Docket No. UE 433 Exhibit PAC/1800 Witness: Anna DeMers

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Direct Testimony of Anna DeMers

February 2024

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ATTACHED EXHIBIT

PAC/1801—Proposed Capacity Reservation Charge and Excess Demand Charge

1		I. INTRODUCTION AND QUALIFICATIONS
2	Q.	Please state your name, business address, and current position with PacifiCorp
3		d/b/a Pacific Power (PacifiCorp or Company).
4	A.	My name is Anna DeMers, and my business address is 315 W. 27th Street, Cheyenne,
5		Wyoming, 82001. I am a Senior Customer Regulatory Specialist for PacifiCorp.
6	Q.	Please describe your education and professional experience.
7	A.	I hold a Bachelor of Science degree in civil engineering with a minor in Spanish
8		language and literature, and a Master of Science degree in environmental engineering
9		from the University of Wyoming. Before joining PacifiCorp in January of 2023, I
10		worked for the Wyoming Office of Consumer Advocate (OCA) and had previously
11		held engineering and environmental science positions for private industry and state
12		government.
13	Q.	Have you testified in previous regulatory proceedings?
14	A.	Yes, during my time working for the OCA I served as an expert witness and
15		represented the interests of Wyoming citizens in cases involving regulated industries
16		before the Wyoming Public Service Commission. However, I have not previously
17		testified on behalf of PacifiCorp, or before the Public Utility Commission of Oregon
18		(Commission).
19	Q.	Have you filed any exhibits to support your testimony?
20	A.	Yes. Exhibit PAC/1801 shows the calculation of the Capacity Reservation Charge
21		and the Excess Demand Charge. Workpapers showing how these charges were
22		calculated are included with the workpapers of Company witness Robert M.
23		Meredith. Modifications to tariff language proposed in my testimony are included in

1		Exhibit PAC/1901 of Company witness Meredith's testimony, and include changes to
2		Rule 1, Rule 13, and Schedule 300.
3		II. PURPOSE OF TESTIMONY
4	Q.	What is the purpose of your testimony in this case?
5	A.	The primary purpose of my testimony is to introduce and support several policies
6		PacifiCorp proposes to implement that would affect very large customers. These
7		proposed policies include changes to how the Company manages system capacity and
8		load requests, including creating a Capacity Reservation Charge and an Excess
9		Demand Charge. I also introduce other proposed modifications to the tariff in my
10		testimony including an extension to the period during which large customers are
11		eligible for Line Extension Refunds (Refunds), a change to the Company's definition
12		of Extension Limits, a change in the timing when Line Extension Advances
13		(Advances) are paid by large customers, and new defined terms that the Company
14		proposes to add to its tariffs.
15	Q.	What characteristics is the Company using to define very large customers in the
16		context of your testimony?
17	A.	Proposed policy changes discussed in my testimony are intended to apply to
18		customers with loads greater than 25,000 kilowatts (kW), unless otherwise stated. As
19		a result of a recent Company filing that was approved by the Commission, ¹ this
20		definition of very large customers is used to differentiate between customers when
21		determining Line Extension Allowance amounts in PacifiCorp's Oregon Rule 13 –
22		Line Extensions.

¹ Order No. 23-472 issued on December 12, 2023, in Docket No. UE 424.

1	Q.	Why is it justifiable to create policies that only affect very large customers?
2	A.	Very large customers are distinct from other customers in significant ways. Most
3		relevant to this testimony, the load requests of very large customers are extremely
4		impactful to the Company's long-term transmission and generation planning.
5		Transmission and generation investments necessary to serve very large customers
6		present sizeable stranded asset risks on a per-customer basis. The policies the
7		Company is proposing in this testimony would provide a just and reasonable way to
8		help limit the risk very large customers pose to other customers by ensuring that very
9		large customers are allocated all costs associated with Reserved Capacity.
10		III. CAPACITY RESERVATION CHARGE
11	Q.	What is Reserved Capacity?
12	A.	Reserved Capacity is the capacity reserved for a new or expanding customer, as
13		specified in written agreements.
14		Customers provide load requirement estimates when requesting service from
15		the Company. Sometimes a customer's total load will fully materialize shortly after
16		energization-effectively coming online all at once. However, it is more common for
17		very large customers to plan to incrementally increase their load over time, and load
18		requests provided to the Company frequently include planned load ramps.
19		When the Company receives a service request from a very large customer,
20		representatives from the Company meet with the customer to ensure that the
21		customer's load estimate is realistic, and to discuss capacity availability at the
22		requested grid interconnection point. These conversations ultimately lead to an

