BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 323

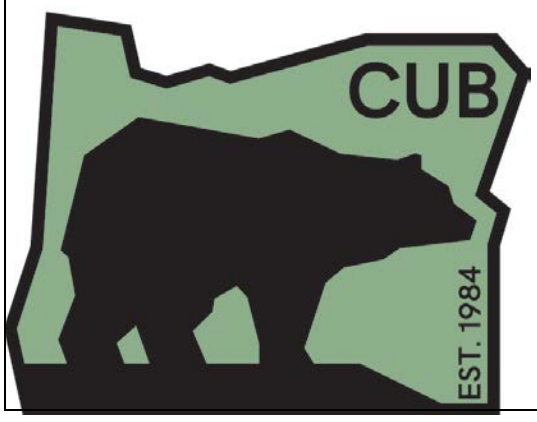
In the Matter of	)
	)
PACIFICORP, dba PACIFIC POWER,	)
	)
2018 Transition Adjustment Mechanism (TAM).	)
	)
	)

REBUTTAL TESTIMONY

OF THE

OREGON CITIZENS' UTILITY BOARD

August 2, 2017



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I. INTRODUCTION

My name is Bob Jenks. My qualifications were provided as CUB Exhibit 101.

In this testimony, the Oregon Citizens' Utility Board ("CUB") responds to PacifiCorp's ("the Company") claims that it has under recovered PURPA Qualifying Facility ("QF") contract costs, and presents evidence showing that the Company has historically over recovered QF costs, is continuing to over recover QF costs, and will likely continue until an adjustment is made to account for the fact that the Company is unable to accurately forecast the Commercial Operation Date ("COD") of QFs.

In addition, CUB identifies where the Company misrepresented CUB's position on the DART mechanism and corrects the record accordingly.

Finally, we note that the Company accepted two of CUB's recommendations in its Reply Testimony. First, the Company accepted CUB's disallowance of costs associated with the SCRs installed at Bridger Units 3 and 4 – those SCRs were not

acknowledged in an IRP and were never found to be prudent in a general rate case. Second, the Company accepted CUB's recommendation to remove years where there is a PCAM price adjustment from the DART mechanism.

II. FORECASTING QF COMMERIAL OPERATION DATES

CUB discussed this issue in its Opening Testimony and cited last year's TAM order, which stated that the Commission "will further consider this issue when additional data is available to evaluate PacifiCorp's use of the attestation method,"[1] and demonstrated that the attestation method was not successful in its forecast of QFs in the 2017 TAM. CUB called for establishing a process similar to the way in which power plants are derated using a Forced Outage Rate, and called this a Contract Delay Rate ("CDR"). The Company's Reply Testimony criticized CUB's proposal for a variety of reasons, and it failed to provide data that would help evaluate the attestation method. In this section, CUB will respond to the Company's criticisms of our proposal. We will also provide additional data that directly responds to the Commission's request for data, which can be used to evaluate the attestation method.

A. *The Company's Criticism of CUB's QF Proposal*

The Company makes a number of arguments:

1. *Its Modeling of QF Contacts is Consistent with Previous TAM's and with the Current TAM Guidelines[2] (The Attestation Method)*

The Company points out that it is operating consistent with the agreement in UE 287, and that the Commission "affirmed" this approach in its 2017 TAM Order.[3] However,

[1] *In the Matter of PACIFICORP, dba PACIFIC POWER, 2017 Transition Adjustment Mechanism*, OPUC Docket No. UE 307, Order No. 16-482 at 18 (Dec. 20, 2016).
[2] UE 323 - PAC/400/Wilding/37.
[3] *Id.* at 37 - 38.

this ignores how the attestation method agreed upon in UE 287 does not come close to accurately forecasting the COD of *new* QFs. Additionally, trends demonstrate that the Company is forecasting new QF CODs in an increasingly inaccurate manner. CUB and Oregon Public Utility Commission Staff ("Staff"), who both agreed to the UE 287 methodology, both agree that this needs to change.[4] Just as important, the Company's claim that the Commission "affirmed" this approach, without recognizing the Commission's call for further evaluation when "additional data is available to evaluate PacifiCorp's use of the attestation method," is misleading.

