ITEM NO. 3

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 23, 2019

REGULAR X **CONSENT** ____ **EFFECTIVE DATE** **April 24, 2019**

DATE: April 16, 2019

TO: Public Utility Commission

FROM: Brittany Andrus BA

THROUGH: Jason Eisdorfer EP and JP Batmale JPB

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF:
(Docket No. UM 2001) Interim PURPA Action on Avoided Costs.

STAFF RECOMMENDATION:

The Oregon Public Utility Commission (OPUC or Commission) approve the avoided costs filed on March 12, 2019 by PacifiCorp, Portland General Electric (PGE) and Idaho Power effective April 24, 2019.

Further, Staff recommends that the Commission clarify that changes to inflation rates or any other financial inputs are not included in the May 1 limited annual avoided cost updates directed in Order No. 14-058.

DISCUSSION:

Issue

Whether the Commission should approve the March 12, 2019 avoided cost updates filed by PacifiCorp, PGE and Idaho Power in compliance with Order No. 19-074.

Whether updated inflation rates should be included in the May 1 annual updates to avoided costs.

Whether measures should be taken to address the differences between PacifiCorp's renewable and nonrenewable avoided costs.

Applicable Rule

OAR 860-029-0040(4)(a) requires utilities to file updated avoided cost prices for qualifying facilities (QF) under PURPA[1] within 30 days of Commission integrated resource plan (IRP)[2] acknowledgment.[3]

The Commission added an annual May 1 avoided cost update in Order No. 14-058.

Order No. 19-074 directed PacifiCorp, PGE and Idaho Power to file updated avoided costs prior to the May 1 annual updates.

Analysis

Background
In its report to the Commission for the February 26, 2019 Public Meeting, adopted by Order No. 19-074, Staff proposed a process for adopting an "enhanced" avoided cost update. That process incorporated a timeline for review and approval that would allow QFs that had submitted complete applications for standard contracts prior to February 26, 2019, sufficient time to obtain a legally enforceable obligation or executed contract prior to the effective date of the price change. Staff's proposed schedule included two weeks for utilities to submit revised avoided costs based on the updated avoided cost elements as proposed by Staff, followed by a two week comment period, and one additional week "to incorporate comments and finalize." Staff intended to make a recommendation on the avoided cost updates at the April 23, 2019 Public Meeting, with rates effective upon approval.

The avoided cost elements included in Staff's proposal are as follows:

1. Capital costs of the avoided resources (SCCT, CCCT, and wind)
2. Fixed operations and maintenance (O&M) costs
3. Capacity factors of the avoided renewable resources (wind)
4. Updated forward electricity and natural gas prices

[1] Public Utility Regulatory Policies Act of 1978.
[2] Integrated Resource Plan and least-cost plan are synonymous.
[3] "In the same manner as rates are published for electricity sales each public utility shall file with the Commission, within 30 days of Commission acknowledgement of its least-cost plan pursuant to Order No. 89-507, standard rates for purchases from qualifying facilities with a nameplate capacity of one megawatt or less, to become effective 30 days after filing. The publication shall contain all the terms and conditions of the purchase. Except when a public utility fails to make a good faith effort to comply with the request of a qualifying facility to wheel, the public utility's standard rate shall apply to purchases from qualifying facilities with a nameplate capacity of one megawatt or less."

5. Changes to the status of the Production Tax Credit (PTC)

Inputs for elements 1 and 2 are not typically included in the annual May 1 updates mandated by Order No. 14-058. When these elements are updated the inputs are sourced from public information provided by the utilities in their respective IRP processes in progress. Inputs for elements 3, 4 and 5 are included in the annual May 1 updates.[4]

Staff proposed no other changes to the methodology or models for PURPA avoided costs, with the understanding that any potential changes to the avoided cost methodology will occur in Docket No. UM 2000.

Staff Analysis

Each utility filed its avoided cost update on March 12, 2019 in compliance with Order No. 19-074. PGE and Idaho Power filed avoided cost models and price schedules in accordance with the Staff proposed method as required. PacifiCorp filed a compliance version, and an alternative model and price schedule including enhancements proposed in its February 12 and 25, 2019 comments.