- agreement between the Company and customer that specifies the Customer's
 Reserved Capacity.
- 3 Q. What are the impacts of Reserved Capacity?

4 A. Load projections provided to the Company when a customer requests service are 5 incorporated into the Company's forecasts and used to plan system transmission and 6 generation investments. Investments to expand system capacity are lumpy and are 7 often made well in advance of additional load coming online—long before there is 8 offsetting revenue from rates to recover the cost of these investments. Additionally, 9 Reserved Capacity affects the load interconnection queue and may delay or prevent 10 other shovel-ready customers from being able to receive service. It also affects the 11 sizing of line extension facilities and may cause subsequent customers to trigger 12 network upgrades, increasing line extension costs for the customer requesting service 13 as well as possibly also directly increasing the cost for subsequent customers to 14 connect to PacifiCorp's system.

15 In a recent proceeding, the Company proposed and the Commission approved 16 to limit the Line Extension Allowance for customers requiring more than 25,000 kW to the cost of metering necessary to measure customer energy usage.² This change 17 18 directly allocated some of the costs of Reserved Capacity to very large customers and 19 has greatly mitigated the risks to other customers of stranded line extension costs 20 directly caused by very large customers. However, other risks of Reserved Capacity 21 persist, including the risk to other customers of stranded upstream transmission and 22 generation investments made to serve very large customers.

² Order No. 23-472 issued on December 12, 2023, in Docket No. UE 424.

1	Q.	How is Reserved Capacity treated under the existing tariff?
2	A.	PacifiCorp's Oregon Rule 13 – Line Extensions, Section III.D, obligates the
3		Company to reserve capacity for customers at least equal to the maximum recorded
4		and billed consumer demand in the most recent 36 months. Under the existing tariff,
5		customers that receive retail electric service from the Company are billed based on
6		their actual energy usage. Customers are not charged for unused capacity on
7		PacifiCorp's system that is reserved for them (Excess Reserved Capacity).
8	Q.	Why does the Company believe the existing mechanisms to manage Reserved
9		Capacity in the tariff are inadequate?
10	А.	Load projections provided to the Company at the time that line extensions are
11		requested frequently overestimate the load customers will ultimately use, particularly
12		for very large customers with load ramping schedules that forecast the customer's
13		load requirements years into the future. The existing tariff does not provide a means
14		to recover the costs of Excess Reserved Capacity from customers in the 36-month
15		interim before Reserved Capacity may be reduced, or to allow customers to choose to
16		pay for the continued availability of Reserved Capacity after the 36-month period.
17		Therefore, customers with loads less than their Reserved Capacity are not accurately
18		allocated the costs that they create, but also do not have the option to preserve
19		capacity they have requested if business or operational delays prevent them from
20		ramping according to their original estimated load projections.
21		More robust tools are needed to manage Excess Reserved Capacity, and to
22		directly allocate the costs of Excess Reserved Capacity to individual customers that
23		create these costs, than what the tariff currently provides. The tariff changes and

