Exh. MGW-1CT
Docket UE-25_____
Witness: Michael G. Wilding

BEFORE THE WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PACIFICORP dba PACIFIC POWER & LIGHT COMPANY Respondent.	Docket UE-25_____

PACIFICORP

REDACTED DIRECT TESTIMONY OF MICHAEL G. WILDING

April 2025

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ATTACHED EXHIBITS

Q. Please state your name, business address, and present position with PacifiCorp d/b/a Pacific Power & Light Company (PacifiCorp or 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.

I. QUALIFICATIONS

Q. Please describe your education and professional experience.

A. I received a Master of Accounting 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 PacifiCorp's diverse generation portfolio. This includes the electric and natural gas hedging, term and 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 Washington Utilities and Transportation Commission (Commission), and in California, Idaho, Oregon, Utah and Wyoming. I have also filed testimony at the Federal Energy Regulatory Commission (FERC).

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

A. The purpose of my testimony is to support the Washington 2026 Protocol for interjurisdictional cost allocations. I will show how Washington customers will benefit under the 2026 Protocol in terms of better resource adequacy and decreased market exposure. I will also explain certain changes to our risk management policy to comply with the Washington Clean Energy Transformation Act (CETA) and to enable the fixed allocations of a Washington-specific generation portfolio. Lastly, I will provide some testimony on PacifiCorp's decision to join the Extended Day-Ahead Market (EDAM) and how it will benefit Washington customers. I will also explain how EDAM settlements may also 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 the system.

Q. Please describe how your testimony is organized.

A. First my testimony describes how the 2026 Protocol improves the resource adequacy position and reduces the reliance on market purchase for Washington customers. Then I describe the changes to the hedging and risk management policy that the Company is implementing for Washington. Finally, I describe how PacifiCorp's participation in organized markets will impact the future allocations of net power costs.

II. THE 2026 PROTOCOL INCREASES RESOURCE ADEQUACY AND DECREASES MARKET RELIANCE FOR WASHINGTON CUSTOMERS

Q. Please briefly describe the generation portfolio assigned to Washington under the proposed 2026 Protocol.

A. The 2026 Protocol assigns the existing generation facilities to Washington as follows:

Plant Name/Resource Type	Allocation Factor/Assignment
Chehalis, Natural Gas	100%
Jim Bridger 1 & 2, Natural Gas	7.897%
Rolling Hills Wind	34.872%
Existing Non-Emitting Resources (non-QFs)	7.897%
Washington Qualifying Facilities	100%

Q. Did you review the Washington generation portfolio under the 2026 Protocol to determine if it provides "*quantifiable direct or indirect benefits to Washington [customers] commensurate with its costs[?]*"[1]

A. Yes, I did. I found that when compared to the Washington Inter-Jurisdictional Allocation Methodology (WIJAM), the Washington generation portfolio under the 2026 Protocol increases resource adequacy and decreases the reliance on market purchases to serve Washington load. I will discuss both these items in more detail below.

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

A. Resource adequacy is the planning, typically for the next year or season, by a utility or load serving entity to serve load in a reliable manner. This planning typically includes ensuring an adequate amount of both generation and transmission capacity to serve peak load plus a planning reserve to account for some uncertainty, such as outages, underperformance of resources, and higher-than-forecast loads. Customers benefit from the utility being resource adequate through increased reliability, less market exposure, 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

[1] Docket No. UE-050684, Order 04 ¶ 68.

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. The 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 – September) and once for the winter period (November – 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 standards 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 Washington generation portfolio.

A. I used the WRAP methodology to evaluate the resource adequacy for 2026 of the Washington generation portfolios per the 2026 Protocol and the WIJAM. The monthly peak loads for the 2026 winter and summer seasons are from the PacifiCorp load forecast that is being used in this case. The WRAP monthly PRM, ranging from 13.7 percent to 21.9 percent, is added to monthly peak load forecast. Note that April, March, and October do not have WRAP planning standards.[2] The monthly peak load

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[2] Since peak load is often driven by heating and cooling, these are shoulder months, where demand is relatively lower as compared to the rest of the year.

