basis for implementing some form of a REC credit are largely undisputed. The RECs are freed up because PacifiCorp's RPS obligation is reduced proportionately to a direct access customer's load when a customer migrates to direct access and purchases RPS-compliant energy through an ESS. ORS 469A.052(1)(b), 469A.065. During the years in which the direct access customer continues to pay transition charges, the direct access customer continues to pay for PacifiCorp's RPS-compliant resources through Schedule 200 and Schedule 201. Calpine Solutions/100, Higgins/17-18. For each MWh of electric energy produced by the RPS-complaint resources in Schedules 200 and 201, the resource also produces a REC. *Id.* The current transition adjustment mechanism recognizes and credits the customer for the value of the freed-up energy, through GRID's calculation of the value of freed-up *energy*. *Id.* at 18. However, the current regime provides no credit for the value of the freed-up RECs. *Id.* In addition, the direct access customers must pay their ESS for the RECs necessary to meet the RPS obligation tied to those customers' load, effectively resulting in double payment for RPS compliance as a condition of participating in direct access. *Id.* at 17.

The freed-up RECs are a classic example of a stranded benefit. In terms of Oregon's direct access law, they are the benefits of an "economic utility investment," which includes investments in generation that "were prudent at the time the obligations were assumed but the *full benefits of which* are no longer available to consumers as a direct result of [direct access], absent transition credits." ORS 757.600(10) (emphasis added). In contradiction to the law and the Commission's rules, the direct access customers pay for the costs of PacifiCorp's renewable resources (indeed, Calpine Solutions contends that the five-year customers overpay for the existing generation fleet in the consumer opt-out charge, as discussed later in this brief). But, absent a REC credit for the full value of the RECs, the customers do not receive a credit back for the full benefits those resources produce. *See* OAR 860-038-0160(1) (requiring that customers receive credit or charge equal to "100 percent" of the net value of the benefits and costs of freed-up resources).

Without the REC credit, direct access customers are paying twice for their RPS obligations and subsidizing RPS compliance for cost-of-service customers. Calpine Solutions/100, Higgins/19. These facts are largely undisputed. *See* Staff/600, Anderson/2. Because the basis for the REC credit is undisputed this year, the only issue is how the value the freed-up RECs or otherwise return the stranded benefit to the direct access customers.

2. Calpine Solutions' Proposed REC Credit Based on REC Sales Is Reasonable and Conservative

In the mechanics of the calculation that derives a value per MWh of freed-up energy, the credit could easily be computed by multiplying the assumed value of a freed-up REC by 15 percent, given the current RPS obligation of 15 percent. Calpine Solutions/100, Higgins/17, 25.[3] That amount would be added to the value of the freed-up energy in the transition adjustment

[3] Each MWh of RPS-compliant energy generates one REC. OAR 330-160-0015(16).

calculation for the one-year, three-year, and five-year program rates. *Id.* The only question in dispute is how to value the freed-up REC.

The record contains ample evidence of today's value of freed-up RECs. Most directly, the record contains detailed evidence that PacifiCorp has sold RECs allocated to other states that have no need for RECs for compliance purposes, such as Utah and Wyoming. These RECs are essentially "freed up" for sale due to the fact that customers in those states pay for PacifiCorp's renewable resources but PacifiCorp has no RPS obligation for those customers, which is analogous to the situation for Oregon direct access customers. *See Id.* at 19. Instead of banking those RECs, PacifiCorp sells them in today's market at today's value and credits that value back to the Utah and Wyoming customers. *Id.*

Use of sale values of unstructured RECs credited to Utah customers is a reasonable proxy for the value of freed-up RECs in this proceeding. As reported by the PacifiCorp in Utah, PacifiCorp sold its "unstructured" (which is equivalent to unbundled) RECs for a sales-weighted average value in 2016 of BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL per MWh. Calpine Solutions/200, Higgins/9. BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL. *Id.* Significantly, the BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL unstructured RECs that PacifiCorp sold in 2016 BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL RECs freed up by Oregon direct access customers in 2016. *Id.* BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL, the average price of those sales would serve as reasonable measurement of the value of Oregon's freed-up RECs. *Id.* at 9-10.

