Exh. RG-1T Docket UE-25___ Witness: Rohini Ghosh

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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

PACIFICORP DIRECT TESTIMONY OF ROHINI GHOSH

TABLE OF CONTENTS

I.	INTRODUCTION AND QUALIFICATIONS	1
II.	PURPOSE OF TESTIMONY	2
III.	FORECASTED CETA-COMPLIANT ENERGY	2
IV.	CLIMATE COMMITMENT ACT IMPACTS	8
V.	CONCLUSION	10

I. INTRODUCTION AND QUALIFICATIONS

- 2 Q. Please state your name, business address, and present position with PacifiCorp
- 3 d/b/a Pacific Power & Light Company (PacifiCorp or Company).
- 4 A. My name is Dr. Rohini Ghosh, and my business address is 825 NE Multnomah Street,
- 5 Suite 600, Portland, Oregon 97232. I am the Director of Clean Energy Planning at
- 6 PacifiCorp.

- 7 Q. Please describe your education and professional experience.
- 8 A. I received a Ph.D. and Master of Science degree in Economics from the University of
- 9 Wyoming and a Bachelor of Science (Honors) Degree in Economics from the
- 10 University of Nottingham. I joined PacifiCorp in February 2021. I have held previous
- roles on the integrated resource planning team and in regulation. I was involved in the
- modeling, analysis, and development of the 2021 and 2023 Integrated Resource Plans
- 13 (IRP) and all Company Clean Energy Implementation Plans (CEIP) and supporting
- filings in Washington since the inaugural 2021 filing. I also previously provided
- support for the multi-state process (MSP) and contributed to a range of other cross-
- functional initiatives, many of which pertain to clean energy planning and policy
- 17 across PacifiCorp's Western states.
- 18 Q. What are your present duties?
- 19 A. I was promoted to Director, Clean Energy Planning in July 2024. I currently oversee
- strategy, implementation, and regulatory filings for our long-term clean energy and
- decarbonization obligations in both Oregon and Washington.
- 22 Q. Have you testified in previous regulatory proceedings?
- 23 A. Yes. I have previously provided testimony in Washington.

2 Q. What is the purpose of your direct testimony in this case? 3 My testimony presents how the Washington 2026 Protocol impacts forecasted A. 4 renewable and non-emitting energy that will qualify to meet compliance obligations 5 under the Clean Energy Transformation Act (CETA). The impact compares 6 forecasted renewable and non-emitting energy for calendar year 2026, the test period 7 for the Power Cost Only Rate Case in this proceeding, with forecasted renewable and 8 non-emitting energy for calendar year 2026 under the currently approved Washington 9 Inter-Jurisdictional Allocation Methodology (WIJAM). 10 Please provide a summary of your direct testimony. Q. 11 My direct testimony shows that, all else equal, the proposed 2026 Protocol will A. 12 increase CETA-compliant renewable and non-emitting energy allocated to 13 Washington in 2026 relative to the CETA-compliant energy allocated to Washington 14 under the WIJAM. This helps progress the Company toward its clean energy goals 15 while reducing customers' reliance on market purchases and need for new, potentially 16 costlier, resources. 17 III. FORECASTED CETA-COMPLIANT ENERGY 18 0. What are the Company's obligations under CETA? 19 A. In May 2019 the Washington State Legislature passed CETA, which requires Washington electric utilities to fully transition to clean, renewable and non-emitting 20 21 resources by 2045. The legislation specifically directs utilities to: 22 1. Eliminate coal-fired resources from Washington's allocation of energy by the 23 end of 2025;1

PURPOSE OF TESTIMONY

II.

.

¹ RCW 19.405.030(1)(a).

- 2. Ensure all retail electricity sales in Washington are greenhouse-gas neutral by 2030;² and
 - 3. Ensure all retail electricity sales in Washington are sourced from 100 percent renewable and non-emitting energy sources by 2045.³

Additionally, the legislation requires that investor-owned utilities develop and implement CEIPs every four years in support of CETA's directives. CEIPs must be informed by and consistent with the Company's long-term resource plans, and should propose interim targets for meeting the greenhouse-gas neutral energy standard by 2030.