2. *The Company Historically Has Under-Forecast the Volume of QFs*

The Company criticizes Staff and CUB for focusing on new QFs, and it claims CUB and Staff are ignoring undisputed evidence that QF volumes are underforecast. This is not true. QF volumes have historically been overforecast.

Here is PacifiCorp's erroneous claim:

> "Neither party, however, has challenged the company's overall QF modeling or the undisputed evidence that the company has historically under-forecast QF generation. Staff and CUB instead unreasonably cherry-pick one component of QF costs without regard for the overall accuracy of the company's approach."[5]

CUB believes these are two separate issues that should not be conflated: (1) the methodology to forecast the output of an existing QF; and (2) the methodology to forecast the COD of a new QF. Because the first may be difficult to accurately forecast, we should not ignore evidence that the current methodology for the latter is not working. Notwithstanding this distinction, CUB ***does dispute*** the claim that the Company has

[4] UE 323 - Staff/300/ Anderson/7; UE 323 - CUB/100/Jenks/6-10.
[5] UE 323 - PAC/400/Wilding/3.

historically under forecast QF generation. This Company's claim that this is undisputed is not true.

The Company includes a table showing the difference between the forecasted volume of QFs and the actual volume of QF generation since 2008.[6] Combining this information with the updated data from CUB Confidential Exhibit 201 demonstrates the Company has actually historically over forecast QF generation -- the exact opposite of what the Company claims is undisputed.[7]

CUB Table 1: Historic QF Volumes[8]

Year	Forecast QF Volume in MWh	Actual QF Volume	Difference
2008	2,395,995	2,959,861	(563,866)
2009	3,221,069	2,979,815	241,254
2010	2,861,965	2,678,393	183,572
2011	2,724,235	2,683,387	40,848
2012	1,912,866	2,227,854	(314,988)
2013	2,438,691	2,341,269	97,422
2014	2,435,389	2,564,988	(129,599)
2015	2,476,266	2,306,533	169,733
2016	3,691,500	3,513,084	178,416
2017	[redacted]	[redacted]	[redacted]
Total			[redacted]

[6] UE 323 - PAC/400/Wilding/39, Figure 9.
[7] CUB Exhibit 201.
[8] 2008-2016 is from UE 323 - PAC/400/Wilding/39, Figure 9. The 2017 data represents January through May and is from CUB Confidential Exhibit 201.

Last year's UE 307 Commission Order asked for more data to evaluate the attestation methodology, which grew out of Docket UE 287.[9] The UE 287 Commission Order describes the methodology:

> To address ICNU's concern that certain QF contracts are included in the TAM that will not achieve commercial operation during the rate effective period, the settlement provides for an attestation by PacifiCorp. As part of its November indicative update in this, and future TAM proceedings, PacifiCorp will confirm that it has a commercially reasonable good faith belief that new QFs included in the TAM will reach commercial operation during the rate effective period.[10]

UE 287, which established the attestation method, was the 2015 TAM. In the table above, 2015, 2016 and 2017 represent the data associated with the attestation method. Those years consistently show the Company over forecasting QF generation by a larger amount each year. By this metric, the problem is getting worse.

3. *The Focus Should Not Be on the Number of Contracts That Are Delayed but Should Be on the "accuracy of the overall QF forecast."*[11]

The Company dismisses the issue of COD, arguing instead the focus should be on the "accuracy of the overall QF forecast."

Again, notwithstanding CUB's belief these are two distinct and separate issues, the data underlying the QFs shows that ignoring the COD forecast and instead focusing on the accuracy of the overall QF forecast, as the Company prefers, still demonstrates the Company is overcharging customers for QF costs.

CUB Confidential Exhibit 202 shows since 2008, the Company's QF costs forecasts have been greater than its actual cost by more than [redacted].[12] If the standard the Company wants to use is the accuracy of the Company's forecasts, then the data shows that the Company has over forecast QF costs.

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[9] OPUC Order No. 16-482, at 18.
[10] *In the Matters of PACIFICORP, dba PACIFIC POWER, 2015 Transition Adjustment Mechanism*, OPUC Docket No. 287, Order No 14-331, at 5 (Oct. 1, 2014).
[11] UE 323 - PAC/400/Wilding/39.
[12] CUB CONF Exhibit 202.