Calpine Solutions' proposed use of unstructured REC values reported in Utah is a conservative valuation because it effectively only credits the customer for the value of unbundled RECs when PacifiCorp's generation resources paid for by the direct access customers actually generate a substantial amount of more valuable bundled RECs. Calpine Solutions/100, Higgins/25. The data demonstrates that BEGIN CONFIDENTIAL [redacted] END CONFIDENTIAL. Confidential Calpine Solutions/201, Higgins/11, 13.

In short, Calpine Solutions' proposal for this year's REC valuation is reasonable and even conservative in favor of cost-of-service customers.

3. PacifiCorp's Proposed REC Credit Unreasonably Assumes RECs Have No Value Until 2028

PacifiCorp proposes to value freed-up RECs by calculating the future value associated with the delay in the timing of the company's RPS compliance shortfall beginning in 2028. *See* PAC/100, Wilding/30-36. The premise of PacifiCorp's argument is that the RECs freed up by direct access today are valueless until PacifiCorp's REC bank has a shortfall for compliance purposes in 2028. *See id.* at 34. Thus, PacifiCorp projects a 2028 REC value and then discount that value back to a present value, which is then input as a discounted credit in the transition adjustment calculation. *See* Calpine Solutions/100, Higgins/22. Calpine Solutions acknowledges that PacifiCorp's argument has some basis in the Commission's order in last year's TAM, but the record in this case demonstrates that the RECs do in fact have value prior to 2028.

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. Calpine Solutions/100, Higgins/22. Direct access customers will pay PacifiCorp for a pro rata share of the Company's RPS-compliant generation at *today's rates* – not a discounted rate based on costs eleven years in the future. *Id.* The actual reason behind the use of a discounted future value is that PacifiCorp has chosen to bank, instead of sell, the RECs freed up by direct access. *See id.* at 23; PAC/100, Wilding/34:4-8; *In the Matter of PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism*, OPUC Order No. 16-482 at 22 (Dec. 20, 2016) (reasoning, "PacifiCorp has stated that it will continue to bank RECs rather than sell them, so there is no benefit to other customers from a potential sale of RECs."). In effect, therefore, PacifiCorp is able to discount the credit to direct access customers through its own election not to make any effort to sell the freed-up RECs today, and 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." Calpine Solutions/100, Higgins/23.

The Commission's endorsement of PacifiCorp's overall policy of banking excess Oregon RECs for future use was not directed specifically to RECs freed-up by direct access customers. *See Re PacifiCorp Application for Policy Determination for Sale of Renewable Energy Credits*, OPUC Order No. 11-512, at 8 (Dec. 20, 2011). Nor is there any reason 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. Calpine Solutions/200, Higgins/8. PacifiCorp remains free to seek Commission approval to sell the freed-up Oregon RECs if it so chooses, just as it already does in Utah and elsewhere, if it determines those RECs would be more valuable sold at today's prices than banked for future use.

However, 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. *Id.* 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," OAR 860-038-0160(1), which in the case of renewable resources should include the full value today of freed-up RECs.

4. The Commission Should Direct the Parties to Develop a Mechanism to Directly Transfer or Retire Freed-Up RECs for the Direct Access Customers

Another alternative to address the freed-up REC issue is to develop a mechanism to directly transfer the REC to the ESS or the customer. *See* Calpine Solutions/100, Higgins/23-24. PacifiCorp could also simply retire the freed-up RECs on behalf of the customer or the ESS through PacifiCorp's Western Renewable Energy Generation Information System ("WREGIS") account. *Id.* This option deals with the issue head-on by allowing direct access customers to get their fair share of the value from the RPS-compliant resources. *Id.* It also avoids any controversy over REC valuation. *Id.* The parties and the Commission would have no need to debate REC valuation every year.

There is even precedent for this approach. Calpine Solutions has provided examples where Oregon utilities have retired RECs on behalf of customers, as well as an example of another jurisdiction where these types of direct transfers or retirements are implemented in the direct access context. *See id.*; Calpine Solutions/200, Higgins/14. Oregon parties should be able to develop similar mechanisms to address the issue here.