Staff first summarizes information on a significant factor driving changes to each utility's avoided costs, the forecast increase in electricity market prices. Following that, Staff responds to PacifiCorp's proposed additional enhancements individually.

One notable difference between these avoided cost updates and those currently in place is significantly higher electricity market prices for each utility. In recent years, market price forecasts have generally declined with each avoided cost update. During periods of resource sufficiency, avoided costs are based on market forecasts, while during periods of deficiency, costs are based on the avoided resource. This means that market prices are a bigger factor in levelized avoided costs over 15 years when a longer sufficiency period is in place. Conversely, market prices have minimal impacts when the sufficiency period is short.

All three utilities forecast a near-term decline from the current relatively high market prices,[5] followed by generally higher longer-term prices, as shown in the following chart

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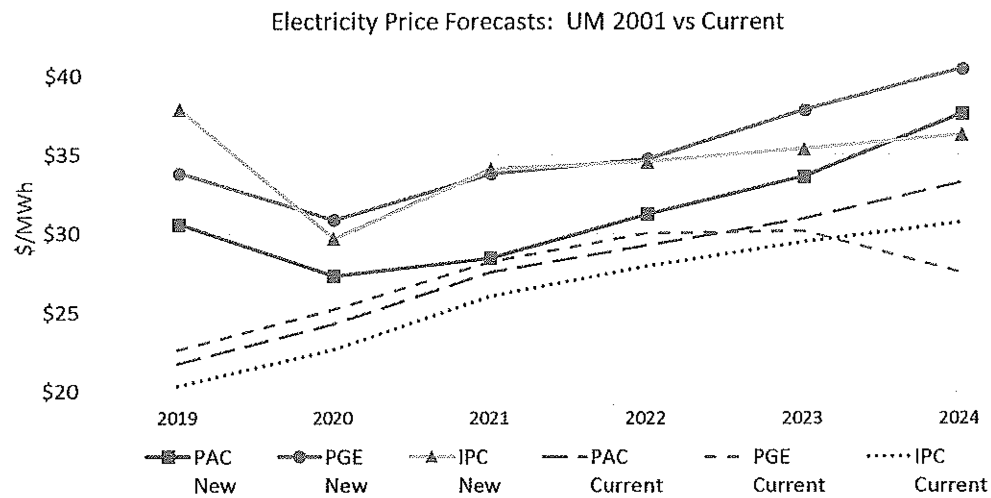
[4] Order No. 14-058: "Annual updates, filed every May 1, will include the following four factors : Updated natural gas prices; On- and off-peak forward-looking electricity market prices; Changes to the status of the Production Tax Credit [PTC]; and any other action or change in an acknowledged IRP update relevant to the calculation of avoided costs." No actions or changes in an acknowledged IRP update have been made since the most recent approved avoided cost updates.

[5] "After a low-key winter season, regional market prices for natural gas and electricity escalated substantially in February and March...A few factors contributing to the high prices include high demand during a late winter cold spell and natural gas infrastructure constraints."
https://www.nwcouncil.org/news/gas-prices-spike-response-late-winter-cold-spell-and-pipeline-constraints

of each utility's electricity market price forecast through 2024. It is important to note that each utility develops its market forecasts using different sources and methods (e.g., PacifiCorp blends Mid-C, Palo Verde and COB, while PGE and Idaho Power base the forecast on Mid-C); however, those sources and methods are consistent across avoided cost updates.



PacifiCorp Issue 1: Solar and wind resource costs.

PacifiCorp proposes using 2019 IRP resource cost assumptions for both wind and solar resources directly, rather than the current practice of using the avoided resource value and adjusting the relative capacity contribution values. PacifiCorp also proposes to average those resource costs between Oregon and other locations (Wyoming for wind and Utah for solar). Staff set out its reasoning for recommending updates to a limited set of resource inputs (e.g., "overnight" capital costs) using publicly available information from utility IRPs in progress, and not changing the Commission's established avoided cost methodology in each of the prior Staff reports for this docket.[6] While recognizing that shortcomings exist with the existing avoided cost methodology, proposals to change that methodology using this approach or any other will be addressed in Docket No. UM 2000. Staff does not repeat its reasoning here.