But again, our focus is evaluating the attestation method, so we are concerned with the data related to 2015, 2016 and 2017.

	2015	**2016**	**2017 (through May)**
Forecast QF Cost	[redacted]	[redacted]	[redacted]
Actual QF Cost	[redacted]	[redacted]	[redacted]
Over-Forecast	[redacted]	[redacted]	[redacted]

With the 2017 results representing less than half a year, this shows a consistent overestimate of more than [redacted]

Last year's TAM order called for more data, in order to evaluate the accuracy of the attestation methodology. The Company argues that parties should look at the overall accuracy of the QF forecast, instead of simply looking at the COD. But when we evaluate the accuracy of the attestation method using the Company's preferred approach, it shows customers are [redacted].

4. *Because the Company under-Forecasted Net Power Costs ("NPC"), It Is Unfair to Point Out That It Is Overcharging Customers for QFs*

According to the Company:

Do you agree with CUB's statement that customers are being significantly overcharged for QFs?

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> A. No. On an overall basis, PacifiCorp's NPC forecasts have consistently understated NPC—meaning that customers, in total, have consistently paid less than the actual cost of service. CUB cannot simply point to one line item and suggest customers are being overcharged when rates are based on total NPC. As noted above, the forecast 2016 NPC was reasonable when compared to actual 2016 NPC; however, this does not mean that every line item in NPC was forecast with 100 percent accuracy.[13]

CUB finds this to be an amazing statement. The Company asserts because the overall Net Power Cost (TAM) forecasts have understated power costs, CUB is precluded from arguing that one element of power costs is actually overcharging customers. This statement ignores the DART, which was supposed to take care of the underforecast of NPC. This statement also ignores how in 2016, the Company actually over forecast the NPC elements in the TAM.

CUB acknowledges the Company has historically under recovered its NPC. The Company has cited this the last two years in support of its DART mechanism. Now it is claiming that we should ignore the overforecasting of QF costs, because of this historic underrecovery. At the same time, the Company argues the modeling changes made in the 2016 TAM substantially improved the accuracy of the TAM.[14] If we fixed the historic underrecovery problem in 2016, then why is this being cited in the 2018 TAM as a reason *not* to improve the accuracy of the QF forecast?

This argument is also troubling because the Company is aware the 2016 TAM forecast significantly over forecast net ***variable*** power costs. The 2016 actual results suggest the changes in the 2016 TAM may well have been a significant overcorrection. CUB understands the Company included in its actual 2016 power costs the one-time

[13] UE 323 - PAC/400/Wilding/41.
[14] UE 323 - PAC/400/Wilding/43.

write-off of a capital addition at the Bridger coal mine. This write-off was not included in the forecast.

In a Wyoming power cost filing, the Company identifies the reason for a 2016 increase in actual Bridger fuel costs:

> BCC costs increased by approximately $31.3 million due to the following reasons: 1) lower British thermal unit ("Btu") content of coal, $2.8 million; 2) spreading costs over the reduced volume of tons produced, $8.4 million; 3) abandonment cost of the Joy Longwall, $12.5 million; and 4) costs of the Joy Longwall recovery efforts, $7.6 million.[15]

This was further explained:

> During mining operations at the end of December 2015, a section of panels in the Joy Longwall became stuck in soft claystone material due to difficult geological conditions. Significant efforts were made by BCC to return the Joy Longwall to operations in 2016; however, due to unsafe working conditions, the Joy Longwall was ultimately abandoned. Included in the 2017 ECAM is the Company's portion of the Joy Longwall recovery and abandonment costs. The recovery costs are the expenses incurred in the effort to return the Joy Longwall to operations. The abandonment costs include the net book value (cost of the asset less accumulated depreciation) of the lost asset, longwall related construction work in process ("CWIP"), materials and supply ("M&S"), inventory items, and deferred longwall costs[16].

