**REDACTED**
Docket No. 25-035-47
Witness: Michael G. Wilding

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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**REDACTED**

Direct Testimony of Michael G. Wilding

August 2025

## I. INTRODUCTION

**Q. Please state your name, business address, and present position with PacifiCorp d/b/a Rocky Mountain Power ("Company").**

A. My name is Michael G. Wilding, and my business address is 825 NE Multnomah Street, Suite 600, Portland, Oregon 97232. My title is Vice President, Energy Supply Management.

**Q. Please describe your education and professional experience.**

A. I received a Master of Accounting degree from Weber State University and a Bachelor of Science degree in accounting from Utah State University. As Vice President, Energy Supply Management ("ESM"), my responsibilities include directing the Company's front office organization in commercial and trading activities. ESM is responsible for commercially managing the Company's diverse generation portfolio. This includes electric and natural gas hedging, day-ahead trading, real-time trading, and system balancing. I am also responsible for the Company's carbon policy and reporting group. Before assuming my current position in February 2021, I worked on various regulatory projects including general rate cases, the multi-state process, and net power cost filings. I have been employed by the Company since 2014.

**Q. Have you testified in previous regulatory proceedings?**

A. Yes. I have previously testified in front of the Public Service Commission of Utah ("Commission"), and in Idaho, Wyoming, California, Oregon, and Washington. I have also filed testimony at the Federal Energy Regulatory Commission.

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to support the 2026 PacifiCorp Inter-Jurisdictional Allocation Protocol ("2026 Protocol") for interjurisdictional cost allocations. I show how

Utah customers will be reasonably allocated resources under the 2026 Protocol in terms of resource adequacy. Additionally, I describe the impacts of having two separate generation portfolios on the Company's front-office operation and the risk management policy. Finally, I explain how the Extended Day-Ahead Market ("EDAM") settlements may be used in the future to settle, or track, net power costs once generation portfolios are fixed and generation resources are no longer dynamically shared among Utah, Idaho, Wyoming, California, and Oregon (the "Five States").

**Q. Please describe how your testimony is organized.**

A. First, my testimony describes how the 2026 Protocol maintains a reasonable resource adequacy position and market position for Utah customers. Next, I describe the changes to the hedging and risk management policy that the Company is implementing. Finally, I explain how the Company's participation in organized markets will impact the future allocations of net power costs.

## II. THE 2026 PROTOCOL MAINTAINS RESOURCE ADEQUACY FOR UTAH CUSTOMERS

**Q. Please briefly describe the limited realignment of generation.**

A. As described in the testimony of Company witness Rick T. Link, the 2020 Inter-Jurisdictional Allocation Protocol ("2020 Protocol") is expiring on December 31, 2025, and the Company is now proposing a new inter-jurisdictional cost-allocation methodology, the 2026 Protocol.[1] The 2026 Protocol is the first step in a process to transition cost allocation and changes in operations to accommodate diverging resource portfolios required to comply with different state energy policies. Most immediately, Washington's Clean Energy Transformation Act requires that the costs of coal generation be excluded

[1] Direct Testimony of Rick T. Link at 2 (Aug. 5, 2025).

from Washington retail rates after December 31, 2025. Additionally, in light of state disallowances of carbon costs under Washington's Climate Commitment Act, it is necessary to situs assign all the costs and benefits of the Chehalis natural gas plant to Washington. Notably, this limited realignment was contemplated as a potential future step in the 2020 Protocol.[2]

**Q. Please briefly describe the creation of two distinct generation portfolios.**

A. The limited realignment that is being proposed under the 2026 Protocol creates two distinct generation portfolios—a Five-State portfolio ("Five-State Portfolio") and the Washington fixed portfolio ("Washington Fixed Portfolio"). The Five-State Portfolio benefits from the diversity of the Company's system and includes a percentage of every resource on the system except for the Chehalis natural gas plant and Washington qualifying facilities ("QFs"), which are situs assigned to Washington. There are four different subsets of generation resources in the two portfolios. The first subset includes those that are allocated to both portfolios. The second subset is for generation resources that are fully allocated to the Five-State Portfolio and not included in the Washington Fixed Portfolio. The third subset is for the Rolling Hills Wind facility, which is included in the Five-State Portfolio, except for Oregon, and in the Washington Fixed Portfolio. The fourth subset includes Washington situs resources that are fully allocated to the Washington Fixed Portfolio. The subsets of resources included in the two portfolios are summarized in the table below.