[6] Staff report for February 14, 2019 public meeting, https://oregonpuc.granicus.com/MediaPlayer.php?view_id=1&clip_id=370&meta_id=18402
Staff report for February 26, 2019 public meeting, https://apps.puc.state.or.us/edockets/edocs.asp?FileType=HAU&FileName=um2001hau165125.pdf&DocketID=21805&numSequence=3.

<u>PacifiCorp Issue 2</u>: Disparities between non-renewable prices and renewable prices. PacifiCorp expresses concern that "the Staff Recommendation fails to correct the disparity between renewable and non-renewable Schedule 37 prices for QFs, where the current non-renewable price exceeds the renewable price."[7] PacifiCorp asserts that if the disparity is not corrected, then QFs will be able to take the higher non-renewable price and keep the additional value of the renewable energy certificates (RECs)[,]" and "customers will end up paying more to receive less value."[8]

To prevent this outcome, PacifiCorp proposes an entirely new pricing approach, described as "an enhancement to interim avoided cost pricing be adopted consistent with Commission Order No. 19-021 in docket UM 1910, which directed the use of the value from PacifiCorp's most recent RPS Compliance Cost filing." Under PacifiCorp's proposal, nonrenewable prices should be equal to renewable prices, less the RPS compliance value."[9] Alternatively, "If the Commission declines to adopt non-renewable prices equal to renewable prices less the RPS compliance value, PacifiCorp requests the Commission restrict all QFs to receiving only renewable avoided cost prices."

Staff does not support the application of a new methodology for calculating renewable versus nonrenewable payment streams in this avoided cost docket. If it is to be considered, this methodology should be put forth in Docket No. UM 2000. Further, Staff does not support restricting QFs to only one avoided cost price stream at this time (this issue has been identified for consideration in Docket No. UM 2000).

Staff shares the fundamental concern of paying more for less, which was also raised in Docket No. UM 1729 when renewable wind avoided costs as approved were lower than nonrenewable wind.[10] Low renewable prices resulting from the Staff method in this docket are driven by two primary factors: 1) an extremely low Wyoming wind avoided renewable resource cost (which excludes any costs for the transmission required to bring this low-cost wind to PacifiCorp's load); and, 2) a renewable sufficiency period that ends in 2020, minimizing the impact of higher sufficiency period market prices.

In Order No. 18-289, addressing PacifiCorp's motion for emergency interim relief based on a nonrenewable/renewable price disparity, the Commission said,

[7] PacifiCorp Interim Adjustments to Standard Avoided Cost Pricing compliance filing, March 12, 2019, p 3.
[8] PacifiCorp Interim Adjustments to Standard Avoided Cost Pricing compliance filing, March 12, 2019, p. 3.
[9] PacifiCorp Interim Adjustments to Standard Avoided Cost Pricing compliance filing, March 12, 2019, p. 4.
[10] Docket No. UM 1729, PacifiCorp Compliance with Order No. 18-273, July 20, 2018.

> As noted, our decisions at the July 17, 2018 Public Meeting mitigated the issue raised by PacifiCorp. Only the adopted wind price is lower under renewable pricing, as opposed to non-renewable pricing. Currently, standard contract QF development in Oregon is dominated by solar, not wind resources. We consider this situation unlikely to change. Approved avoided costs for wind resources are roughly 20% lower than previously adopted rates.
>
> We recognize the dynamic nature of the energy industry, and do not prelude PacifiCorp from seeking future relief it believes necessary to protect customers. If PacifiCorp begins to see signs of new wind development acting to take advantage of the current cost spread, it may return with a request for interim relief that provides a clear and specific showings of potential customer harm.[11]

Staff recognizes that because solar and baseload resources will also now have nonrenewable/renewable price "inversion," the potential for customer harm may be higher. The table below shows the magnitude of the changes in prices for tracking solar QFs between those in place today, and under Staff's proposed method (2020-2034).