The Joy Longwall was purchased by the Bridger Coal Company as part of the Deer Creek Mine Closure in 2015:

> At the Deer Creek mine, located in Emery County, Utah, coal is extracted using a longwall system purchased from Joy and placed into service in August 1998. The mining height of the Joy Longwall results in a cutting thickness of seven to ten feet. PacifiCorp has announced, and has received approval of, the closure of the Deer Creek mine in 2015, making available for use at BCC a longwall mining system with a cutting height that better matches the coal seam thickness at BCC. The Joy Longwall meets BCC's operating requirements with the ability to operate more efficiently,

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[15] *In the Matter of the Application of Rocky Mountain Power for Authority to Decrease Current Rates by $15.7 Million to Refund Deferred Net Power Costs Under Tariff Schedule 95 Energy Cost Adjustment Mechanism and to Decrease Current Rates by $528 Thousand Under Tariff Schedule 93, REC And SO2 Revenue Adjustment Mechanism,Wyoming PSC,* Docket No. 20000-514-EA-17, Direct Testimony of Michael G. Wilding at 15.

[16] *Id.* at 16.

> bypassing waste material and reducing ash content of the coal. Thus, BCC has entered into a Sale and Purchase Agreement ("Agreement") with PacifiCorp, included as Attachment A to this Application, for the purchase and delivery of the Joy longwall mining system to the underground BCC mine.
>
> If the transaction is approved, BCC will use the Joy Longwall in the underground areas that have the higher potential of lower coal seam height. The DBT longwall will be retained at BCC to be used in other districts of the mine. If the DBT longwall were to continue operations in the western district, a refurbishment of the mining system with a projected capital cost of $22 million would be required prior to reaching the end of the eastern district of the underground mine. To maximize life cycles of the longwall equipment, BCC plans to use the Joy Longwall beginning in August 2015 to complete the remaining western district of the mine, the underground areas experiencing the lowest coal seam height. The Joy Longwall will continue operations through the first eastern district, with an anticipated completion in December 2019. At this time, the DBT longwall is expected to complete the remaining five eastern district panels of the mine, panels that better match the operating parameters of the DBT longwall. Less coal will be produced by the Joy Longwall; however, due to its lower ash content it will have the same total BTUs delivered to the Jim Bridger plant, resulting in a lower cost per MMBTU as compared to the DBT longwall for this area of the underground mine. Alternatives including increasing third-party coal or increasing the mine coal stockpile size proved more expensive. The installation of the Joy Longwall at BCC with its ability to cut a lower height coal face to minimize ash content is critical to the mine's intensive effort to reduce ash.[17]

After the Deer Creek mine closed, Bridger Coal Company, a joint venture of Idaho Energy Resources (Idaho Power affiliate) and Pacific Minerals (PacifiCorp affiliate) purchased the Joy Longwall from the Company, with the expectation it would be used at the Bridger mine beginning in August, 2015. Within a few months, the Joy Longwall became stuck and was ultimately abandoned at a cost of approximately $20 million: $12.5 abandonment costs and $7.6 million cost of recovery efforts. These costs

[17] *In the Matter of the Application of Idaho Power Company for an Order Authorizing 5 Approval of the Purchase from PacifiCorp of a Longwall Mining System*, OPUC Docket No. UP 327, Idaho Power Application to Purchase Property, at 2-3,http://edocs.puc.state.or.us/efdocs/HAA/up327haa16512.pdf.

are not truly variable power costs – they do not increase or decrease with changes in loads.

Whether adding this one-time, non-variable cost to net power costs is reasonable is an issue for the 2016 PCAM. Additional issues worthy of investigation in the 2016 PCAM are prudency issues around the operation of the Joy Longwall, as well as issues related to the affiliate transfers of property. However, examining net power costs is relevant to *this* TAM, because the Company continues to claim that it historically under recovers its power costs. Changes were made to the 2016 TAM to reduce or eliminate this underrecovery. If the Joy Longwall did not become stuck or abandoned, thus not expensed to net power costs, the results of the 2016 TAM would have shown over recovery of net power costs by millions of dollars. This scenario runs directly *counter* to the Company's assertions of underrecovery.

2016 was the first year the DART mechanism was supposed to correct for this historic underrecovery. While a single year may be too small of a sample size to declare the DART mechanism over corrected the power cost underrecovery, CUB believes it undercuts the Company's attempt to use the historic underrecovery as a reason not to fix the QF forecast error.