[2] *See* 2020 Protocol, Section 6.4.

| Plant Name/Resource Type | Five-State Portfolio (OR, CA, ID, UT, WY) | Washington Fixed Portfolio | Total |
|---|---|---|---|
| Resource Subset 1 | | | |
| Jim Bridger 1 & 2 | 92.10% | 7.90% | 100% |
| Other Existing Non-Emitting Resources (non-QFs) | 92.10% | 7.90% | 100% |
| Legacy Interruptible Contracts | 92.10% | 7.90% | 100% |
| Resource Subset 2 | | | |
| Other Natural Gas and Coal (non-QFs) | 100% | 0% | 100% |
| Five State QFs | 100% | 0% | 100% |
| Resource Subset 3 | | | |
| Rolling Hills Wind (excluding OR) | 65.13% | 34.87% | 100% |
| Resource Subset 4 | | | |
| WA QFs | 0% | 100% | 100% |
| Chehalis | 0% | 100% | 100% |

**Q. How will the generation costs within the Five-State Portfolio be allocated?**

A. The generation costs within the Five-State Portfolio will continue to be allocated on a dynamic basis, with a few exceptions. First, Oregon does not participate in the Rolling Hills Wind facility. Second, QF costs continue under the same treatment as the 2020 Protocol. Any new or renewed QF contract as of January 1, 2020, is situs assigned to the state of origin. Lastly, certain resources acquired for the purpose of state-specific initiatives, such as community solar, will continue to be situs assigned to the state of origin.

**Q. Did the Company analyze the resource adequacy and energy position of the Five-State Portfolio?**

A. Yes. The Company assessed the impact of the 2026 Protocol on the resource adequacy and energy position of the Five-State Portfolio, and performed a separate analysis for Utah.

**Q. Please describe the results of your assessment of resource adequacy under the 2026 Protocol.**

A. I found that when compared to the 2020 Protocol, the Five-State Portfolio under the 2026 Protocol provides a similar resource adequacy position. This is also consistent with my findings when comparing resource adequacy impacts separately for Utah.

**Q. What is resource adequacy and how does it benefit customers?**

A. Resource adequacy is a measure, typically for the next year or season, of a utility's or load-serving entity's ability to serve load in a reliable manner. This measure typically identifies an adequate amount of both generation and transmission capacity needed to reliably serve peak load plus a planning reserve to account for uncertainty, such as outages, underperformance of resources, and higher-than-forecast loads. Customers benefit from the utility being resource-adequate through reliable service and more stable power costs.

**Q. Does the Company have a formal resource adequacy standard?**

A. Yes. The Company currently participates in the non-financially binding phase of the Western Resource Adequacy Program ("WRAP"), which is a regional reliability planning and compliance program developed by the members of the Western Power Pool to address the emerging reliability needs in the West. WRAP has created a regional planning standard for which each participant must comply. This planning compliance occurs twice a year in what is called the "forward showing." Each WRAP participant must show it has adequate generation and transmission capacity to meet its peak load plus a planning reserve margin ("PRM") twice a year, once for the summer period (June through September) and once for the winter period (November through March). The PRM is calculated monthly based on a one-in-ten-year loss of load event. Currently, there are no penalties for failing to comply

with the WRAP standard. However, once the program becomes financially binding, WRAP participants who fail to meet the WRAP standard in their forward showing will face deficiency charges. Each WRAP participant must decide whether to become part of the financially binding WRAP by October 31, 2025.

**Q. Please explain how you evaluated the resource adequacy of the Five-State Portfolio and Utah's share of the Five-State Portfolio.**

A. I used the WRAP methodology to evaluate the resource adequacy of the Five-State Portfolio and Utah's share of the Five-State Portfolio for 2026 under the 2026 Protocol and the 2020 Protocol. The monthly peak loads for the 2026 winter and summer seasons are from the most recent Company load forecast used in regulatory proceedings. The WRAP monthly PRM, ranging from 13.7 percent to 21.9 percent, is added to the monthly peak load forecast.[3] The monthly peak load plus the PRM is the amount of generation capacity that is needed to comply with WRAP.