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) or in other words, 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 QCC 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 PRM each month.[3]

Q. Please show the resource adequacy comparison of the Washington generation portfolio under the WIJAM and the 2026 Protocol.

A. The below figures show capacity contribution by resource type, based on the WRAP QCCs, attributed to Washington compared to the peak load and PRM for the 2026 WRAP seasons, winter and summer.

Confidential Figure 1 below provides a resource adequacy look of the Washington generation portfolio under the WIJAM; [redacted]

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[3] [redacted]

Confidential Figure 1: Resource Adequacy under the WIJAM

[redacted]

Confidential Figure 2 below provides a resource adequacy looks using the same WRAP metrics and standards using the Washington generation portfolio for 2026 Protocol.

Confidential Figure 2: Resource Adequacy under the 2026 Protocol

[redacted]

The ‘Peak Load + PRM’ lines are identical between the two figures, with only the bars showing the QCC of generations resources changing. [redacted]

[redacted]

Q. [redacted]

A. [redacted]

Q. [redacted]**?**

A. [redacted]

Q. Please explain how you evaluated the ability of the Washington generation portfolio to meet the energy needs of Washington 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 Washington load. The average hourly energy output of the Washington generation portfolio was created from the different generation types.[redacted]

[redacted]

Q. Please show the energy comparison of the Washington generation portfolio under the WIJAM and the 2026 Protocol.

A. [redacted]

Confidential Figure 3: Energy Comparison of the 2026 Protocol and the WIJAM – January 2026

[redacted]

[redacted]

Confidential Figure 4: Energy Comparison of the 2026 Protocol and the WIJAM – July 2026

[redacted]

Q. [redacted]**?**

A. [redacted]

Q. [redacted]**?**

A. [redacted]

III. PROPOSED CHANGES TO THE RISK MANAGEMENT POLICY

Q. Why is the Company changing its risk management policy?

A. The Company routinely evaluates its risk management policy to ensure risks are being adequately addressed. The risk management policy is being updated to specifically address two risks, which I will discuss in more detail later in my testimony. First, is the resource adequacy risk or supply risk. The second is the price risk or price volatility.

Q. Are the changes in Washington also contributing to the changes to the risk management policy?

A. Yes. Changes in Washington are driving the need to manage the resource adequacy risk and price risk on a Washington specific basis. First, CETA requires coal to be out of Washington customer rates effective January 1, 2026, which dictates what can be included in Washington rates and places restrictions on the types of market purchases that the Company can use to address the risks identified above. Second, the 2026 Protocol moves the Washington generation portfolio from a dynamic allocation to a static allocation and includes significant situs assignment of resources. These two changes in circumstance require that the need for forward market transactions, including hedges, be accounted for separately and situs assigned to Washington.

Q. Please describe the changes that the Company is proposing to its current risk management policy and hedging program and practices.

A. The Company proposes to create two separate power and gas hedge books, one for Washington and one for the rest of the system. Additionally, the risk management policy will be updated to create risk limits to address the resource adequacy position and the average energy position of the two power hedge books. This will allow the Company to manage risk to net power costs (NPC) on behalf of Washington customers, while ensuring compliance with all relevant state laws.

Q. Please describe the revised approach to manage the resource adequacy risk for Washington customers.

A. The Company will create a monthly Washington resource adequacy position based on Washington load plus a PRM and generation resources. [redacted].[4]

[4] The earliest PacifiCorp will become a financially binding participant of WRAP is Winter 2027-2028.