B. *Data Clearly Shows That the Attestation Method Is Failing*

The Company objects to CUB's proposal to adjust QF online dates based on historic evidence:

> PacifiCorp objects to the proposed CDR. CUB has not presented any analysis that its proposal will result in a more accurate forecast of overall QF generation and costs.[18]

CUB has attempted to address the Company's focus on overall QF generation and cost above, and not focus on the overall forecast of QF generation and costs. The Company's response to CUB's Opening Testimony failed to address the central question identified by the Commission: the accuracy of attestation method. CUB offered evidence the attestation method was not working in our Opening Testimony. Additional information is now available.

CUB Exhibit 201 shows that for [redacted] out of the last [redacted] months, the Company has over forecast the cost of QFs, including every single month since the Commission's Order, stating that additional data would be reviewed when it is available. Below are the MWh and dollars associated with the QF contracts that were forecasted to deliver power in 2017, but which were delayed. These projects had attestations to support their projected online dates, but the delays were not captured by the attestation methodology. So far in 2017 alone, customers have been charged [redacted] for QFs forecasted to deliver power but which ultimately did not deliver power.[19]

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[18] UE 323 - PAC/400/Wilding/40.
[19] CUB Exhibit 201.

Month	MWh from QFs in Forecast but Not Delivering Power	Cost of QFs in Forecast but Not Delivering power
January	[redacted]	[redacted]
February	[redacted]	[redacted]
March	[redacted]	[redacted]
April	[redacted]	[redacted]
May	[redacted]	[redacted]
Total	[redacted]	[redacted]

These dollars are associated with contracts the Company attested would have earlier on-line dates. The above table represents the customer cost, due to the inaccuracy of the attestation method for the first five months of the year.

C. *Fixing the QF Forecast Error*

In Opening Testimony, CUB proposed a method to "derate" the contracts. CUB proposed the Company be required to calculate a rolling three year QF CDR, which it would apply to all new QFs. This CDR would represent the average number of days new QFs have been delayed in the most recent three year period.

Staff proposed a similar adjustment, but it was based on a single year forecast. Staff proposed that an 80-day delay should be applied to each contract.[20]

PacifiCorp offers two criticism of CUB and Staff's approach. First, PacifiCorp argues the CDR should be weighed for the size of each project. Second, they argue the calculation of the rate should be limited to delays that fall within the TAM forecast.

[20] UE 323 - Staff/300/Anderson/7. Staff testimony identified the 80-day delay as confidential, however, PacfiCorp's Reply testimony does not mark this as confidential.

1. Weighting by Size

The Company proposed the calculation of the average number of delayed days be weighted by the size of a QF:

> The average delayed days weighted by QFs' nameplate capacity is about 57 days, which is much smaller than the unweighted delayed days, or the "80-days delay" claimed by the Staff.[21]

However, similar to Staff's adjustment, this is based on a single year forecast, rather than CUB's proposed methodology, which includes three years and is on-going. More importantly, beyond showing this produces a smaller number, the Company offers no evidence to show it produces a better forecast.

2. *Only Counting Delays Included in the Forecast Year*

According to the Company:

> **Did PacifiCorp make any other refinements when calculating the average QF delay?**
>
> A. Yes. In calculating the delay rate, the number of days delayed was limited to the number of days that the QF would have been in rates had it not been delayed. For example, if, in the 2016 TAM, a QF was expected to be online on December 31, 2016, but its actual online date was February 1, 2017, then the QF was delayed one day because it was only erroneously included in rates for one day. In this example the 2017 TAM would include the correct online date. In other words, the QF would only be in rates when not actually operating for one day.[22]

CUB disagrees with the Company's adjustment of this calculation. The issue of delayed QFs, with only part of that delay contained within the TAM forecast, is real. However, this should be taken into account when the CDR is applied to the contract, not when the delay rate is calculated.

[21] UE 323 - PAC/400/Wilding/40.
[22] UE 323 - PAC/400/Wilding/40.

Consider the Company's example above. In the 2016 TAM, there was a QF that was forecast to come on line on December 31, 2016, but in fact it came on line on February 1, 2017. Under the Company's methodology, calculation of the Contract Delay Rate would only include a single day, even though this contract was delayed by more than a month. This makes little sense. The purpose of the CDR is to identify *on average* how much later contracts come online than they were forecasted. This particular contract came online more than a month late. However, the fact this contract is only included in the forecast for a single day is taken into effect when the CDR is applied. Let's assume on average, over the last three years, contracts have been delayed by thirty-two days. When the CDR is applied to a contract that is scheduled to come online December 31 of the TAM year, the thirty-two day adjustment would move the online date to February 1 of the following year. But since only December 31 is included in the TAM year, the impact of that application is a single day of output from that contract is removed from the TAM. The fact the contract is only included in the TAM forecast for a single day is taken care of by the manner in which the CDR is applied.