Each resource is assigned a qualified capacity contribution ("QCC"), which is a measure of how much of the generation capacity can be expected to be available for dispatch during the peak load. The QCC is calculated based on historical performance of the resource or resource type, e.g., wind and solar resource QCCs are evaluated as a resource type in a specific region. To be considered resource adequate, the sum of the QCCs of all generation resources must be greater than or equal to peak load plus the PRM each month.[4]

[3] Note that April, May, and October do not have WRAP planning standards. Since peak load is often driven by heating and cooling, these are "shoulder months," where demand is lower relative to the rest of the year.

[4] [redacted]

**Q. Please show the resource adequacy comparison of the Five-State Portfolio under the 2020 Protocol and the 2026 Protocol.**

A. Confidential Figure 1 shows the capacity contribution by resource type, based on the WRAP QCCs, attributed to the Five-State Portfolio compared to the peak load and PRM for the 2026 WRAP seasons (winter and summer) under the 2020 Protocol and the 2026 Protocol.

**Confidential Figure 1: Five-State Portfolio Resource Adequacy Under the 2020 Protocol and 2026 Protocol**

The "Load + PRM" lines are identical between the 2020 Protocol and 2026 Protocol views, with only the bars showing the QCC of generation resources changing. Confidential Figure 1 shows that resource adequacy from the Five-State Portfolio is similar between the 2026 Protocol and the 2020 Protocol.

**Q. Why does the 2026 Protocol not fully cover the peak loads plus PRM in each month for the Five-State Portfolio?**

A. First, this is not surprising as the Company, as a system, generally has an open position that it fills using near-term transactions such as market purchases. My analysis only considers existing resources and does not consider other actions the Company will take to ensure reliability for its customers.

**Q. Please show the resource adequacy comparison for Utah's share of the Five-State Portfolio under the 2020 Protocol and the 2026 Protocol.**

A. Confidential Figure 2 provides a resource adequacy look for Utah's allocation of the Five-State Portfolio under the 2020 Protocol and the 2026 Protocol.[5]

**Confidential Figure 2: Utah Resource Adequacy Under the 2020 Protocol and the 2026 Protocol**

[redacted]

[5] The Company has conducted similar analysis for each of the Five States, as provided in Exhibit RMP___(MGW-1) to my testimony.

The "Load + PRM" lines are identical between the 2020 Protocol and the 2026 Protocol views, with only the bars showing the QCC of generation resources changing. Confidential Figure 2 shows that, based on Utah's share of the Five-State Portfolio, resource adequacy is similar under the 2026 Protocol and the 2020 Protocol.

**Q. Please explain how you evaluated the ability of the Five-State Portfolio to meet the energy needs of customers.**

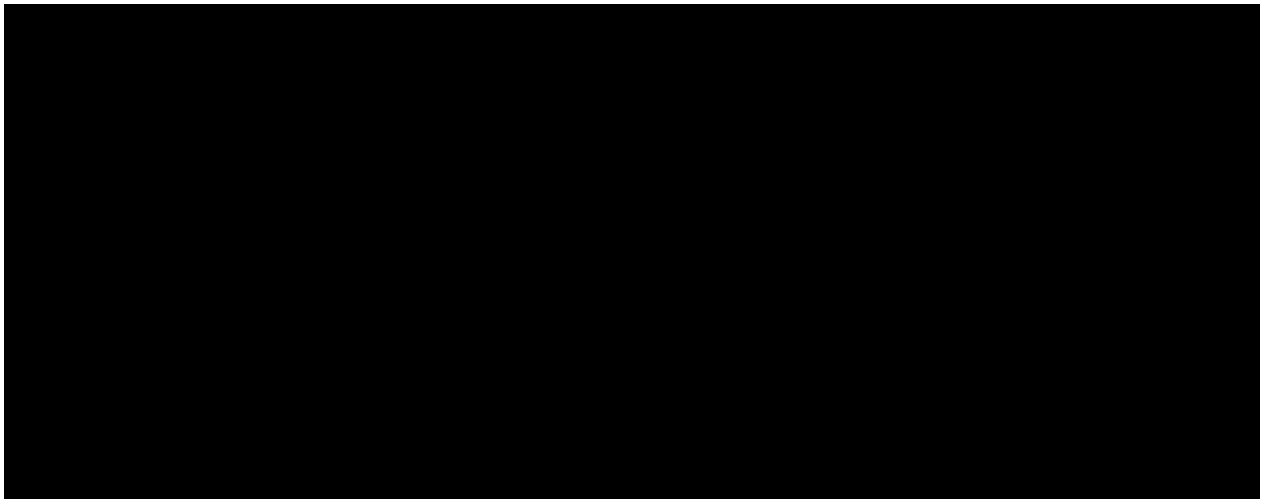
A. First, I looked at two months: January 2026, to capture the winter peak; and July 2026, to capture the summer peak. Using the same load forecast as the resource adequacy analysis, an hourly load profile was created for each month based on the average hourly load for the Five States. The average hourly energy output of the Five-State Portfolio was created for different types of resources.