	Renewable	Nonrenewable
Current, effective July 2018	$56.05	$45.46
Staff-proposed	$45.00	$48.77
Difference	-20%	7%

Staff considered recommending a reduction to the eligibility cap for standard nonrenewable prices as a way to mitigate potential impacts of the "higher cost, less value" situation. However, PacifiCorp has not executed a standard solar power purchase agreement with a QF since October 2015.[12]

While Staff understands PacifiCorp's concern regarding this issue we do not recommend action at this time for three reasons. First, the Company's recent history of not executing contracts points to a lack of evidence that the renewable/nonrenewable price disparity will cause actual harm to PacifiCorp ratepayers. Second, larger PURPA

[11] Order No. 18-289, Docket No. UM 1729, p. 6.
[12] PacifiCorp executed several wind and other PPAs after this date, many for contract renewals.

issues, such as the avoided cost methodology, were meant to be addressed in UM 2000 not in the action items found in UM 2001. And finally in the interim, while Staff and stakeholders seek to remedy more systemic PURPA issues in UM 2000, PacifiCorp may file a motion if it believes potential harm is imminent.

PacifiCorp Issue 3: Changes to payment factors, discount rates, resource-specific cost de-escalation for renewable resources, and inflation.

PacifiCorp again requests inclusion of additional financial parameters and projected resource cost de-escalation assumptions in interim avoided costs, correctly noting that these factors impact the accuracy of the proxy resource costs. Staff has characterized its proposed method as "based on publicly available information presented in the current utility IRPs for select elements,"[i] and "*only* changes to a limited set of inputs to the existing model." As discussed under PacifiCorp Issue 1 above, Staff's view is that an input such as the "overnight" capital costs per kW to build a resource at a particular place at a specific point in time (e.g., 2021 wind) is limited and transparent in comparison to elements such as a payment factor that results from several financial components or a set of assumptions for resource cost de-escalation. In Staff's view, these additional inputs are not necessary to achieve a balance between accuracy and a transparent, limited update.

Staff does address PacifiCorp's note that "each of the prior Schedule 37 updates have included inflation forecasts consistent with the forward market prices in the filing," citing its inclusion in the limited annual update of May 1, 2017.[13] This is indeed the case. However, Staff believes that inflation should not be included as it applies to resource costs in the annual updates. For example, Table 9 of PacifiCorp's model contains the costs of displaceable resources, SCCT and CCCT. In the 2017 annual update, PacifiCorp did include updated inflation and applied it to resource costs from the previously acknowledged IRP, which is the source for the fundamental resource cost inputs such as capital costs per unit. Order No. 14-058 includes four specific, discrete inputs, none of which are the application of an updated set of inflation rates to resource cost or any other cost. If PacifiCorp wanted to propose making this addition, Staff believes it should have been described as such and included in Appendix 2-Method Write-up and Minimum Filing Requirements of its compliance filing.[14] Staff believes that the Commission should clarify that updating inflation assumptions is not a component of the annual May 1 updates required by Order No. 14-058.

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[13] PacifiCorp Interim Adjustments to Standard Avoided Cost Pricing compliance filing, March 12, 2019, p. 4-5.

[14] PacifiCorp Standard Avoided Cost Update, May 1, 2017, Appendix 2, https://edocs.puc.state.or.us/efdocs/HAQ/um1729haq16138.pdf

PacifiCorp Issue 4: Solar capacity contribution.

While not proposing its inclusion, PacifiCorp again raises the issue of the effect of excluding its updated resource capacity contributions based on study results presented in the 2019 IRP public input process. Staff notes that the Capacity Contribution agenda item presented on September 28, 2018, describes a study that includes nine "key refinements" to prior methods, and states that the results of the capacity contribution study are driven by the coincidence of loss of load probability (LOLP) and resource shapes/capacity factors and location.[15] As Staff stated at the February 26, 2019 public meeting, it proposed a limited avoided cost update method that uses inputs to the IRP studies, not results of studies developed in the IRP process. PacifiCorp states that "Staff mistakenly suggested that PacifiCorp's inputs were not complete and had not yet been subject to public review."[16] Staff disagrees with this characterization. Staff supported the use of PGE's updated capacity contribution values because their methodology is from its acknowledged 2016 IRP, and noted that PacifiCorp's capacity contribution study had been shared but not yet fully vetted. Staff recognizes that significant capacity contribution factor changes can have a large impact on avoided cost calculations. However, the results of a study with nine key refinements, based in large part on an updated LOLP study, cannot be considered to be a limited, transparent input.

