Docket No. UE 433 Exhibit PAC/1400 Witness: Allen Berreth

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFICORP

Direct Testimony of Allen Berreth

February 2024

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1		I. INTRODUCTION AND QUALIFICATIONS
2	Q.	Please state your name, business address, and present position with PacifiCorp
3		d/b/a Pacific Power (PacifiCorp or the Company).
4	A.	My name is Allen Berreth. My business address is 825 NE Multnomah Street, Suite
5		1700, Portland, Oregon 97232. My present position is Vice President of Transmission
6		and Distribution Operations for PacifiCorp. I am responsible for the departments that
7		support the operations, maintenance, and construction of PacifiCorp's transmission
8		and distribution systems; such as Asset Management, Investment Delivery, Finance,
9		Real Estate, GIS, Facilities, Vegetation Management, and Wildfire Mitigation
10		Planning.
11	Q.	Briefly describe your education and professional experience.
12	A.	I have a Bachelor of Science degree in Electrical Engineering with a focus in electric
13		power systems from the University of Idaho and a Masters of Business
14		Administration from Utah State University. I have been Vice President of
15		Transmission and Distribution Operations since October 2020. Prior to my current
16		position, I have held positions in delivery assurance, asset management, work
17		planning, business improvement, and field engineering since joining PacifiCorp in
18		1998.
19	Q.	Have you testified in previous regulatory proceedings?
20	A.	Yes, I have testified previously in California, Oregon, and Washington.
21		II. PURPOSE OF TESTIMONY
22	Q.	What is the purpose of your testimony?
23	A.	The purpose of my testimony is to describe PacifiCorp's wildfire related transmission

and distribution investments and vegetation management expenses included in this rate case. I support the Company's incremental investments in wildfire mitigation to address the risks posed by the increased frequency, severity, and costs of wildfires to customers, employees, and Company facilities. While most of these costs are now recovered through the ongoing Wildfire Mitigation Plan (WMP) Automatic Adjustment Clause (AAC), there are certain costs that are not recovered in that mechanism that are recovered in this case. My testimony also supports the baseline vegetation management spend. Additionally, my testimony discusses and supports the inclusion of the restoration costs for the 2020 Labor Day wildfires. Finally, I describe the Company's investment in the Juniper Ridge Bend Service Center. I recommend that the Public Utility Commission of Oregon (Commission) approve these new investments and proposed changes as prudent and in the public interest.

III. BACKGROUND ON WILDFIRE RISK IN OREGON

- Q. How have the risks associated with wildfires evolved in PacifiCorp's service territories?
- 16 A. There has always been some degree of wildfire risk across PacifiCorp's service
 17 territories, including in Oregon. This risk is inherent to operating an electric utility
 18 and is elevated for utilities in the Western United States where climates are arid
 19 year-long in some areas, or seasonally in others. However, the frequency, severity,
 20 and costs of catastrophic wildfires are increasing across the West. Recent experiences
 21 with catastrophic and tragic wildfires have resulted in an even greater focus on
 22 wildfire risk mitigation by public utilities in the region.

1 Q. Please describe Senate Bill (SB) 762 and the WMPs.¹

2 A. On July 19, 2021, Governor Brown signed SB 762 into law. SB 762 requires that 3 public utilities file with the Commission risk-based WMPs that include means for mitigating wildfire risk, balancing costs with the resulting reduction of risk, and 4 5 preventive actions and programs to minimize risk of utility facilities causing a wildfire.² This law allows for recovery of all reasonable costs and prudent 6 7 investments made by a public utility to implement a WMP and also allows for the recovery of those costs through an automatic adjustment clause.³ Following SB 762, 8 PacifiCorp filed its first WMP on December 30, 2021.⁴ 9

10 Q. What are the elements of the WMP?

PacifiCorp is adapting to the changes in wildfire risk through adoption of accelerated and enhanced wildfire mitigation measures that conform with Oregon legislation, including SB 762, for utility wildfire mitigation. PacifiCorp identified key goals to help inform its wildfire mitigation approach: 1) minimize the risk of wildfires from PacifiCorp equipment; 2) promptly address any problems attributed to PacifiCorp equipment if they do occur; 3) be prepared to address wildfires from other sources; and 4) respond when a wildfire puts utility equipment at risk. PacifiCorp took these goals and engaged in an extensive modeling process to develop a risk-based approach to achieving them. This risk-based approach facilitates smart investments targeted to places on PacifiCorp's system where they will have the most impact and ensures that

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¹ Per formal rulemaking and OAR 860-300-0020, the Wildfire Protection Plan is now referred to as the Wildfire Mitigation Plan.