For run-of-river hydroelectric and geothermal resources, a flat generation profile was used based on the WRAP QCCs. For wind and solar resources, hourly generation profiles were sourced from developer-provided forecasts. For natural gas, hourly energy schedules were created based on actual generation data from January 2025 and July 2024. Storage resource schedules were created from the Company's production cost model outputs to determine the optimal use of battery charging and discharging across an average day in January and July. Finally, dispatchable hydroelectric resource schedules were created by determining optimal schedules to minimize the single-hour short position for the Five States based on a normal water year. Once the hourly energy schedules were created, I applied the resource-specific allocation percentage for each of the Five States under the 2020 Protocol and the 2026 Protocol.

**Q. Please show the energy comparison of the Five-State Portfolio under the 2020 Protocol and the 2026 Protocol.**

A. The results of the analysis show that the 2026 Protocol slightly improves the Five-State energy position compared to the 2020 Protocol. Confidential Figure 3 compares the 2020 Protocol average energy profile to the 2026 Protocol and the average load for the Five States in January 2026.

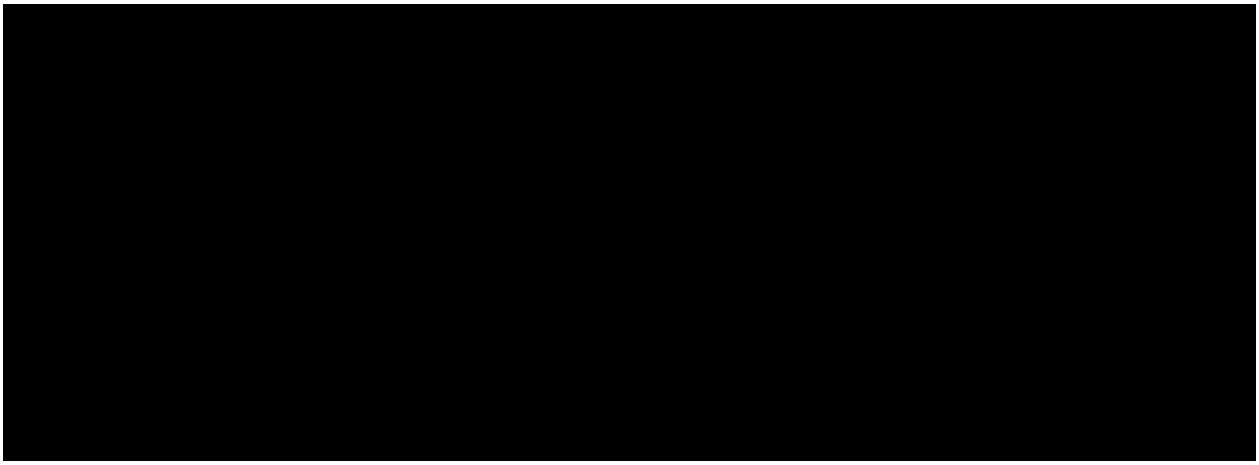
**Confidential Figure 3: System Energy Comparison of the 2026 Protocol and the 2020 Protocol – January 2026**



Confidential Figure 3 shows that the 2026 Protocol slightly increases the energy sufficiency quantity for customers for all hours compared to the 2020 Protocol.

