ENERGY BALANCING ACCOUNT AUDIT FOR ROCKY MOUNTAIN POWER FOR CALENDAR YEAR 2018 (DOCKET NO. 19-035-01)

PUBLIC EXECUTIVE SUMMARY

PREPARED FOR

Division of Public Utilities

State of Utah

PREPARED BY

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I. EXECUTIVE SUMMARY

In its Corrected Report and Order in Docket No. 09-035-15 issued March 3, 2011 ("EBA Order"), the Public Service Commission of Utah ("Commission") approved the implementation of the Energy Balancing Account ("EBA") to recover the differences between Rocky Mountain Power ("RMP"), a business unit of PacifiCorp ("PacifiCorp" or the "Company") actual EBA costs and approved forecasted ("Base") EBA costs established in the general rate case ("GRC") or cases establishing rates during the EBA deferral period. The Commission found in its Order that an EBA mechanism as modified by the Commission was in the public interest and would result in rates that were just and reasonable.

On March 15, 2019 RMP filed a request to recover $23.9 million in deferred EBA costs incurred during the 12-month Deferral Period from January 1, 2018 through December 31, 2018.[1] RMP's request represents seven components, including three credits and four costs. The request is summarized in Table 1 of the direct testimony of Michael Wilding, which is reproduced in Figure ES-1 below. The credits include $2.9 million for savings related to the Retiree Medical Obligation, $4.8 million for sales to a special contract customer, and $0.2 million for the Commission-ordered adjustment of the EBA for deferral year 2017 (Docket No. 18-035-01). The cost components in the application include $22.9 million in EBA costs, $0.4 million adjustment for Utah situs resources, $7.6 million in Deer Creek mine amortization expense, and $1.0 million in interest accrued through April 30, 2019. All components represent Utah-allocated amounts, and there is no sharing band.

[1] Docket No. 19-035-01, Application to Increase the Deferred EBA Rate Through the Energy Balancing Account Mechanism.

Calendar Year 2018 EBA Deferral			Exhibit RMP___(MGW-1) Reference
Actual EBA ($/MWh)	$	26.20	*Line 5*
Base EBA ($/MWh)		25.25	*Line 10*
$/MWh Differential	**$**	**0.95**	
Utah Sales (MWh)		24,719,693	*Line 4*
EBA Deferrable*	$	22,854,942	*Line 12*
Incremental Non-Fuel FAS 106 Savings*		(2,921,597)	*Line 13*
Special Contract Customer Adjustment*		(4,845,293)	*Line 16*
Utah Situs Resource Adjustment*		362,506	*Line 17*
Total Deferrable	$	15,450,557	*Line 18*
2018 EBA Order	$	(218,375)	*Line 22*
Deer Creek Amortization Costs		7,635,599	*Line 25*
Interest Accrued through December 31, 2018		537,935	*Line 23*
Interest Jan. 1, 2019 through April 30, 2019		471,637	*Line 26*
Requested EBA Recovery	**$**	**23,877,352**	*Line 27*

** Calculated monthly*

Figure I(ES)-1: Summary of Calendar Year 2018 EBA Deferral Calculation[2]

Daymark Energy Advisors ("Daymark") was retained by the Division of Public Utilities ("Division" or "DPU") to assist in reviewing RMP's application to increase the deferred EBA rate through the EBA mechanism in Docket No. 19-035-01. The scope of our assignment was to ascertain whether the actual costs included in the EBA filing were incurred pursuant to an in-place policy or plan, were prudent and were in the public interest. This report presents the results of and the conclusions from that review. This review was similar to reviews that we performed for the Company's application to approve rate changes to recover (or refund) deferred EBA costs incurred at the end of 2011 presented in Docket No. 12-035-67, calendar year 2012 presented in Docket No. 13-035-32, calendar year 2013 presented in Docket No. 14-035-31, calendar year 2014 presented in Docket No. 15-035-03, calendar year 2015 presented in Docket No. 16-035-01, calendar year 2016 presented in Docket No. 17-035-01, and calendar year 2017 presented in Docket No. 18-035-01.