The Company's example included a contract coming on line at the end of the TAM year. However, there are also contracts that come online after the final TAM indicative filing, but before the start of the TAM year. In CUB's Opening Testimony, we discussed several of these contracts. If a contract was scheduled to come online on November 15, but it came online on January 15 of the TAM year, the Company's methodology would only have 15 days included in calculating the rate. If that was the only contract in the 3-year average, the result would be a contract delay rate of 15 days, which, when applied to the contract, would move it from November 15 to December 1.

Customers would still be charged for the contract from January 1 to January 15. If the CDR is based on the actual delay (61 days), and this is applied to the contract, it would move the contract from November 15 to January 15. The result is customers would not be charged for this contract from January 1 to January 15, reflecting the actual operation of the contract.

The purpose of the CDR is to more accurately reflect when a contract will go online. This should reflect the actual delays, regardless of whether some of the delay falls outside of the TAM year. When the CDR is applied to a new QF, the rate impact only affects the part of the QF that is contained in the TAM year.

CUB's proposal for a CDR:

Step 1: Using a 3 year rolling average to produce a CDR. In this case, the rolling average would include 2014, 2015 and 2016 final TAM forecasts. Within that forecast, all QFs with a Commercial Operation Date past the final TAM forecast are identified – essentially a 14-month period from the final forecast to the end of the TAM year. Compare the forecast COD to actual COD for all projects – some will come online before their expected COD, some will come online on the expected COD and some will be after their expected COD. Then, use the 3 years of data to identify the average delay in number of days for all projects, which is used as the CDR.

Step 2: Apply this to the TAM forecast. This CDR will be applied to all QFs in the current TAM forecast, which have a COD between the final update and December 31, 2018. The effect of the CDR is to move the forecasted COD. If, for example, the three year average says QFs have been delayed an average of 91 days, then all QFs with a COD after the final update will be assumed to have a 91 day delay in operation. These

contracts will be placed into GRID with this 91 day delay, and GRID will dispatch other resources or market purchases to make up for the lost generation. (Note: CUB is not suggesting the delay should be 91 days, but we are simply using this as an example.)

CUB believes this ongoing adjustment will improve the accuracy of the forecast of the COD of QF contracts. In doing so, the forecast of QF volumes and QF costs will improve.

III. THE COMPANY MISREPRESENTS CUB'S POSITION ON THE DART

According to the Company:

> Despite Commission approval of the DA/RT adjustment in the 2016 and 2017 TAMs, and despite the undisputed evidence that the NPC forecast with the adjustment is more accurate than without, Staff, CUB, and ICNU have once again asked the Commission to reject the adjustment.[23]

According to CUB's Opening Testimony:

> In previous TAMs, CUB has asked the Commission to reject the DART adjustment. While CUB will not be making the same recommendation in this proceeding, our concerns regarding the adjustment remain.[24]

CUB's testimony clearly states that we are not asking the Commission to reject the DART adjustment.

IV. CONCLUSION

The evidence is clear the attestation method does not accurately reflect the Commercial Operation Date for new QFs, and this is leading the Company to over forecast both the cost of QF's and the volume of QFs. While CUB is not recommending additional changes to the DART mechanism, CUB does believe that a change to the current attestation methodology for determining the COD of QF is necessary to protect

[23] UE 323 - PAC/400/Wilding/11.
[24] UE 323 – CUB/100/Jenks/12.

customers. CUB invites the Commission to order the Company to implement CUB's proposed CDR mechanism, the best correction to this problem.

UE 323 – CERTIFICATE OF SERVICE

I hereby certify that, on this 2nd day of August, 2017, I served the foregoing **CUB Confidential Rebuttal Testimony & Exhibits** in docket UE 323 upon the Commission and each party designated to receive confidential information pursuant to Order 16-128 by U.S. mail, postage prepaid.

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