BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF ROCKY MOUNTAIN POWER TO DECREASE THE DEFERRED EBA RATE THROUGH THE ENERGY BALANCING ACCOUNT MECHANISM	))))))))	**DOCKET NO. 21-035-01** **Exhibit DPU 2.0R** **Testimony** **Philip DiDomenico and Dan F. Koehler**

FOR THE DIVISION OF PUBLIC UTILITIES
DEPARTMENT OF COMMERCE
STATE OF UTAH

REDACTED

Rebuttal Testimony of

Philip DiDomenico
and
Dan F. Koehler

January 4, 2022

TABLE OF CONTENTS

I. Introduction

Q: Please state your name, business address and title.

A: My name is Philip DiDomenico. I am employed by Daymark Energy Advisors, Inc ("Daymark") as a Managing Consultant. My business address is 370 Main Street, Suite 325, Worcester, Massachusetts, 01608.

My name is Dan F. Koehler. I am employed by Daymark as a Managing Consultant. My business address is 370 Main Street, Suite 325, Worcester, Massachusetts, 01608.

Q: On whose behalf are you testifying?

A: We are jointly testifying on behalf of the Division of Public Utilities of the State of Utah (the "Division").

Q: Have you previously filed testimony in this proceeding?

A: Yes. Our direct testimony in this proceeding was filed on November 5, 2021.

Q: What is the purpose of your rebuttal testimony?

A: The purpose of our rebuttal testimony is to respond to the response testimony of Rocky Mountain Power ("RMP"), a business unit of PacifiCorp ("PacifiCorp" or the "Company"), witnesses Mr. Brad Richards and Mr. Jack Painter. We respond to certain issues raised by Mr. Richards regarding the proposed generation plant outages featured in the Technical Report of the Energy Balancing Account Audit for Rocky Mountain Power for Calendar Year 2020 ("Audit Report") provided by Daymark. We respond to Mr.

Painter's proposed changes to estimated replacement power costs. However, the lack of response to any issue raised by the RMP witnesses should not be construed as agreement on that issue.

II. Richards' Response Testimony

Q: To what issues raised in Mr. Richards' response testimony do you wish to respond?

A: In our direct testimony, we recommended that $113,391 in PacificCorp-wide net replacement power costs related to two imprudent outages be removed from actual NPC, resulting in a reduction of the Utah-allocated EBA deferral amount by $53,873. Mr. Richards' response testimony disputes our findings that the Company acted imprudently in these outages and asserts that there should be no adjustment to the EBA deferral amount.

Hunter Unit 3 (June 28, 2020)

Q: Do you agree with any of the assertions regarding the Hunter Unit 3 outage made in Mr. Richards' response testimony?

A: In part, yes. We agree with Mr. Richards that *"typically problems associated with slagging are a result of changes in coal quality"*[1]. Also, we agree that *"... a particular*

[1] Confidential 321486 Response Testimony of Brad Richards for Rocky Mountain Power 12-9-2021, page 3, lines 47-48

batch of poor-quality coal, when identified, cannot reasonably be tracked through the coal feeding system relative to the time that it is consumed in the boiler.[2]*"* Lastly, we agree that *"Because Hunter 3 is considered a flexible load unit, as opposed to a base-loaded unit, coal may reside in a silo for greater than eight hours, which results in varying coal quality entering the boiler at any one time and makes it difficult to track poor quality fuel and preemptively apply corrective action in time to compensate for poor-quality fuel."*[3]

Q: Where do you disagree?

A: As discussed in its response testimony, the Company is very much aware that ash build-up and slagging are recurring issues with coal-fired power plants and in particular given Hunter 3's operational status as a *"flexible load unit"*[4]. In this instance, the Company appears to be suggesting that in the 37 years of this plant's operation (not even considering the decades of operational experience across its entire coal fleet) this slagging event was unique in both location and cause. Given the recurring nature of ash build-up and slagging and absent specific evidence to support such a claim, we find this to be highly unlikely.

[2] Ibid, lines 50-52

[3] Ibid, lines 53-57

[4] Ibid, line 53

Q: How do you respond to the Company's assertion there was no problem with the Company's procedures related to this outage?

A: The Company's Significant Event Report ("SER") related to this outage event identified several corrective actions that have since been completed or are currently in progress, among them: [redacted]

Q: Has your finding of imprudence related to this outage event changed?

A: No, our finding of imprudence remains unchanged, ash build-up and slag are recurring occurrences in plant operation. The lack of procedures geared toward minimizing their impact on plant operations, especially for a facility with decades of operating experience, is unacceptable and serves as a basis for a finding of imprudence. It is incumbent on the Company to ensure proper procedures are in place to cover all major contingencies let alone contingencies that are recurring in nature.