Q. Please describe the revised approach to manage the price risk for Washington customers.

A. In addition to ensuring resource and energy adequacy, the Company will also calculate an average on- and off-peak position for the purpose of managing risk to NPC. The Company will run the Power Costs Incorporated, Inc (PCI) model on a total-Company basis, then apply the 2026 Protocol allocation factors to the generating resources, contracts, and QFs that are included in Washington rates. The generation output of the Washington generation portfolio will be compared to the Washington load forecast (also by month and peak type) to determine the Washington open position. [redacted]

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

A. Once the changes to the risk management policy are in place all forward transactions and hedges will be done on a Washington specific basis. Any forward market transactions greater than balance of month will be tracked as specifically for Washington and situs assigned.

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

A. The Company currently has made market transactions for delivery in 2026 and has no desire for Washington to "start from zero" when the change is made, so there will be an allocation of existing hedges to the Washington position. The plan is to allocate hedges at the weighted average cost of eligible existing transactions to maintain equality among the states when the split occurs (in other words, no state or generation portfolio will profit from this re-allocation). In terms of the amount or percentage to be allocated, further analysis is required to ensure that a robust and equitable approach is used, and the Company commits to sharing those details as they become available, likely when 2026 actual NPC are reviewed in the annual power cost adjustment mechanism.

Q. How will system balancing market transactions be allocated to Washington?

A. The Washington position being hedged will be calculated separately, however, PacifiCorp will continue to operate and balance as a system. All system balancing market transactions (balance of month, day-ahead, real-time, etc.) will be allocated through a system balancing adjustment using the spreadsheet method. Company witness Mitchell addresses this in more detail.

Q. Does this conflict with the Company's prior position on the inefficiency of hedging separately for Washington customers?

A. No. Right now, Washington benefits from being allocated additional hedge volumes during the balancing step of the WIJAM, which obviates the need to hedge separately and specifically for Washington customers. However, beginning in 2026, Washington state law places restrictions on the type and tenor of hedging transactions that can be included in rates, and those restrictions are dissimilar to the requirements of other states. As a result, separate tracking will be required to ensure that the Company can maintain compliance with Washington state law while prudently managing risk to NPC.

Q. Will this require a formal change to PacifiCorp's Energy Risk Management Policy?

A. Yes. Even if the intention was simply to implement these changes for Washington specifically, the Company would need to incorporate requirements and limits to manage the position separately and identify the absence of Washington from the PacifiCorp West balancing area. However, Washington is simply the first state to fully implement a law like CETA. There are similar changes underway in other states where the Company does business, so the Company will soon need to consider other similar restrictions in those jurisdictions. For that reason, the Company will incorporate these changes into the overall risk management policy and apply the ideas equally, even as it measures the positions and assesses the eligible hedges separately.

Q. Are any changes being proposed to the natural gas hedging limits?

A. Not to the limits themselves, but Washington will have its own natural gas requirement based on the forecasted requirements of the Chehalis plant, coupled with Washington's allocated share of the requirements for Jim Bridger units 1 and 2. In addition, hedges will be allocated to Washington when the position is split, and a separate hedge book for Washington gas hedges will be maintained in the future.

Q. Will this necessitate a change to the type of hedging instruments used by the Company?

A. A change of that sort is not contemplated at this time, but obviously the Company cannot rule that out categorically. It is possible that future market dynamics may necessitate a different approach from the one currently in use, but there are no plans for those changes right now.

IV. ORGANIZED MARKET PARTICIPATION

Q. Please explain PacifiCorp's experience with organized market participation.

A. In 2014, PacifiCorp partnered with the California Independent System Operator (CAISO) 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 utilizing 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 (WECC) load participating. WEIM participants have realized significant economic benefits to the tune of $6.62 billion through the fourth quarter of 2024. PacifiCorp has achieved approximately $938.1 million in savings, which has benefited customers through reduced NPC.[5] PacifiCorp has announced its intention to join the Extended Day-Ahead Market (EDAM) and is currently working on implementation with an expected go-live date of May 2026.

Q. Please explain the Extended Day-Ahead Market.

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. Prior to the operating hour, the WEIM examines whether a balancing authority area (BAA) can meet its own native resource-load balance by testing the resource plan against the

[5] https://www.westerneim.com/Pages/About/QuarterlyBenefits.aspx.