This effort could be conducted in conjunction with the RPS rulemaking in AR 610. Staff and PacifiCorp also agree that this solution is worthy of further cooperative efforts in a generic manner. Staff/600, Anderson/7-8; PAC/800, Wilding/53. Thus, regardless of REC the valuation used this year, the Commission should direct the parties to develop a direct transfer mechanism.

B. The Commission Should Require PacifiCorp to Properly Account for the Impact of Accumulated Depreciation in Calculation of PacifiCorp's Fixed Generation Costs in the Consumer Opt-Out Charge for the Five-Year Program

PacifiCorp's consumer opt-out charge for the five-year opt-out program impermissibly escalates the fixed generation costs included in the transition charges for a full 10 years after the customer commits to stop using PacifiCorp's generation resources. However, once the pool of stranded generation assets is closed, the revenue requirement for that pool of assets should decline each year due to the effects of normal increases in accumulated depreciation and declining returns. Although this issue is on appeal in the Oregon Court of Appeals, the record in this proceeding provides additional support to correct this basic miscalculation of the consumer opt-out charge for this year's election window in November.

1. Transition Charges for New Generation Investments Made Up to 10 Years After a Permanent Opt-Out Election Violate Oregon's Direct Access Law

For a permanent opt-out such as the five-year program, PacifiCorp may not lawfully include incremental generation investments and obligations among the stranded generation assets included in transition charges. As noted above, Oregon's direct access statute allows the Commission to set transition charges up to the full value of PacifiCorp's uneconomic utility investments. *See* ORS 757.607(2) (OPUC may approve "transition charges" that allow "full or partial recovery of the costs of uneconomic utility investments"); ORS 757.600(31) ("'Transition charge' means a charge or fee that recovers all or a portion of an uneconomic utility investment."). The law defines "uneconomic utility investments" as "all electric company *investments*, including plants and equipment and contractual or other legal obligations, *properly dedicated to generation*, conservation and workforce commitments, that *were* prudent at the time the obligations *were* assumed but the full costs of which *are no longer* recoverable *as a direct result of* [*direct access*], absent transition charges." ORS 757.600(35) (emphasis added). The "statute's past tense phrasing reflects a focus on completed conduct," *Shuler v. Distrib. Trucking Co.*, 164 Or App 615, 620, 994 P2d 167 (1999), *rev den* 330 Or 375 (2000), – in this case, PacifiCorp's completed conduct of incurring an obligation to a generation investment *prior* to the customer's commitment not to purchase generation services from PacifiCorp.

According to the Commission's administrative rules, the "ongoing valuation" method determines the "transition costs or benefits for a generation asset by comparing the value of the asset output at projected market prices for a defined period to an estimate of the revenue requirement of the asset for the same time period." OAR 860-038-0005(41). Within this framework, the Commission determined in docket UE 267 to require participants in PacifiCorp's five-year program to pay for the projected ongoing valuation charges for PacifiCorp's generation investments for 10 years instead of for just five years. *In the Matter of PacifiCorp, dba Pacific Power: Transition Adjustment, Five-Year Cost of Service Opt-Out*, OPUC Order No. 15-060, at 6-7; *see also* OAR 860-038-0140(2) (requiring establishment of period for conducting the ongoing valuation components). However, the law and administrative rules do not allow for that stranded "revenue requirement" attributable to the direct access customer to continually expand by adding new investments and obligations well after a permanent opt-out election. Otherwise, PacifiCorp could ignore the customer's commitment not to use PacifiCorp's generation resources and continue to acquire and charge the direct access customer for additional uneconomic utility investments into perpetuity.

2. PacifiCorp's Consumer Opt-Out Charge Unreasonably Charges Direct Access Customers for New Generation Investments Made Six to 10 Years After the Customer Commits Not to Use PacifiCorp's Generation Resources.