Confidential Figure 4 compares the 2020 Protocol average energy profile to the 2026 Protocol average energy profile, against the average load for the Five States in July 2026.

**Confidential Figure 4: System Energy Comparison of the 2026 Protocol and the 2020 Protocol – July 2026**



When the Company analyzed average energy needs in July 2026, the energy shortfall decreased for all hours except hours ending 2 through 6 under the 2026 Protocol compared to the 2020 Protocol. Although some hours showed a decreased energy position in July under the 2026 Protocol, the overall energy position improved. The 2026 Protocol reduces the system energy shortfall over these critical hours, thereby reducing reliance on market purchases.

**Q. Why does the 2026 Protocol not fully cover the energy needs of customers in the Five-States during July?**

A. Like the resource adequacy results, this is not surprising as the Company, as a system, generally has an open position that it fills using near-term transactions such as market purchases. While Confidential Figure 4 shows that neither allocation method leads to customers being able to meet 100 percent energy needs with existing resources during July 2026, the Company will take near-term actions, such as making market purchases, to ensure there is enough energy to meet system load.

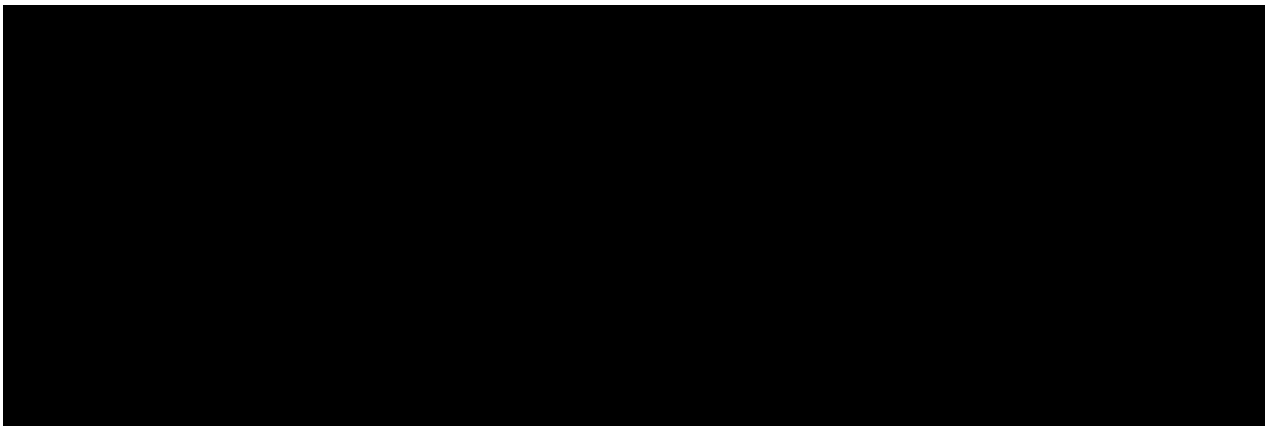
**Q. Please explain how you evaluated the ability of Utah's share of the Five-State Portfolio to meet the energy needs of Utah customers.**

A. First, I looked at two months: January 2026, to capture the winter peak; and July 2026, to capture the summer peak. Using the same load forecast, an hourly load profile was created for each month based on the average hourly load for Utah. The average hourly energy output is the same as the data that was used in the analysis of the Five-State Portfolio. I applied resource-specific Utah allocation percentages under the 2020 Protocol and the 2026 Protocol to the energy schedules to arrive at Utah-allocated energy totals.