Comments on Filings
The Renewable Energy Coalition, Community Renewable Energy Association and Northwest and Intermountain Power Producers Coalition (QF representatives) submitted comments on the utilities' filings on March 26, 2019. QF representatives urge the Commission to reject the three utilities' filings arguing that the circumstances do not support the Commission's ordered update to the utilities' avoided cost prices. The QF representatives note that the State has a policy of increasing "the marketability of electric energy produced by qualifying facilities located throughout the state for the benefit of Oregon's citizens" and creating "a settled and uniform institutional climate for the qualifying facilities in Oregon."[17] The QF representatives note the Commission has furthered this policy by implementing a process of regularly scheduled avoided cost updates and retaining the authority to change avoided cost prices outside of these scheduled updates to reflect a significant change in circumstances.[18] The QF

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[15] PacifiCorp 2019 IRP Public Input Meeting, September 27-28, 2018, slides 87-91, http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2019_IRP/PacifiCorp_2019_IRP_September_27-28_2018_Public_Input_Meeting.pdf
[16] PacifiCorp Interim Adjustments to Standard Avoided Cost Pricing compliance filing, March 12, 2019, p. 5.
[17] CREA, REC and NIPPC Comments, p. 1.
[18] Id., pp. 1-2.

representatives assert that no significant change in circumstances warrants the out-of-cycle avoided cost price updates contemplated by the OPUC.

The QF representatives also urge the Commission to reject PacifiCorp's proposal to include changes to avoided cost prices in addition to those directed by the Commission.[19]

Conclusion

Staff has reviewed the three utility avoided cost updates filed March 12, 2019, and finds no issues with PGE's or Idaho Power's compliance. Staff also concludes that PacifiCorp's "Staff Proposed" version complies with Order No. 19-074.

Staff has considered PacifiCorp's comments and proposed enhancements, and continues to support only the inclusion of the limited, transparent input elements it has proposed in these avoided cost updates. The additional updates proposed by PacifiCorp were previously considered by the Commission but not adopted. Staff sees no reason to re-visit the Commission's decision now. Similarly, the QF representatives previously argued against the Commission order directing the compliance filings on the ground the relief contemplated by the Commission is inconsistent with the Commission's previous actions implementing PURPA. Staff sees no reason for the Commission to change its mind about these arguments.

Finally, given PacifiCorp's inclusion of updated inflation assumptions that are not sourced from an acknowledged IRP, Staff believes that the components of the annual avoided cost update required by Order No. 14-058 should be clarified by the Commission.

Staff includes a summary of avoided costs as Attachment A.

[19] Id., p. 2.

PROPOSED COMMISSION MOTION:

Approve the avoided costs filed by PacifiCorp, Portland General Electric (PGE) and Idaho Power on March 12, 2019, effective April 24, 2019:

Idaho Power's as filed;
PGE's as filed; and,
PacifiCorp's as filed in the "Staff Proposal" version of Schedule 37.

Clarify that changes to inflation rates or any other financial inputs are not included in the May 1 annual avoided cost updates directed by Order No. 14-058.

Reg 3 UM 2001 Avoided Cost Updates

Avoided Cost Prices

UM 2001
March 16, 2019

		Nonrenewable			Renewable		
		Current	Staff-proposed method	Difference	Current	Staff-proposed method	Difference
PacifiCorp	Baseload	$ 37	$ 40	9%	$ 41	$ 32	-22%
	Wind	$ 34	$ 38	10%	$ 29	$ 20	-31%
	Solar	$ 42	$ 46	10%	$ 52	$ 43	-17%
PGE	Baseload	$ 47	$ 38	-19%	$ 61	$ 58	-6%
	Wind	$ 36	$ 29	-21%	$ 54	$ 51	-6%
	Solar	$ 40	$ 30	-24%	$ 58	$ 54	-7%
Idaho Power	Baseload	$ 38	$ 39	5%	n/a		
	Wind	$ 11	$ 12	14%			
	Solar	$ 43	$ 46	7%			

Notes:

- PGE includes avoided transmission, PacifiCorp and Idaho Power do not.
- Market prices are 9% higher than in 2018 filings, increasing PacifiCorp nonrenewable more than renewable prices due to the longer nonrenewable sufficiency period.
- "Baseload" resources include hydro, geothermal, biogas, biomass, etc.