While the mechanics of the calculation are complicated, the record clearly establishes that PacifiCorp's consumer opt-out charge unlawfully assigns the costs of PacifiCorp's new generation investments to participants of the five-year program for 10 years after they enter the program.

As noted above, the five-year program (Schedule 296) consists of two major parts. First, it contains the transition adjustment component for the first five years, which includes the credits for each of those years that will be applied to reduce the customer's payment of the actual Schedule 200 rates in effect during the first five years. Calpine Solutions/100, Higgins/26. Second, Schedule 296 includes the consumer opt-out charge, which is the projected Schedule 200 costs for years six through 10, minus the projected savings and proceeds from market sales attributed to the departed opt-out load calculated under the ongoing valuation method for those years. *Id.* The customer pays all of those charges in the first five years. *Id.* Critically, under PacifiCorp's proposed rates, the projected revenue requirement for Company-owned investments contained in the consumer opt-out charge for years six through 10 are simply the currently effective Schedule 200 rates *escalated* at an assumed inflation rate of 2.5 percent per year. *Id.* at 30; Calpine Solutions/200, Higgins/21-22 & n.23.

However, absent new additions to the pool of generation investments for 10 years after the opt-out election, the projected Schedule 200 costs attributable to the customer in the five-year program should not be escalated for 10 years. Under basic rate-making principles, once the portfolio of assets is "frozen" for the purposes of a stranded cost calculation, the revenue the utility earns from its return on these rate-based investments will decline each year as those investments are depreciated and amortized. Calpine Solutions/100, Higgins/31. This is a function of the fact that a utility is authorized to earn a return only on its *net* plant in rate base, which requires accumulated depreciation and amortization to be subtracted from rate base. *Id.* It is well understood that the revenue requirement of a set of stranded generating plants is "'generally a steadily declining function.'" Gregory N. Basheda, et al, *The FERC, Stranded Cost Recovery and Municipalization*, 19 ENERGY L J 351, 367 (1998). "Normal stranded plant revenue requirements therefore have a downward sloping shape * * * ." *Id.* PacifiCorp has never provided any reason why its existing investments and obligations are different from normal stranded plant revenue requirements.

PacifiCorp's consumer opt-out charge should not add new investments to rate base, such as environmental upgrades to extend coal plant lives, or ignore the effect of depreciation of the existing rate base for a closed pool of generation investments six to 10 years after a permanent opt-out election. Instead, just as PacifiCorp does for cost-of-service rates, the law requires application of the downward effect of accumulated depreciation in calculating "an estimate of the revenue requirement of the asset * * *" for transition charges. OAR 860-038-0005(41).

However, the record demonstrates that PacifiCorp does not close the pool of generation investments until year 10. It is undisputed that PacifiCorp applies virtually identical inflation rates to Schedule 200 in year one through five as it applies in years six through 10. *See*

PAC/400, Wilding/56-57.[4] As PacifiCorp agrees, this "methodology does not preclude the inclusion of incremental fixed generation costs in the calculation of the Consumer Opt-Out Charge in years six through 10, just as incremental fixed generation costs are included in the first five years." PAC/800, Wilding/53-54.

In contrast to PacifiCorp's proposal, Calpine Solutions has again demonstrated that the effect of normal growth in accumulated depreciation on a closed pool of rate-based investments in Schedule 200 is a significant decline in revenue requirement in the consumer opt-out charge for years six through 10. Calpine Solutions/100, Higgins/32; Calpine Solutions/104. Calpine Solutions' calculation allowed the Schedule 200 charge to escalate at PacifiCorp's inflation rate for five full years, which conservatively assumes PacifiCorp made some commitments to new generation investments at the time of the opt-out election that cannot be unwound for the first five years. *Id.* at 30. However, once the generation portfolio is frozen, PacifiCorp's existing generation rate base and associated return shrinks by 8.38 percent per year. *Id.* at 32. Thus, even when allowing for an escalating rate base in the first five years, the Schedule 200 entry for years six through 10 should decline by approximately 2.36 percent per year to properly account for growth in accumulated depreciation and the associated reduction in returns. *Id*. That refinement would merely reduce, but not eliminate, PacifiCorp's consumer opt-out charge. For example, customers on delivery Schedule 48-P would have a reduction in the consumer opt-out charge from $14.18 per MWh to $10.99 per MWh, which would reduce the overall transition charges to