1		charges proposed by the Company will increase the ability of the Company and
2		customers to efficiently manage Reserved Capacity.
3	Q.	What is the proposed Capacity Reservation Charge and how would it be
4		calculated?
5	A.	The proposed Capacity Reservation Charge is a charge that would be applied to all
6		kilowatts of Excess Reserved Capacity as part of the monthly bills of affected
7		customers. The proposed Capacity Reservation Charge is \$4.91 per kW. The Capacity
8		Reservation Charge would be the same amount for all applicable customers and
9		would be set to recover the Federal Energy Regulatory Commission (FERC)
10		transmission function revenue requirement plus 11.5 percent of fixed generation
11		costs.
12	Q.	Why does the Company propose setting the Capacity Reservation Charge to
12 13	Q.	Why does the Company propose setting the Capacity Reservation Charge to recover the FERC transmission function revenue requirement?
	Q. A.	
13		recover the FERC transmission function revenue requirement?
13 14		recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue
13 14 15		recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue requirement because transmission facilities are built to meet peak demand. The
13 14 15 16		recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue requirement because transmission facilities are built to meet peak demand. The Company will incur the cost of building facilities capable of transporting energy to
13 14 15 16 17		recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue requirement because transmission facilities are built to meet peak demand. The Company will incur the cost of building facilities capable of transporting energy to fully serve the customer's Reserved Capacity whether the customer uses electricity or
 13 14 15 16 17 18 	A.	recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue requirement because transmission facilities are built to meet peak demand. The Company will incur the cost of building facilities capable of transporting energy to fully serve the customer's Reserved Capacity whether the customer uses electricity or not.
 13 14 15 16 17 18 19 	A.	recover the FERC transmission function revenue requirement? The Company proposes charging customers the FERC transmission function revenue requirement because transmission facilities are built to meet peak demand. The Company will incur the cost of building facilities capable of transporting energy to fully serve the customer's Reserved Capacity whether the customer uses electricity or not. Why is the Company proposing to recover 11.5 percent of the cost of fixed

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generation facilities, are incurred as a direct result of Reserved Capacity and the Company's long-term load forecasts.

The Company's proposal to charge customers 11.5 percent of fixed generation 3 4 costs is based on the Company's planning reserve margin. The Company is required 5 to have sufficient electricity available to serve unexpected changes in energy supply 6 and demand such as fluctuations in energy usage, and so it plans for a 13 percent 7 planning reserve margin. Therefore, the Company plans to have capacity available to serve 113 percent of the annual peak load it has forecasted. Recovering the cost of 8 9 planning uncertainty from customers with Excess Reserved Capacity is reasonable, 10 because the Company has forecast for customer loads in its planning and those loads 11 have not shown up. Thirteen percent of 113 percent is 11.5 percent.

12 Q. Which customers would be required to pay the Capacity Reservation Charge?

13 Customers with total expected loads exceeding 25,000 kW would be required to pay A. 14 the Capacity Reservation Charge for Excess Reserved Capacity. As explained earlier 15 in my testimony, very large customers acutely impact Company transmission and 16 generation facility planning. Additionally, both because of the scale of their 17 operations and the lead times required to build line extension and other electric 18 infrastructure to serve them, very large customers frequently forecast their energy 19 needs years into the future and are likely to require Reserved Capacity. Forecasting 20 energy needs years in advance reduces the accuracy of load forecasts. Obviously, as a 21 forecast is made further out in time, there are more factors that may affect a 22 customer's ultimate energy needs. The long lead times on building Company 23 infrastructure also influence customers to overestimate their load requirements so that

they will not be forced to wait years for additional capacity if their initial forecasts are
 too conservative.

3		Additionally, limiting the requirement to pay this charge to very large
4		customers provides the ancillary benefit of simplifying billing and implementation of
5		this policy, while still greatly benefiting and improving the efficiency of PacifiCorp's
6		system as very large customers have the greatest per-customer impact on system
7		planning.
8		Permanently opted-out direct access customers would not be subject to the
9		Capacity Reservation Charge, because the Company does not plan for these
10		customers in its forecasts or purchase transmission rights to serve them.
11	Q.	Is the Company proposing any limitations on the ability of customers to change
12		Reserved Capacity after energization?
13	A.	Yes. The Company has included proposed tariff language that would limit how
14		quickly customers may reduce Reserved Capacity. As proposed by the Company,
15		each customer would be permitted to reduce Reserved Capacity by up to 10 percent
16		of the customer's total load per year or 50 megawatts per year, whichever is smaller,
17		or by a larger amount if mutually agreed upon by the customer and the Company.
18		Limiting how quickly a customer may reduce Reserved Capacity provides the
19		Company time to adjust system investment planning in response to changes in
20		requested customer load, and encourages customers to provide accurate load requests
21		when requesting service. The Company also included proposed tariff language stating
22		requests to increase Reserved Capacity may be considered at the Company's
23		discretion.