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. What sets the EDAM apart from the current CAISO day-ahead market paradigm?

A. All voluntary EDAM participants will show their entire resource and transmission portfolio for the day-ahead market to optimize in parallel with their resource plan. As discussed above, the EDAM includes a resource sufficiency evaluation, which tests if an EDAM participant can meet its own native requirements prior to conducting market transfers for the EDAM footprint. This paradigm sets EDAM participation apart from other day-ahead market structures as it tests a BAAs ability to meet its forward obligations ahead of the real-time market. The transmission showing equips the market optimization with the necessary information to conduct feasible market transfers with other EDAM participants by economically committing resources through the CAISO’s security constrained economic dispatch mechanism. EDAM prerequisites mandate that all EDAM participants must also participate in the WEIM, as the EDAM market awards serve as the baseline for meeting demand across the EDAM footprint come real-time. The day-ahead and real-time efficiencies merge creating a symbiotic relationship between EDAM and WEIM leading to increased reliability, economic benefits to customers, and regional coordination for the entire market.

Q. Why did PacifiCorp decide to join the EDAM specifically?

A. The most important driver of the Company's decision was the ability to achieve additional savings for customers and enhance reliability as the West continues to integrate variable energy resources at a high rate. PacifiCorp evaluated other day-ahead market offerings and concluded that the EDAM design was superior as it built on the existing infrastructure of the WEIM. The WEIM has proven to be a competitive and successful market offering and provided substantial cost savings to PacifiCorp customers. PacifiCorp determined it would be a disservice to its customers if the Company did not pursue the CAISO's EDAM.

The EDAM is the best option for an inclusive market in the West that will leverage the greatest possible transmission connectivity, load and resource diversity while reducing emissions utilizing zero-fuel cost resources available in the market. As discussed above, since its inception, the WEIM has delivered $938.1 million in savings to PacifiCorp customers and the EDAM participation benefit analysis conducted in 2024 estimates that PacifiCorp's customers are expected to benefit from $359 million in annual savings in addition to an estimated nine terawatt-hours of reduced renewable energy curtailment across the study footprint in 2032.[6] These estimated benefits are incremental to the benefits from the WEIM, all of which contribute to offsetting the increasing price pressure on our retail customers. Akin to

[6] https://www.brattle.com/wp-content/uploads/2023/04/Brattle-EDAM-Simulations-PacifiCorp-Results-2024-Updated-IRP.pdf Actual EDAM benefits will be driven by transmission connectivity and load and generation resource diversity. The estimated benefits are based on the September 2024 EDAM benefits study, which studies a market footprint of CAISO, PacifiCorp, Idaho Power, NV Energy, LADWP, BANC, PGE and Seattle City and Light with loads, generation resources, and transmission expected to be in service based is 2032.

the WEIM, it should be expected for market benefits to grow commensurate with market participation.

Q. How might future EDAM participation impact NPC allocations in Phase 2 of the2026 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, therefore NPC allocations will continue to use the spreadsheet method as noted above. However, in Phase 2 EDAM settlements will enable the Company to track NPC per unique generation portfolios. For example, Washington would be allocated the fuel costs, purchased power costs, and wholesale sale revenues associated with its generation portfolio. Washington 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 PacifiCorp's system. This cost or credit for Washington 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 opine on using EDAM to track NPC for Washington. I anticipate multiple workshops on this subject and more robust testimony will accompany any filing asking to implement this as part of Phase 2.

V. CONCLUSION

Q. Please summarize and conclude your testimony.

A. In summary, the 2026 Protocol provides Washington customers with a static generation portfolio that results in greater resource adequacy and less market reliance that under the WIJAM. Additionally, the changes to the risk management policy allow for the Company to address resource adequacy risk and price risk on a Washington specific basis in a manner that is compliant with CETA. I recommend that the Commission approve the 2026 Protocol as just and reasonable for Washington customers.

Q. Does this conclude your direct testimony?

A. Yes.