[4] *Compare* Calpine Solutions/103, Higgins/2-3 (containing PacifiCorp's proposed calculation with escalating Schedule 200 projections at the same inflation rate for 10 full years in column (d) of the exhibit), *to* Calpine Solutions/104, Higgins/2-3 (demonstrating Mr. Higgins' proposed escalation of Schedule 200 in years one through five using PacifiCorp's escalation rate before closing the pool of generation investments and decreasing Schedule 200 in years six through 10 in column (d) in the exhibit).

a hypothetical 15-MW customer from $3,982,000 to $3,663,000 in 2018, or $319,000 less than under PacifiCorp's proposal. Calpine Solutions/100, Higgins/28, 33.

In past years, the Commission has relied upon PacifiCorp's assertion that incremental generation is not added to the consumer opt-out charge after year five, but PacifiCorp now contradicts its past assertion – undercutting the basis for past years' orders on this issue. *See In the Matter of PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism*, OPUC Order No. 15-394 at 12 (containing PacifiCorp's argument that "incremental generation is not added after year five"). PacifiCorp now concedes that under PacifiCorp's calculation of the Consumer Opt-Out Charge, the "generation assets are frozen in Year 10, not Year 5." PAC/400, Wilding/57. For the reasons explained herein and in prior proceedings, it is not lawful or reasonable to wait 10 full years to freeze the pool of generation investments stranded by a permanent direct access election.

PacifiCorp also continues to make an argument that was refuted in past years. Its testimony repeats the incorrect argument from past TAMs that in "years six through 10, the direct access customer does not pay incremental generation, because Schedule 200 is held constant in real terms." PAC/400, Wilding/59. This suggestion that the Schedule 200 costs in PacifiCorp's calculation do not actually escalate is based on a hope that the Commission does not know the difference between real and nominal values. Calpine Solutions' witness has again thoroughly refuted this baseless assertion by demonstrating that holding Schedule 200 constant in real, i.e. inflation adjusted, terms for 10 years means that the costs increase year over year, which is demonstrated by PacifiCorp's calculations of the charge. *See* Calpine Solutions/200, Higgins/19-20; *see also supra* n. 4. There is no basis to mechanistically apply an inflation adjustment to derive a present value. Nor is there any basis to arbitrarily hold costs constant in "real" terms with a 2.5-percent increase in costs, absent some basis to assume the *existing* pool of investments will increase in cost.

The Commission should require PacifiCorp to close the pool of incremental generation investments in Schedule 200 after year five and require PacifiCorp to apply the effects of accumulated depreciation to the consumer opt-out charge.

3. PacifiCorp Failed to Fully Comply with the Commission's Directive to Provide Relevant Historical Data, but the Data Provided Further Supports Calpine Solutions' Argument

Although the Commission ruled in PacifiCorp's favor on this issue in past years, last year's TAM order also directed:

> For the next TAM filing, we direct PacifiCorp, dba Pacific Power, to include a historical time series of fixed generation costs included in its direct access opt-out charge, broken down by its components (e.g., capital, O&M) as a check on the reasonableness of its forecasts.

In the Matter of PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism, OPUC Order No. 16-482 at 23. The Commission had further reasoned, "PacifiCorp explains that the consumer opt-out charge includes other costs that escalate over time and more than offset the impact of accumulated depreciation." *Id.*

In its direct testimony, filed on March 31, 2017, PacifiCorp provided a graphical depiction of a "historical time series" of data containing the cost components of Schedule 200 as provided in its Results of Operations Reports since 2006. *See* PAC/100, Wilding/36-37; PAC/110. But, contrary to Calpine Solutions' understanding of the purpose of this exercise, PacifiCorp made no effort to exclude *any* incremental generation investments at any point from 2006 to 2015. *See* Calpine Solutions/100, Higgins/33.