2		Capacity Reservation Charge?
3	А.	The Company has the right to revoke unused capacity under the existing tariff, and
4		smaller customers may wish to maintain flexibility to pay to keep Reserved Capacity
5		in lieu of the Company exercising this right. Therefore, the Company proposes that
6		Customers requiring more than 1,000 kW but less than 25,000 kW should have the
7		option to pay the Capacity Reservation Charge to maintain Excess Reserved Capacity
8		on PacifiCorp's system.
9	Q.	Does the Company plan to treat existing and new customers the same when
10		calculating the Capacity Reservation Charge?
11	А.	No. Excess Reserved Capacity would be calculated differently for existing and new
12		customers. For customers that signed contracts with the Company prior to January 1,
13		2025, Excess Reserved Capacity would be calculated based on the maximum
14		recorded and billed consumer demand in the most recent 36 months. For new
15		customers, it would be based on the maximum recorded and billed consumer demand
16		in the most recent 12 months.
17	Q.	Why would there be different treatment of legacy and non-legacy customers
18		under contract load requests?
19	А.	Existing customers entered into service agreements with the Company with the
20		understanding that they would have 36 months to use Reserved Capacity before it
21		would be reclaimed by the Company. The Company proposes to only reduce this time
22		limit to 12 months for new customers to reduce overplanning and overbuilding by the

Will any other customers be affected by the Company's proposal to create a

Direct Testimony of Anna DeMers

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Q.

1		Company, while continuing to honor the tariff terms that were in place to preserve
2		Reserved Capacity when existing customers signed service agreements.
3	Q.	Does the Company anticipate additional benefits from creating the Capacity
4		Reservation Charge?
5	A.	Yes. Creating a charge to allocate the costs of Excess Reserved Capacity to individual
6		customers will provide an accurate price signal which may encourage customers to
7		improve the accuracy of load requests provided to the Company, or to relinquish
8		unneeded Excess Reserved Capacity that they hold. These actions on the part of
9		customers could reduce the Company's system costs and could free up unused
10		capacity so that the Company can provide service to new customers which it would
11		otherwise be unable to immediately serve.
12	Q.	When would the Company begin charging customers a Capacity Reservation
13		Charge?
14	A.	The Company believes it is reasonable to provide at least six months for existing
15		customers to request to reduce their Reserved Capacity before charging customers for
16		Excess Reserved Capacity. Therefore, the Company proposes to begin charging
17		customers a Capacity Reservation Charge on July 1, 2025, which is six months after
18		the expected effective date of this general rate case.
19		IV. EXCESS DEMAND CHARGE
20	Q.	Why is the Company proposing to create an Excess Demand Charge?
21	A.	System costs are minimized when the Company has accurate load forecast
22		information. The Capacity Reservation Charge may encourage customers not to
23		overestimate their load requirements. Conversely, the creation of an Excess Demand

1		Charge would ensure that customers do not underestimate their needed load and
2		operate their facilities within the bounds of their load request.
3	Q.	How would the Excess Demand Charge be calculated?
4	А.	As explained above, the Company plans to charge customers an Excess Demand
5		Charge when a customer's load exceeds forecasts stipulated in written agreements.
6		Under these circumstances, the Company would not be able to anticipate the need for
7		additional capacity and additional transmission rights. Depending on when a
8		customer's energy use exceeds their Reserved Capacity, the Company may incur
9		higher power costs. More dire outcomes may result when load forecasts are exceeded
10		under extreme circumstances, and the reliability of PacifiCorp's system could be
11		compromised.
12		Because of the negative outcomes possible when system load exceeds the
13		Company's forecast, the Company proposes to set the Excess Demand Charge as a
14		multiple of the Capacity Reservation Charge. The Company is proposing an Excess
15		Demand Charge of \$19.64 per kW, which is equal to four times the Capacity
16		Reservation Charge.
17	Q.	Which customers would be required to pay an Excess Demand Charge?
18	А.	Customers required to pay a Capacity Reservation Charge would also be subject to an
19		Excess Demand Charge. Customers requiring more than 25,000 kW would
20		automatically be billed this charge when their maximum demand exceeds their
21		Reserved Capacity. Permanently opted-out direct access customers would not be
22		subject to an Excess Demand Charge.