This executive summary does not contain any confidential information. The remainder of this report does contain significant amounts of confidential information provided by RMP, and it explains the basis for our conclusions. The full report can be provided to

[2] Docket No. 19-035-01, Direct Testimony of Michael G. Wilding, Table 1 at line 57.

parties that have signed the appropriate non-disclosure agreements for receiving material deemed to be confidential by RMP.

The Division is conducting a parallel review and analysis of the EBA deferral filing. Division Staff will be issuing its own report summarizing the results of their review. This report summarizes only the results of Daymark's review and analysis. Thus, the result contained in this report should be considered as complementing the work done by Division Staff.

Actual vs. Base NPC

The NPC category with the largest variance between Base and Actual values is wholesale sales revenue ($153 million increase). Purchased power expense in Actual NPC exceeded Base NPC by $84 million, resulting in a $237 million variance for wholesale sales and power purchases combined. Daymark's assignment included reviewing this specific variance to understand the underlying drivers of the difference and to ensure that differences can be explained reasonably. We do not consider forecast "accuracy" to be a material issue in this review (particularly given the wide temporal mismatch between the 2014-15 test period and the 2018 deferral period), but rather focus on the drivers of difference that are within PacifiCorp's control.

The general decrease in wholesale sales for resale coupled with lower average sales prices resulted in increased Actual NPC. Higher purchases also drove an increase in Actual NPC over Base NPC, without any mitigation from lower average purchase prices. The variance from Base NPC is generally consistent with and explainable by market condition changes (notably the change in relative economics between coal-fired and natural gas-fired generation) between the Base NPC forecast for the 2014-15 test period and actual conditions during the 2018 deferral period, as well as changes in long-term contracts in effect for the respective periods.

Outages

One task was to review and assess actual plant outages to ensure that these outages and their cost impact on the EBA charge is appropriate. We examined the information provided in filing requirements and conducted additional discovery.

We performed a detailed review of the thermal, wind and hydro outage data as provided in the EBA filing and with the supporting documentation provided by RMP. Further documentation was sought for a select number of outages that were chosen based on the narrative description provided. While the information provided in the EBA Filing for the thermal and hydro outages was sufficient, the wind and outage documents provided little information on the root cause of the outages. After reviewing the filing requirements and data request responses provided, we found no reason to adjust the EBA costs because of the hydro and wind outages. However, further review of the following specific thermal outages was performed.

Our review of forced, maintenance, and extended planned outages of at least 72-hour duration at PacifiCorp's thermal plants during the EBA deferral period yielded 14 outages that warranted further investigation to determine whether or not there were any unnecessary increases to Company-wide NPC. Of these 14 outages that warranted additional scrutiny, three outages demonstrated sufficient imprudence that we recommend reducing EBA costs to reflect replacement power costs related to the outages.

A troubling trend developed during the discovery phase of Daymark's investigation into the root causes of these outage events. RMP on multiple occasions revised information that had been previously filed on the record because of inaccuracies driven by improper maintenance recording or lack of knowledge on the part of authors. This raises potentially serious diligence concerns. It is incumbent on RMP to make every effort to make certain the information filed at the outset is accurate and that the individuals charged with writing incident reports are knowledgeable of the facts of the situation. This apparent lack of scrutiny leads to wasted efforts and incurred costs chasing information to determine its accuracy. Two outages that were initially causes for a disallowance were subsequently reversed based on revised information. This serves to demonstrate the concern.

In the case of outages caused by avoidable mistakes or oversight by the Company or its third party vendors, we recommend the adjustment of EBA costs based on the incremental market power costs during the outage period relative to generation costs if the unit had been operating normally. Estimation of replacement power costs is necessarily imprecise because it is impossible to know with certainty the PacifiCorp dispatch, bilateral transactions and market outcomes in the counterfactual scenario with the subject unit online. Our methodology relies on available market data or proxy data, actual Company costs and reasonable assumptions to construct counterfactual scenarios.

Outage	Start Month	Est. Lost MWh	Recommended EBAC Adjustment*
Outage A	Apr	116,150	$1,118,765
Outage B	Aug	8,083	$326,701
Outage C	Dec	1,292	$19,819
TOTAL		**125,525**	**$1,465,285**

**Company-wide NPC*

Figure I(ES)-2. Summary of outage-related EBA adjustment recommendations.