² See ORS 757.963.

³ ORS 757.963(8).

⁴ See UM 2207. Since 2021 the Company has filed a WMP annually with the most recent WMP filed on December 29, 2023.

	PacifiCorp's human capital is also deployed in areas where they will have the greatest
	impact. These targeted investments are incremental to PacifiCorp's investment in the
	ordinary course of its business and will meaningfully reduce the wildfire risk on the
	Company's system.
Q.	Please describe how the risk of wildfire has been modeled in PacifiCorp's service
	territory.
A.	PacifiCorp recognizes that if certain weather and fuel conditions are present, a
	disruption of normal operations on the electrical network, called a "fault", can result
	in the ignition of a fire. Under certain weather conditions and in the vicinity of
	wildland fuels, such an ignition can grow into a harmful wildfire, potentially even
	growing into a catastrophic wildfire causing great harm to people and property.
	PacifiCorp's risk analysis reviews fire history, the recorded causes of the fires, the
	acreage impact of the fires, and when in the year the fires typically occur. Using that
	information, the risk analysis identifies the logic for a risk-informed method to
	strategically address utility wildfire risks.
	IV. WILDFIRE MITIGATION CAPITAL COSTS
Q.	Please explain how the Company recovers costs for the implementation of the
	WMP.
A.	The majority of costs for the implementation of PacifiCorp's WMP are recovered
	through the WMP AAC.
	A. Q.

1 Q. Please explain the WMP AAC that was approved by the Commission in docket 2 **UE 407.**⁵ 3 The Company makes an annual advice filing adjusting Schedule 190 rates to reflect A. collection for the Company's WMP Oregon capital investments, projections of WMP 4 5 incremental costs for the coming year, as well as incorporating any variances from the 6 previous year. The forecast WMP expense for the next calendar year is based on the 7 annual WMP. The residual amounts in the balancing account may result in an 8 increase or a decrease in the amounts to be collected through the adjustment 9 schedule. The combined forecast amounts, capital investments plus residual balance 10 amount, is the total amount to be collected through Schedule 190 rates for the year. 11 Q. Are there certain costs associated with the WMP that are not recovered through 12 the WMP AAC? Yes. Consistent with the agreement with staff reached in Advice No. 23-015 (ADV 13 A. 14 1529) and approved by the Commission on January 9, 2024, capital costs associated 15 with wildfire mitigation activities for transmission lines located outside the state of 16 Oregon and certain costs related to indirect capital loadings were removed from the 17 WMP AAC and will be recovered in this proceeding. While Company witness 18 Sherona L. Cheung will address how wildfire mitigation capital costs, including 19 capital loadings, are reflected in this case in her testimony, I describe the transmission 20 investments outside of Oregon in greater detail below.

⁵ In the Matter of PacifiCorp, dba Pacific Power, Application for Approval of an Automatic Adjustment Clause for Recovery of Costs Associated with the Company's Wildfire Protection Plan; Docket No. UE 407, Order 23-173 (May 10, 2023).

1	Q.	Please identify the amount of capital investment the Company is seeking to		
2		recover for wildfire mitigation investments in transmission lines outside the state		
3		of Oregon.		
4	A.	The Company is seeking to recover \$14.9 million of project costs on an Oregon-		
5		allocated basis.		
6	Q.	Can you provide a brief explanation of the types of investments that are included		
7		in this amount?		
8	A.	Yes, these investments represent rebuilding transmission lines with the installation of		
9		new equipment such as poles, insulators, and conductor. Rebuilding transmission		
10		lines in areas where the wildfire risk is heightened allows PacifiCorp to improve		
11		structures which will reduce the probability of a fault event and improve resiliency to		
12		the extent rebuilt structures can better withstand wildfire events.		
13	Q.	Do these investments benefit PacifiCorp's Oregon customers and help reduce		
14		wildfire risk across PacifiCorp's system?		
15	A.	Yes, rebuilding transmission lines helps to reduce equipment failures and incidental		
16		contacts that pose a risk of wildfire ignition. Such equipment failures, while		
17		infrequent occurrences, could result in substantial arc energy that can result in		
18		wildfire ignition. Due to the cross-country nature of many portions of PacifiCorp's		
19		system the risk of ignition sources is heightened. Maintaining a resilient transmission		

system benefits all states that PacifiCorp serves as it allows power to be moved from

the location of generation to the communities served.