**Q. What did the analysis show at the state-level view?**

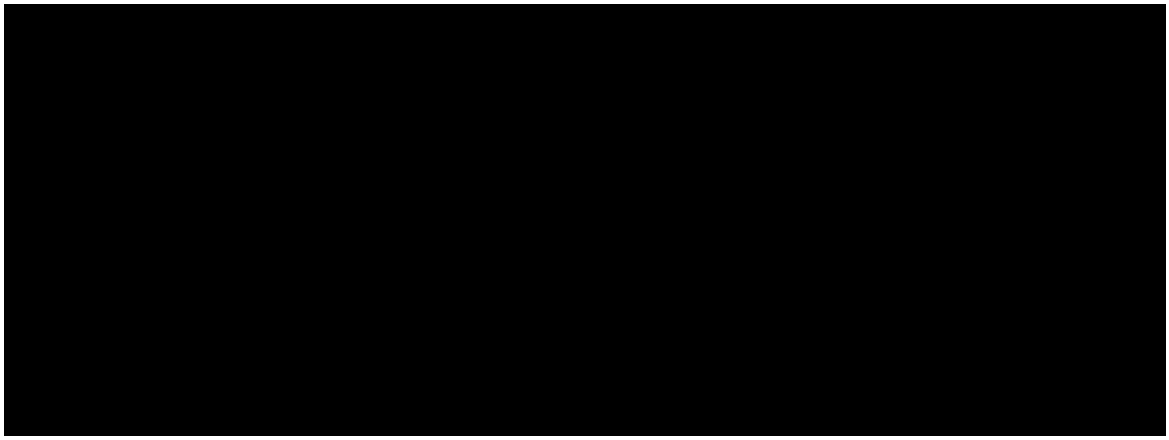
A. The results of the state-level energy analysis are similar to the Five-State Portfolio view. Confidential Figure 5 compares the 2020 Protocol average energy profile with the 2026 Protocol average energy profile, against the average load for Utah in January 2026. The figure shows that the 2026 Protocol slightly increases the energy sufficiency quantity for Utah customers for all hours compared to 2020 Protocol.

**Confidential Figure 5: Utah Energy Comparison of the 2026 Protocol and the 2020 Protocol – January 2026**



The July 2026 results for Utah shown in Confidential Figure 6 differ slightly from the Five-State Portfolio results. The 2026 Protocol improves the Utah energy position for all hours compared to the 2020 Protocol.

**Confidential Figure 6: Utah Energy Comparison of the 2026 Protocol and the 2020 Protocol – July 2026**



**Q. What conclusions do you draw from your energy analysis?**

A. Under the 2026 Protocol, the Company's Utah customers are in a more favorable position than under the 2020 Protocol. On average, both the Five-State Portfolio and Utah's share of the Five-State Portfolio produce slightly more energy every hour under the 2026 Protocol. This results in less market reliance and more price stability.

## III. IMPACTS TO THE RISK MANAGEMENT POLICY

**Q. In light of creating the two resource portfolios, did the Company evaluate its risk management policy?**

A. Yes. The Company routinely evaluates its risk management policy to ensure risks are being adequately addressed, and changes in the market (e.g., price, product availability, etc.) or the regulatory landscape are considered. The creation of the two generation portfolios, the Five-State Portfolio and the Washington Fixed Portfolio also caused the Company to

evaluate its risk management policy. The risk management policy was reviewed to specifically address two risks: resource adequacy risk and price volatility risk.

**Q. Are the regulatory changes in the states that the Company serves contributing to changes to the risk management policy?**

A. Yes. Changes in state energy policy where the Company operates are driving the need to manage resource adequacy and price risk across the Company's system in different ways. As an example, compliance with Washington law requires coal to be out of Washington customer rates effective January 1, 2026, and places restrictions on the types of market purchases that the Company can use to address the risks identified above. Additionally, the 2026 Protocol creates two distinct resource portfolios and includes situs assignment of resources. These changes require that forward market transactions, including hedges, be accounted for separately for each of the resource portfolios.

**Q. Please describe the changes that the Company will make to its current risk management policy and hedging program and practices if the 2026 Protocol is approved.**

A. The Company will create two separate power and gas hedge books, one for the Five-State Portfolio and one for the Washington Fixed Portfolio. This will allow the Company to manage risk to net power costs ("NPC") on behalf of customers, while ensuring compliance with all relevant state laws.

**Q. Once the changes to the risk management policy are in place, how will forward market transactions and hedges be allocated?**

A. Once the changes to the risk management policy are in place, all forward transactions and hedges will be executed either for the Five-State book or for the Washington book. Any

forward market transactions greater than balance of month will be tracked specifically for the relevant book.