Gadsby Unit 2 (July 5, 2020)

[5] ID_1262862_SER-HTR3-20200628-Boiler Pluggage.docx. Page 3.

Q: Please summarize the Company's position as to the prudence of its actions related to the Gadsby Unit 2 outage.

A: The Company believes that because it followed the OEM procedures and *"…there was no indication that the backup oil regulator would not function as designed; therefore, there was no reason to believe verifying functionality was necessary prior to performing maintenance."*[6]

Q: What is your concern with the Company's actions?

A: Intentionally switching an operating unit to dependence on a backup system to perform maintenance without first verifying the backup system will function as designed is an imprudent practice.

Q: Did the Company offer any evidence that the latest OEM procedures were followed or what the indication might have been that the oil pressure regulator would malfunction?

A: No, the Company offers no evidence that it followed the most recent OEM procedures or what would have been an indication that the oil pressure regulator would malfunction.

Q: Is relying exclusively on OEM procedures a good practice?

[6] Ibid, page 5, lines 106-109.

A: OEM procedures are essential to the proper operation of equipment. However, it is not possible for them to cover all possible configurations and field conditions. At times local judgement needs to be factored into the process. It is incumbent on the Company to make certain a backup system is fully functional prior to relying on it. This is not hindsight as the Company has suggested; it is simply the prudent thing to do.

Q: Has the Company's response testimony caused you to amend your findings of imprudence?

A: No. We continue to believe the Company acted imprudently in both the Hunter and Gadsby outage events and recommend a finding of imprudence and the associated disallowance.

Q: How do you respond to the Company's position on sharing *"lessons learned"* across the fleet?

A: The Company's response testimony has misrepresented my concern. Specifically, as stated in the Audit Report conclusions: *"…the Company's lack of emphasis on providing plant **specific evidence** of what the Plants are doing to minimize outage durations to be of concern."*[7] The emphasis is on the Company's seeming unwillingness to provide any specific evidence. Every discovery request is met with a generic response that fails to address the question or concern. For example, see confidential responses to DPU Data

[7] 21-035-01 Exhibit 2.3 2020 EBA Audit Report (CONF).pdf. Page 4

Requests 3.3, 3.6, 3.8, 3.13, 3.21, 3.24, which are provided as Confidential DPU Exhibit 2.1 R. Simply circulating the root causes and corrective actions from an event for review is a necessary first step but what's missing is any documentation of the review or resulting actions that were taken. It is incumbent on the Company to make every effort to make sure that "learnings" from outage events are properly vetted across the fleet to help proactively minimize future outages. Absent documentation of review and actions taken, it is impossible to verify that the Company is taking prudent actions to proactively minimize outage events across the fleet.

III. Painter's Response Testimony

Q: To what issues raised in Mr. Painter's response testimony do you wish to respond?

A: We respond to Mr. Painter's proposed revisions in the calculation of replacement power costs related to the contested outages at Hunter Unit 3 and Gadsby Unit 2.

Q: Do you agree with Mr. Painter's proposed correction of Hunter Unit 3 replacement power costs?

A: Yes. Mr. Painter noted that our calculation of replacement power costs omitted costs from the final day of the outage, July 1, 2020. Upon investigation, we identified a formula error in our spreadsheet workpaper leading to the omission. When corrected, we obtained the same result as Mr. Painter – an adjustment to net power costs on a total company basis of $256,081. On a Utah-allocated basis, after adjusting for interest, the proposed adjustment to the EBA deferral amount is $121,525.

Q: What disagreements does Mr. Painter raise with our method for the Gadsby Unit 2 replacement power cost calculation?

A: Mr. Painter first disagrees with our treating Gadsby Unit 2 as a peaking unit, like Gadsby Units 4-6, rather than as a baseload unit, like Hunter Unit 3. He also disagrees with our inputs for market prices, variable operations and maintenance ("VOM") costs, and unit heat rate to estimate generation cost.

Q: How do you respond to the Company's suggestion that Gadsby Unit 2 should be treated as a baseload unit for the purpose of replacement power costs?

A: As a gas-fired steam plant, we agree that Gadsby Unit 2 is distinct from a prototypical "peaker" plant such as a gas-fired combustion turbine. Heating water to generate steam to drive a steam turbine is not a process physically suited to rapidly cycle on and off or to follow volatile load or market price signals. However, comparison to standard "baseload" units is also problematic – its role in the Company's fleet is clearly not to operate at or near full output around-the-clock for any extended period of time, much less over an entire month, as shown in both modeled and actual operation of the unit. In 2020 there were [redacted]. Over that time the average capacity factor (using a combined nameplate of 231 MW) for Gadsby Units1-3 was [redacted].[8] In the Company's dispatch modeling from

[8] Based on analysis of CONFIDENTIAL 321487Testimonies' Workpapers 12-9-2021.xlsx, provided with Company's Response Testimony ("Response Workpapers"). Capacity factor calculated using Gadsby generation

the general rate case in Docket No. 13-045-184 ("2014 GRC") setting Base NPC, Gadsby Units 1-3 were only modeled with [redacted].[9] Rather than operating baseload throughout the month, the steam plant is presumably operated only to meet peak generation needs. The baseload unit replacement power cost method, with its reliance on monthly average prices, is also potentially problematic. The unit is likely to be only "in the money" (generation costs less than market price for power) for limited windows of time when, for instance, demand is particularly high or a major generation or transmission outage in the region limits supply. Lower prices at other times throughout the month may reduce monthly average prices and fail to show that the unit was ever in the money at all.