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2	Q.	Is PacifiCorp proposing an increase in baseline vegetation management costs?
3	A.	Yes. PacifiCorp's forecast costs in this case reflect updates to the expenses PacifiCorp
4		has seen over the past year to meet its vegetation management goals and reflect the
5		ongoing cost to implement PacifiCorp's vegetation management program outside the
6		scope of the wildfire mitigation spending covered under SB 762 implementation.
7	Q.	Is there an incremental impact of these costs on the operation and maintenance
8		(O&M) included for vegetation management in base rates?
9	A.	PacifiCorp is proposing to increase baseline O&M for vegetation management from
10		\$50 million to \$67 million.
11	Q.	What steps did the Company take to control costs while still achieving the goals
12		of the program from the last general rate case?
13	A.	PacifiCorp implemented two strategies for cost control and delivering on the goals of
14		the vegetation management program as described above. The first strategy was to
15		increase the number of internal Company foresters that coordinate the vegetation
16		management activity within a geographic area. This increased oversight of both
17		program efficiencies and deliverables. The second strategy was to implement an
18		internal vegetation management audit team to bolster the quality assurance reviews of
19		the program. This helped drive program performance in terms of productivity,
20		efficiency, and cost of program deliverables.
21	Q.	Has PacifiCorp seen improvement in outcomes for the Company's vegetation
22		management programs?
23	A.	Yes, through increased vegetation management activities and quality control audits of

VEGETATION MANAGEMENT

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1		the vegetation management program through forester interaction and oversight of
2		contractors the number of internal audit findings resolved has increased resulting in a
3		decrease of the number of probable violations identified in the Oregon Public
4		Commission annual audit.
5	Q.	Is PacifiCorp proposing to continue the Wildfire Mitigation and Vegetation
6		Management (WMVM) adjustment mechanism?
7	A.	Yes. In Order No. 22-491 the Commission approved the current structure of the
8		WMVM. PacifiCorp proposes to continue the use of this mechanism until its next
9		general rate case.
10		VI. 2020 WILDFIRE RESTORATION COSTS
11	Q.	Can you please describe the 2020 wildfires?
12	A.	At the beginning of September 2020, a historic wind event resulted in a number of
13		wildfires spreading across Oregon causing widespread and extensive damage in and
14		around PacifiCorp's service territory. Areas affected by the fires include western
15		Oregon counties where the Company provides service including Josephine, Jackson,
16		Douglas, Lane, Linn, Lincoln, Klamath, and Marion Counties. This event resulted in
17		widespread and extensive damage to PacifiCorp's transmission and distribution
18		facilities and resulted in loss of power to customers.
19	Q.	Can you describe the restoration activities that occurred as a result of these
20		activities?
21	A.	Yes, PacifiCorp coordinated with state and local officials to gain access and repair
22		damaged structures to restore service to its customers in those areas affected.
23		PacifiCorp incurred significant costs restoring power to customers and repairing,

- restoring, and replacing damaged equipment. The areas affected had extensive

 damage to transmission and distribution lines that required immediate reconstruction

 of burnt poles and replacement of conductors to restore vital electric service to

 communities in PacifiCorp's service territory. Over 500 field resources were deployed

 to work with public safety partners responding to the containment and reconstruction

 and restoration of communities.
- 7 Q. Can you describe the restoration and rebuild efforts that have occurred?
- 8 A. Yes, the following table provides a high-level summary of the restoration along with 9 the benefits and resiliency efforts:

District	Wildfire	Benefits
Medford	Almeda	Restore services to customers in Talent, Phoenix, Ashland, and Medford and address distribution tree removal.
Medford	South Obenchain	Restore transmission Line 19 for Prospect Hydro, and to customers in Shady Cove and Butte Falls. Address transmission rights of way vegetation and distribution tree removal.
Lincoln City	Echo Mountain	Restore transmission redundancy on Van Duzer transmission lines, address vegetation management along transmission right of way and restore customers in Otis and Neotsu, and address distribution tree removal.
Roseburg	Archie Creek	Restore Line 46 and Line 39 transmission in support of Umpqua hydro projects, address long-term vegetation management and tree removal for both rebuild and future asset protection, procure fire wrapped poles for Line 39, access management and erosion control for improved access. Restore distribution service to customers in the town of Glide.
Stayton	Beachie Creek	Restore customers on the distribution system in Mehama, Mill City, Gates, and Lyons. Address vegetation removal in support of rebuild efforts.
Grants Pass	Slater	Restore transmission on Line 33. Restore distribution service to customers in Takelma and O'Brien.
Klamath Falls	Two Four Two Fire	Restore distribution service to customers in Chiloquin and address vegetation along both distribution and transmission right of way.

10 Q. Is there work continuing in support of these activities?

11 A. Yes, of the work noted in the table above, environmental cultural studies and

1 reporting in support of vegetation management and line rebuild efforts remains for the 2 Archie Creek Fire. Ongoing service restoration will continue in all rebuild project locations as customers continue to rebuild homes and businesses that were destroyed. 3 This work is anticipated to continue through 2024. 4 5 Q. What were the costs of these activities? The costs of these activities have been deferred as identified in docket UM 2116,6 and 6 A. 7 the Company is seeking to amortize the approximately \$45.2 million in costs, before 8 interest accrual, that have been incurred through 2023. 9 Q. Please explain why it is prudent and in the public interest for PacifiCorp to 10 recover these costs. 11 A. The Company has an obligation to serve its customers and these activities were 12 necessary and reasonable to eliminate potentially hazardous conditions, repair or replace damaged facilities, and restore service to customers in the affected areas. 13 JUNIPER RIDGE BEND SERVICE CENTER 14 VII. 15 Please describe the Company's new Juniper Ridge Bend Service Center. Q. 16 The new Bend Service center includes office space, truck bays, warehouse, A. 17 meter/wireroom, mechanic shop, yard storage, parking, and conference/learning space 18 on 15 acres. The service center will be used primarily by the Company field 19 employees that provide operational support (maintenance, operations, construction of 20 the transmission, substation, and distribution electrical network) to the surrounding 21 communities.

⁶ In the Matter of PacifiCorp, dba Pacific Power, Application Deferred Accounting Related to Wildfire Damage and Restoration Costs, Docket No. UM 2116, Order Nos. 22-154 (May 9, 2022) and 22-140 (May 9, 2022).

I	Q.	Please explain why the new Juniper Ridge Bend Service Center is necessary for		
2		the Company to provide service to Oregon customers.		
3	A.	This new site will consolidate the three Bend-area operating centers (the leased Bend		
4		Service Center and Bend Metering Office, and the owned Bend Substation Ops) into		
5		one location and resolve end-of-lease risks for the current Bend Service Center and		
6		Bend Metering Office.		
7	Q.	Will the Company's new Juniper Ridge Bend Service Center lead to greater		
8		efficiency in the Company's operations?		
9	A.	Yes. The consolidated operational center creates increased collaboration, facility		
10		efficiencies (e.g., building maintenance, consolidated storage, etc.) and makes use of		
11		the previously unused Company-owned Juniper Ridge property. Consolidating		
12		multiple leased facilities into one Company-owned location reduces annual rent		
13		expense and eliminates future lease increase exposure.		
14	Q.	What is the forecast cost of the Juniper Ridge Bend Service Center and when is		
15		it expected to be placed in-service?		
16	A.	The total project is forecasted to be \$40.3 million, and is expected to be in-service by		
17		December 2024.		
18		VII. CONCLUSION		
19	Q.	Please summarize your recommendation to the Commission.		
20	A.	My testimony supports the Company's activities with regards to Wildfire Mitigation		
21		costs that are not included in the WMP AAC and the current level of appropriate		
22		non-wildfire vegetation management spend. Additionally, I support the prudence of		
23		the costs associated with the Company's restoration of power and additional capital		

- investments from the 2020 wildfires. Finally, I support the Company's investment in
- 2 the new Juniper Ridge Bend service center. I recommend the Commission approve
- 3 these investments as prudent and appropriate for inclusion for recovery in this general
- 4 rate proceeding.
- 5 Q. Does this conclude your direct testimony?
- 6 A. Yes.