**Q. How will existing hedges made for 2026 be allocated?**

A. The Company has already made market transactions for delivery in 2026 and has no desire for any state to "start from zero" when the change is made, so there will be an allocation of existing hedges to the two books. Once the 2026 Protocol is approved, the Company will assign the existing hedges to either the Five-State book or the Washington book considering supply risk, price risk, and compliance obligations.

## IV. ORGANIZED MARKET PARTICIPATION

**Q. Please explain the Company's experience with organized market participation.**

A. In 2014, the Company partnered with the California Independent System Operator to launch the Western Energy Imbalance Market ("WEIM"), a real-time organized market. The WEIM is a real-time imbalance market that operates on 15-minute and 5-minute intervals, optimizing imbalances by using available transmission and generation from market participants through an economic dispatch mechanism. Since its inception, the WEIM participation has grown into a diverse footprint that currently has approximately 80 percent of the Western Electricity Coordinating Council load participating. WEIM participants have realized significant economic benefits in the form of $7.41 billion through the second quarter of 2025. The Company has achieved approximately $1.02 billion in savings, which has benefited customers through reduced NPC.[6] The Company has also announced its intention to join the EDAM and is currently working on implementation with an expected go-live date of May 2026.

[6] *See* Western Energy Markest, "Benefits," https://www.westerneim.com/Pages/About/QuarterlyBenefits.aspx (last accessed (July 31, 2025).

**Q. Please explain the EDAM.**

A. The EDAM is a voluntary day-ahead market that encompasses the foundation of the WEIM design. The WEIM is designed to optimize generation in the real-time timeframe by economically dispatching resources to meet demand fluctuations across the WEIM footprint while considering transmission constraints and congestion. Before the operating hour, the WEIM examines whether a balancing authority area can meet its own native resource-load balance by testing the resource plan against the feasibility of deliverability to its own native load, this is called the resource sufficiency evaluation. This uniform assessment ensures there is no leaning on the footprint thereby creating reliability issues. The EDAM extends this framework to the day-ahead timeframe, optimizing all load, transmission, and generation resources.

**Q. How might future EDAM participation impact NPC allocations in Phase 2 of the 2026 Protocol?**

A. As part of the 2020 Protocol, the Company introduced the concept of the nodal pricing model ("NPM"). This was a method to track NPC once state generation portfolios become static or fixed. EDAM settlements will replace the need for the NPM. At this time, only Washington will have a static generation portfolio, and EDAM will not be live until May 2026. However, in the future, EDAM settlements will enable the Company to track NPC per unique generation portfolios. For example, Utah would be allocated the fuel costs, purchased power costs, and wholesale sale revenues associated with its generation portfolio. Utah would pay the market price for its load and would receive the market revenues from its generation resources. The sum of the load costs and the generation revenues would net to zero on a system basis but would result in either a credit or cost to

each unique generation portfolio on the Company's system. This cost or credit for Utah would be added to the allocated fuel costs, purchased power costs, and wholesale sale revenues to arrive at the total NPC. This will be based on the actual market settlements received from EDAM. The Company is not asking the Commission to consider using EDAM to track NPC for Utah at this time. I anticipate multiple workshops on this subject and more robust testimony will accompany any filing asking to implement this method.

## V. CONCLUSION

**Q. Please summarize and conclude your testimony.**

A. In summary, the 2026 Protocol provides Utah customers with a generation portfolio that results in similar resource adequacy and market reliance as under the 2020 Protocol. I recommend that the Commission approve the 2026 Protocol as just and reasonable for Utah customers.

**Q. Does this conclude your testimony?**

A. Yes.

**REDACTED**
Rocky Mountain Power
Exhibit RMP___(MGW-1)
Docket No. 25-035-46
Witness: Michael G. Wilding

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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**REDACTED**

Exhibit Accompanying Direct Testimony of Michael G. Wilding

State Capacity and Energy Positions Comparison
of the 2020 Protocol and 2026 Protocol

August 2025

**THIS EXHIBIT IS CONFIDENTIAL IN ITS ENTIRETY AND IS PROVIDED UNDER SEPARATE COVER.**