In discovery, Calpine Solutions attempted to obtain the historical data *excluding* the costs associated with PacifiCorp's incremental generation investments during this historic time period. PacifiCorp acknowledged that its historic time series presented in response to the Commission's directive included 17 entirely new power plants that were added to rate base from 2006 to 2015 and numerous large environmental upgrades added to existing coal plants in order to extend their useful lives, among other capital additions to rate base. *See id.* at 34-35; Calpine Solutions/105, Higgins/2-3.

To illustrate, PacifiCorp's historical data filed with its opening case failed to remove the following 17 power plants added to rate base since 2006: Leaning Juniper Wind in 2006, Currant Creek in 2006, Chehalis in 2007, Lakeside Capital Build in 2007, Blundell Bottoming Cycle in 2007, Marengo Wind in 2007, Marengo Wind II in 2008, Glenrock Wind in 2008, Seven Mile Hill Wind in 2008, Seven Mile Hill Wind II in 2008, Goodnoe Hills Wind in 2008, High Plains Wind in 2009, Glenrock III Wind in 2009, McFadden Wind in 2009, and Dunlap Wind in 2010. *See* Calpine Solutions/400 at 1-3. PacifiCorp's detailed historical time series states that its "Total Rate Base" was $719,894,639 in 2006, which nearly doubled to $1,336,508,766 in 2007, and again jumped to $1,648,371,025 in 2008. PAC/110; *accord* Calpine Solutions/105, Higgins/2. While these data certainly demonstrated a striking increase in fixed generation costs in the graph in PacifiCorp's opening testimony, it was not responsive to the Commission's directive in last year's order and provided no insights into why, or how, a closed pool of PacifiCorp generation investments might escalate in cost.

Furthermore, in discovery, PacifiCorp only provided data with certain cost elements of incremental generation removed, stating it was too burdensome to remove the impact of incremental generation investments from all different cost categories in Schedule 200. For example, PacifiCorp provided no data removing operations and maintenance expense and certain taxes associated with these new power plants and other additions to rate base since 2006. *See* Calpine Solutions/100, Higgins/34-36; Calpine Solutions/400 at 1-2.

In its opening testimony filed on June 9, 2017, Calpine Solutions' witness, Kevin C. Higgins, used PacifiCorp's incomplete data to attempt to demonstrate the significance of the historical data. Mr. Higgins testified that the general trend from 2008 to 2015 was a significant decline in fixed generation costs if incremental investments were excluded, just as expected from general rate making principles. Calpine Solutions/100, Higgins/34-36.[5] Mr. Higgins also included a graphical depiction of the results of all data provided by PacifiCorp in Calpine Solutions/105. The data confirms that if all incremental investments are removed from rate base, thereby correcting the depreciation expense, accumulated depreciation, and return on rate base components from PacifiCorp's data, the general trend is a significant decline in PacifiCorp's Schedule 200 revenue requirement. *See id.* This confirms that there is nothing special or unique about a closed pool of PacifiCorp's generation investments that prevents their revenue requirement from declining over time.

In its reply testimony, filed on July 11, 2017, PacifiCorp provided no response to Mr. Higgins' characterization of PacifiCorp's historical time series data. *See* PAC/400, Wilding/56 – 59. Mr. Wilding's only response to Mr. Higgins' characterization of the historical time series data was as follows:

> In this case, Calpine contends that PacifiCorp's historical fixed generation costs, included in my direct testimony, demonstrate that Schedule 200 costs should

[5] The data from 2006 were unreliable for this purpose due to a timing issue and the abnormally large increase in fixed generation costs from 2006 to 2007. *Id.*

> decrease in years six through 10. But Calpine can only support this contention by freezing the fixed generation costs in year five and excluding all incremental generation costs after year five.

PAC/400, Wilding/57. Mr. Wilding went on to assert that it was appropriate to freeze the pool of generation assets in year 10, not year five. *Id.* at 58. Mr. Higgins' rebuttal testimony was therefore confined to a response to Mr. Wildings' assertions in reply testimony but contained no response to any contrary interpretation of the historical data. Calpine Solutions/200, Higgins/16-21.