Q: Describe the Company's proposed method for the Gadsby Unit 2 outage.

A: The Company proposes a kind of hybrid approach between the peaker and baseload unit methods, adopting the baseload unit approach to replacement power prices but the peaker unit approach to calculating generator costs on a monthly basis.

Q: Is the Company's proposed method reasonable?

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shown on sheet "Actual NPC", row 323. Nameplate capacity based on Response Workpapers, sheet "(3.3) Base UTGRC14 Stlmt NPC S2", row 741. Capacity factor calculated as [Monthly net generation] / ([Nameplate capacity] * [total hours in month]).

[9] Based on analysis of Response Workpapers, sheet "(3.3) Base UTGRC14 Stlmt NPC S2", row 591.

A: Yes, in this instance, with one exception to the Company's choice of inputs. As noted earlier, there is no "perfect" approach here. The flaws in the Company's preferred methodology would be most problematic if the outage occurred during a time when daily prices far exceeded monthly averages. We see no evidence of that condition occurring in this instance based on our proxy CAISO DAM LMPs. We accept Mr. Painter's proposed methodology with one alteration to the inputs used.

Q: Which input did the Company use that you find problematic?

A: The Company used the July 2014 heat rate for Gadsby in Base NPC from the 2014 GRC.[10] This is an average modeled heat rate reflecting total monthly fuel burned divided by net generation from the Company's Generation and Regulation Initiative Decision Tool ("GRID"). The average heat rate reflects modeled operations for July 2014 and may or may not be representative of the incremental cost of actual generation in July 2020.

Q: Please describe your revised calculation of replacement power costs at Gadsby Unit 2.

A: The replacement power calculation is basically a simplified dispatch model based on a single point estimate of the unit's heat rate. We propose using a heat rate that reflects the input heat rate curve used in the Company's GRID modeling for Base NPC. The

[10] Mr. Painter's testimony states that the heat rate is from the most recent GRC (Docket No. 20-035-04), but workpapers show Docket No. 13-035-184 as the source. We assume the reference to Docket No. 20-035-04 is an error.

Company provided the heat rate curve specifications in Confidential Response to DPU Data Request 14.1. Like many generator units, Gadsby Unit 2 is more efficient at higher operating levels, so full load heat rates are significantly lower (less fuel needed per MW of generation) than partial load heat rates. We conservatively used the partial (35 MW) load average heat rate of [redacted]. Otherwise, we used the same methods and input assumptions proposed by the Company.

Q: What is your updated calculation for replacement power costs at Gadsby Unit 2?

A: On a total company basis the replacement power cost is $20,213. On a Utah-allocated basis, after adjusting for interest, the proposed adjustment to the EBA deferral amount is $9,583. Confidential workpapers supporting our calculations are provided with our testimony as DPU Workpapers 2.2R.

Q: Please summarize your recommended outage-related reductions in Company-wide NPC.

A: After considering new information provided by the Company in Response Testimony, we determined that nothing in the Company's response testimony changes our conclusion that the identified outages demonstrated sufficient imprudence that we recommend reducing EBA costs to reflect net replacement power costs related to the outages. After considering corrections and suggested adjustments to our calculation of replacement power costs, the total reduction in PacifiCorp-wide NPC for these outages is $276,294 resulting in a Utah-allocated EBA deferral adjustment, after adjusting for interest, of $131,109 as detailed below in Daymark Table 1.

196

DAYMARK TABLE 1

	Daymark Direct Testimony		**Daymark Rebuttal Testimony**	
	Total Company	Utah Allocated	Total Company	**Utah Allocated**
Hunter 3	$ 72,313	$ 32,442	$ 256,081	**$ 114,886**
Gadsby 2	$ 41,078	$ 18,429	$ 20,213	**$ 9,068**
TOTAL	$ 113,391	$ 50,871	$ 276,294	**$ 123,954**
Interest		$ 3,002		**$ 7,155**
TOTAL RECOMMENDED OUTAGE ADJUSTMENT		$ 53,873		**$ 131,109**

197

198 **Q: Does this conclude your testimony?**

199 A: Yes.