1	Q.	When would the Company begin charging customers an Excess Demand
2		Charge?
3	А.	The Company proposes to begin charging customers an Excess Demand Charge on
4		July 1, 2025, to provide time for customers to adjust their operation and business
5		practices to curb demand which exceeds the customer's Reserved Capacity.
6		V. REFUND ELIGIBILITY
7	Q.	What are Line Extension Refunds?
8	А.	A Line Extension Refund is a pass-through between customers which is collected by
9		the Company. Line Extension Refunds are used to reimburse initial customers who
10		paid for the cost of line extension facilities with an Advance when those line
11		extension facilities benefit subsequent customers. In Oregon Rule 13, Line Extension
12		Refunds are limited to three customers during the first five years after construction
13		for all eligible customers.
14	Q.	Please explain the Company's proposed changes to Refund eligibility for very
15		large customers.
16	А.	Interested Parties to docket UE 424 suggested that Line Extension Refund limitations
17		in the Company's tariff should be reduced for very large customers. Unlike other
18		nonresidential customers requesting distribution-voltage service, new line extension
19		applicants requiring more than 25,000 kW are no longer eligible for a Line Extension
20		Allowance equal to a multiple of their revenue following the Commission's approval
21		of the Company's proposal in docket UE 424. Consequently, the potential impact of
22		Line Extension Refund policy on these customers is more significant than it is on
23		smaller customers because very large customers pay a larger Advance. Additionally,

1		the five-year limitation on Refunds is not appropriate for very large customers since it
2		sometimes takes several years to build line extension facilities to serve subsequent
3		customers with very large load requests that may owe a Refund to the initial
4		customer. Therefore, the Company proposes to increase the window during which
5		very large customers are eligible for Refunds from five years to 10 years.
6		VI. ADDITIONAL TARIFF CHANGES
7	Q.	Is the Company proposing any additional changes to tariff rules that you are
8		presenting in your testimony?
9	A.	Yes. The Company is proposing to add language to Rule 13 to formalize the
10		Company's ability to consider whether a load request is speculative when evaluating
11		the customer interconnection queue, and to change the definition of Transmission
12		Voltage in the tariff to service at or above 46,000 volts. The Company is also
13		proposing to eliminate language in the tariff which permits customers requiring more
14		than 1,000 kW to pay only half of the Line Extension Advance prior to construction.
15	Q.	Why is the Company proposing to add language to Rule 13 to address treatment
16		of speculative load requests?
17	A.	The Company is receiving a number of very large load requests that it considers
18		speculative, and that may not produce sufficient revenues to justify Company
19		investments made to serve them. Examples of speculative load requests received by
20		the Company include requests for cryptocurrency mining, for large loads to serve
21		novel technologies, and load requests for data center capacity to be subleased without
22		contracted recipients for energy at the time of the line extension request.
23		The Extension Limits definition in the Oregon Rule 13 – Line Extensions

1 states that the provisions of the Rule do not apply to projects that will not have 2 sufficient revenues to cover ongoing costs, but it doesn't clarify what is meant by 3 sufficient revenues. In other states that PacifiCorp serves, the tariff clarifies that the 4 Company may make special considerations for handling speculative load requests. 5 The Company believes adding similar language to Oregon's tariff is appropriate to 6 clarify what is meant by sufficient revenues and that the Company may consider the 7 risk of stranded investments that customers present to the system when evaluating 8 customer line extension treatment and the load request queue.

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Q.

limitations that is specific to the load request queue?