However, on August 11, 2017, PacifiCorp presented a completely new argument regarding the historical evidence in response to Mr. Higgins' opening testimony. *See* Withdrawn PAC/800, Wilding/54:11 – 58:13 (filed Aug. 11, 2017, but never admitted to the record). In this proposed sur-rebuttal, Mr. Wilding relied on a new series of calculations and percentages of cost increases to assert – for the first time – that PacifiCorp's historical data "demonstrate that even when new generation resources are removed, PacifiCorp's fixed generation costs increase. Thus, the increase in the Consumer Opt-Out Charge in years six through 10 reflects non-incremental fixed generation costs, which is contrary to Calpine Solutions' claims." *See id.* at 58.

Calpine Solutions moved to strike Mr. Wilding's last-minute theory of the historical data as highly prejudicial, or in the alternative to admit additional rebuttal testimony of Mr. Higgins responding to the new theory, with the proposed additional rebuttal testimony attached. *See Calpine Solutions' Motion to Strike* (filed Aug. 24, 2017). As Calpine Solutions explained, the Commission itself directed PacifiCorp in last year's order to provide a historical time series of its fixed generation costs in its *direct* testimony. *Id.* at 8. The evidence speaking to the point was in PacifiCorp's exclusive possession, and the Commission directed PacifiCorp to present it. *Id.* If

PacifiCorp truly believed that its historic evidence demonstrates that fixed generation costs escalate even after removing all costs associated with incremental generation investments and obligations, PacifiCorp should have presented that position in its direct testimony to allow the record to be fully developed on the point. *Id.* Instead, PacifiCorp made no assertions regarding the historical time series excluding incremental generation until its proposed *third* round of testimony. *Id.* Accordingly, PacifiCorp's new theory of its historical data had to be stricken or Calpine Solutions had to have a fair opportunity to present additional rebuttal testimony on the point.

In response, PacifiCorp voluntarily withdrew the offending portions of Mr. Wilding's proposed sur-rebuttal testimony, mooting Calpine Solutions' proposal to admit its additional rebuttal in response to this new theory. *See PacifiCorp's Response to Motion to Strike* (filed Aug. 25, 2017). At the hearing, PacifiCorp only offered for admission Mr. Wilding's revised sur-rebuttal testimony that did not contain the new theory that even when new generation resources are removed, PacifiCorp's fixed generation costs increase. *See* Tr. at 11-12, 16-17 (admitting "revised surrebuttal PAC/800 to 801").

Remarkably, however, PacifiCorp's legal brief now reproduces the new factual theory of the historical data that its witness never made in admitted testimony. The brief states:

> But even if major capital additions are removed, Calpine's analysis shows that fixed generation costs still increase—by 64 percent from 2006 to 2015, 19 percent from 2007 to 2015, 2 percent from 2008 to 2015, and 16 percent 2009 to 2015.
>
> Moreover, Calpine's analysis confirms the reasonableness of the inflation escalator used to calculate the consumer opt-out charge. Without major capital additions, PacifiCorp's fixed generation costs increased by 5.65 percent per year from 2006 and 2015, 2.25 percent per year from 2007 and 2015, and 2.45 percent per year from 2009 to 2015.

PacifiCorp's Opening Br. at 47-48 (footnotes omitted). In the footnotes, the brief merely cites to an exhibit containing raw data, without any supporting calculations. The brief is not supported by work papers that would need to accompany testimony of this type, demonstrating "the source, calculations, and details supporting the testimony." OAR 860-001-0480(5). However, tracing through the cited exhibit to find the data that would calculate the percentage increases in PacifiCorp's brief, it becomes apparent that each alleged increase set forth in the brief occurs when incremental capital additions of less than $1 million and all environmental upgrades are still *included* in rate base in the historical data.

Therefore, the calculations and suggestions in PacifiCorp's brief are both incomplete and procedurally improper. Calpine Solutions disputes the relevance of each assertion in the above-quoted passages, which it never had the opportunity to respond to with its own expert testimony. PacifiCorp simply reproduced the material provided in its voluntarily stricken testimony into its brief.