The table above summarizes our recommendations with respect to EBA adjustments on a Company-wide NPC basis. The Division's separate report and testimony calculates the impact of our recommended adjustments on RMP's requested EBA recovery amount. On a Utah-allocated basis these adjustments result in a reduction of $681,889 to RMP's requested recovery of deferred EBAC.

Natural Gas and Power Transactions

Daymark also evaluated a sample of trading transactions for accuracy, completeness and prudence. Between 2013 and 2018, PacifiCorp engaged in many thousands of transactions on a system-wide basis for natural gas and electricity that settled in the 2018 EBA deferral period. The costs or proceeds of these transactions flow through into net power costs. The transactions fall into three broad categories: hedging, system balancing and other. Transactions are also classified as either physical or financial depending on whether physical delivery is involved.

We developed a sample of 48 broadly-representative transactions (including 29 transactions related to the Company's hedging program) and accounting entry groupings and conducted extensive discovery on these transactions. The sample included 12 gas financial, 12 gas physical, and 24 power physical transactions. Sample transactions were targeted for selection based on characteristics identified in the trade capture data provided in response to Filing Requirement 6(b), either to facilitate investigation of specific issues or questions or to ensure a broadly representative sample. We built on knowledge gained from similar review in previous EBA cases.

On September 10, 2019, Division and Daymark representatives visited PacifiCorp's headquarters in Portland, Oregon to observe hedging and system balancing operations, and to meet with traders and other energy supply management personnel. The visit provided first-hand information on the Company's processes for securing natural gas and power to balance its system while managing costs and risks to customers.

For the sample transactions, we submitted detailed data requests for initial data, as well as several targeted follow-up sets. The data requests sought information that would shed light on why the transactions were done, how the terms of each deal fit in with the Company's market view at the time and whether each deal conformed to risk management and corporate governance policies.

Based on our review of the sample transactions and the supporting information provided to us, we find no reason at this time to adjust energy balancing account or net power costs for sample transactions reviewed.

Energy Imbalance Market Participation

We were asked to review the impact of PacifiCorp's fourth full calendar year of participation in the California Independent System Operator's ("CAISO") Energy Imbalance Market ("EIM"). PacifiCorp's participation in EIM impacts actual NPC in several ways, both directly and indirectly. First, there are direct costs and revenues associated with EIM transactions administered through the CAISO settlement system. As a result of trading energy imbalance through the EIM, the Company's own generation dispatch changes relative to what would have occurred absent the market, impacting fuel and purchased power cost indirectly. These impacts are not precisely quantifiable because they involve comparison to a counterfactual. Estimation of these impacts is necessary to determine if participation in EIM on balance reduces NPC.

RMP has offered testimony that, "participation in the EIM provides benefits to customers in the form of reduced Actual NPC."[3] The two main sources relied upon for this conclusion are PacifiCorp's own analysis showing $57.0 million in inter-regional benefits in the deferral period,[4] and CAISO's published EIM Benefits Report estimating a wider subset of benefits attributable to PacifiCorp of $61.7 million.[5] We reviewed the two studies to verify that customers benefit from the Company's participation in the EIM.

Based on our high-level review of public reports produced by CAISO supporting its benefits estimates we have found no reason to challenge CAISO's methodology or its

[3] Direct Testimony of Michael G. Wilding, Page 16, Line 311 – 312.

[4] Direct Testimony of Michael G. Wilding, Page 15, Line 315.

[5] California ISO, Western EIM Benefits Quarterly Reports for 2018. Link: https://www.westerneim.com/Pages/About/QuarterlyBenefits.aspx Accessed on October 24, 2019.

findings that EIM participants benefit significantly from real time imbalance trading facilitated by the market. PacifiCorp's estimates of benefits tend to be more conservative than CAISO's but have been increasing relative to CAISO over the past three years. As the number of participating BAAs increases, it will be an increasingly complex challenge for PacifiCorp to quantify benefits independently of CAISO. However, we find no reason to disagree with the joint conclusion of CAISO and PacifiCorp that participation in EIM delivers some benefits to PacifiCorp customers.

Energy Risk Management Policy Changes

The Company made two changes to the Energy Risk Management policy that will have bearing on future EBA periods. We reviewed and found both changes reasonable.