Is the Company proposing to add any tariff language addressing load request

11 A. Yes. The Company proposes to add language to Section III.D of Oregon Rule 13 – 12 Line Extensions to establish tariff limitations on load requests that the Company will 13 consider including in the load request queue. This proposed language explains to 14 customers that the Company considers available system capacity at requested 15 interconnection points when evaluating load requests, and that requests may be 16 denied if capacity is not available. This provision protects the Company and 17 customers from the need to greatly invest in expanding capacity at highly congested 18 interconnection points, and may encourage customers to request service at site 19 locations with available existing capacity to increase system planning efficiency. The 20 proposed language in this section also creates additional restrictions on load requests 21 that are five years in the future. Generally, the further out the planning horizon, the 22 more speculative planning for individual customers becomes.

1	Q.	Why is the Company proposing to reduce the threshold for what is considered
2		transmission voltage in the tariff?

- 3 A. The voltage considered Transmission Voltage varies across PacifiCorp's six-state 4 service territory as a legacy of historical local grid operating conditions. The 5 Company proposes changing the voltage defined as Transmission Voltage in Rule 1 6 and subsection III.A of Rule 13 from 57,000 volts to 46,000 volts to ensure 7 consistency in the Company's tariffs in the different jurisdictions where it operates. 8 This change to the Oregon tariff definition is for clarification and consistency only 9 and is not anticipated to result in any changes to actual operation or to customer bills. 10 Q. Please explain the proposed tariff change to the Line Extension Advances of 11 customers requiring more than 1,000 kW. 12 Under the existing tariff, all customers except customers requiring more than A. 13 1,000 kW are required to pay the full Line Extension Advance prior to construction. 14 Customers requiring more than 1,000 kW are required to pay 50 percent of the
- Advance when the line extension agreement is executed, and 50 percent uponcompletion of construction.
- With larger customer loads, it becomes more costly to provide service to that customer and the risk of stranded asset creation associated with beginning construction on line extension facilities to serve that customer is greater. Existing tariff provisions that create less strict Line Extension Advance payment timelines for customers requiring 1,000 kW or greater compared to smaller customers do not reflect the relative risk that large customers present when the Company begins building line extension facilities to serve them compared to smaller customers.

1		Therefore, the Company proposes to require all customers to pay the full Line	
2		Extension Advance prior to construction, as a later payment schedule for customers	
3		requiring 1,000 kW or greater is not justifiable.	
4		VII. CONCLUSION	
5	Q.	Please summarize your testimony.	
6	A.	Creating a Capacity Reservation Charge and an Excess Demand Charge will improve	
7		system planning by incentivizing very large customers to provide accurate load	
8		forecasts, and to relinquish unused capacity. Additionally, these charges will improve	
9		fixed cost allocation by appropriately charging very large customers for the costs of	
10		reserving capacity. Creating a Capacity Reservation Charge and an Excess Demand	
11		Charge is just, reasonable, and in the public interest. For these reasons, the Company	
12		requests the Commission to approve the implementation of these charges, in addition	
13		to other refinements to the Company's tariff explained in this testimony.	
14	Q.	Does this conclude your direct testimony?	

15 A. Yes.

Docket No. UE 433 Exhibit PAC/1801 Witness: Anna DeMers

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFICORP

Exhibit Accompanying Direct Testimony of Anna DeMers

Proposed Capacity Reservation Charge and Excess Demand Charge

February 2024

Pacific Power State of Oregon

Calculation of Proposed Capacity Reservation Charge and Excess Demand Charge Based on Proposed Revenues for Primary and Transmission Customers 1MW and Over

Transmission & Ancillary Services, revenues for proposed rates	\$24,347,442
Base Generation (Schedule 200), revenues for proposed rates 11.5% of Base Generation revenues	\$90,977,830 \$10,462,450
Total for Calculation	\$34,809,892
kW Billing Demand	7,085,816
Capacity Reservation Charge (\$/kW)	\$4.91
Excess Demand Charge (4 x Capacity Reservation Charge)	\$19.64