If the Commission considers the factual assertions in PacifiCorp's brief, it should also consider the expert factual assertions contained in the proposed additional rebuttal testimony of Mr. Higgins, which is contained in the record as an attachment to Calpine Solutions' motion to strike. *See Calpine Solutions' Motion to Strike*, at Attachment 2 (filed Aug. 24, 2017, containing proposed Calpine Solutions/300 to 301). Although that additional rebuttal testimony was not admitted into the evidentiary record, PacifiCorp's brief has likewise not been admitted into the evidentiary record. Mr. Higgins' additional testimony demonstrated, through extensive calculations, that excluding all capital additions to rate base, including environmental upgrades, "results in a decline in 2015 fixed costs relative to the initial year *in each and every measurement* *period* between 2007-2015 and 2014-2015." *See* Proposed Calpine Solutions/300, Higgins/7. That testimony thoroughly and comprehensively refutes the new factual assertions in PacifiCorp's brief and need not be repeated here.

Additionally, PacifiCorp incorrectly quotes last year's TAM order in its brief. PacifiCorp argues "in Order No. 16-482, the Commission explained that 'there are many costs to operate and maintain existing generating assets that increase over time and offset the impact of accumulated depreciation, such as overhauls, *capital expenditures for maintenance*, and union labor contracts.'" *PacifiCorp's Opening Br.* at 48-49 (quoting Order No. 16-482 at 23 (emphasis in PacifiCorp's brief)). The quoted section of the order was a recitation of PacifiCorp's argument last year, not the Commission's explanation in support of the order. In any event, the statute does not allow for inclusion of any new capital investments added to rate base in a charge to departed direct access customers for the reasons explained above. In addition, to the extent PacifiCorp relies on the costs of operating and maintaining its existing plants, none of Mr. Higgins' calculations removed any operation and maintenance expense from PacifiCorp's initial exhibit, yet the overall costs still decline without making additions to rate base.

In sum, the statutory bar against charging for new generation investments is not limited to inclusion of a whole new greenfield power plant, as PacifiCorp suggests. It bars inclusion in the charge for any new "electric company investments, including plants and equipment and contractual obligations," which certainly includes environmental upgrades and other capital additions undertaken after the direct access customer departs. *See* ORS 757.600(35). PacifiCorp's testimony provides no basis to conclude these capital additions in the historical data were incurred for any purpose other than to extend the lives of existing power plants. As such, there is no reason to consider such capital additions as a basis to assess an escalating Schedule 200 charge to direct access customers.

4. The Commission Has an Ongoing Obligation to Change Rates

In response to the consumer opt-out charge issue, PacifiCorp suggests it is unreasonable for Calpine Solutions to continue to address this issue. However, the Commission has an ongoing obligation to evaluate rates anew based upon the record developed in each rate case. *American Can Co. v. Davis*, 28 Or App 207, 224, 559 P2d 898 (1977). "A new rate order will supersede an old one." Or. Atty. Gen. Opin. No. 6454, 1992 WL 526799 at * 9 (June 8, 1992). This is so because "[e]ven when conditions remain the same, the administrative understanding of those conditions may change, and the agency must be free to act." *Id.* (quoting Davis, *Administrative Law Text*, § 18.01, at 370-71 (3d ed. 1972)). The Commission can address the evidence and arguments presented to ensure that the rates that go into effect in this year's election window are fair, just and reasonable to customers eligible for direct access.

V. CONCLUSION

For the reasons asserted herein, the Calpine Solutions respectfully requests that the Commission adopt the REC credit and consumer opt-out charge proposals outlined in Calpine Solutions' testimony and this brief.

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CERTIFICATE OF SERVICE

I certify that on September 26, 2017, a true and correct copy of the within and foregoing Response Brief of Calpine Energy Solutions, LLC in Docket No. UE 323 was delivered via electronic mail to the Public Utility Commission of Oregon's Filing Center. Confidential portions of the brief were served by USPS Priority Mail two-day service, to:

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