10 Q. What are interim targets?

3

4

11 Washington Administrative Code (WAC) 480-100-640(2) defines a series of "interim A. 12 targets" to be proposed by the utility that demonstrate how the utility will make 13 reasonable progress toward meeting CETA standards. Interim targets are expressed as 14 the percent of forecasted retail sales of electricity supplied by non-emitting and 15 renewable resources before 2030, and from 2030 through 2045. Forward-looking 16 interim targets have been presented in each relevant IRP and CEIP that PacifiCorp 17 has filed since its inaugural 2021 CEIP filing. 5 Beginning in 2023, PacifiCorp 18 presented its actual progress toward meeting interim targets in an annual clean energy 19 progress report.6

² RCW 19.405.040(1).

³ RCW 19.405.050(1).

⁴ RCW 19.405.060(1).

⁵ *In re* PacifiCorp's 2021 CEIP, Docket No. UE-210829 (Dec. 30, 2021) (available here: https://apiproxy.utc.wa.gov/cases/GetDocument?docID=85&year=2021&docketNumber=210829).

⁶ *In re PacifiCorp's CEIP 2023 Annual Progress Report*, Docket No. UE-210829 (Jul 3, 2023) (available here: https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/ceip/210829-PAC-CEIP-2023-Progress-Rpt-7-3-23.pdf).

	For perspective, PacifiCorp's most recent CETA progress report, the 2024
	annual progress report, showed that the Company met just over 30 percent of its
	Washington customers' retail sales with qualifying renewable and non-emitting
	energy in 2023. ⁷
^	II :- thethe

Q. How is the currently approved allocation methodology used in calculation of the Company's clean energy interim targets?

A. As explained in the testimony of Company witness Rick T. Link, the WIJAM is the Company's currently approved allocation methodology, being contrasted with the proposed 2026 Protocol.

PacifiCorp's CEIPs are based on utility IRPs—a resource procurement and planning process that forecasts future dispatch outcomes based on a portfolio of existing resources, new proxy supply-side resources, optimized demand-side management resources, and selected transmission system upgrades that are based on a set of inputs and assumptions that forecast expected future conditions. Together, this IRP modeling process represents a six-state system and produces least-cost, least-risk outcomes to ensure reliable energy is served across the system. While the IRP modeling process is continuously refined to better consider individual state obligations and policies, it is generally agnostic about multi-state cost allocation issues. That is because the IRP is not a ratemaking exercise. However, implementation of state-specific policies increasingly requires that the IRP process plan for state-specific resources, as part of the broader system, to achieve policy objectives. For example, PacifiCorp's 2023 Biennial CEIP Update assumed that all

⁷ *In re PacifiCorp's CEIP 2024 Annual Progress Report*, Docket No. UE-210829 (Jul. 1, 2024) (available here: https://apiproxy.utc.wa.gov/cases/GetDocument?docID=867&year=2021&docketNumber=210829).

resources were allocated to Washington customers in a manner that is consistent with
the currently approved WIJAM. ⁸

Applied here, to estimate future interim targets and any anticipated shortfalls
from the clean energy standards, cost allocation assumptions are applied to forecasted
generation of existing and proxy resources in the IRP process. These cost-allocation
assumptions are used to estimate how much forecasted generation on a resource-by-
resource basis is expected to serve Washington customers, from which the forecast of
CETA-compliant energy and interim targets are determined. On an actuals basis, the
same methodology is applied looking backwards—resource generation, and
associated environmental attributes, are allocated based on the cost allocation, aligned
with what is approved in rates. Any changes to the cost-allocation methodology will
impact the amount of CETA-compliant energy allocated to serve Washington.

Q. What is the impact of moving from the WIJAM to the proposed new allocation methodology on forecasted progress towards complying with CETA?

The 2026 Protocol is expected to drive changes to Washington's allocation of CETA-compliant energy in two distinct ways: 1) the fixed system factors based on a historical average are slightly higher than the current dynamic WIJAM factors, leading to slightly more generation of all resources being allocated to Washington; and 2) the unallocated share of the Rolling Hills wind facility is allocated to Washington, leading to a higher amount of total renewable energy.

The 2026 Protocol results in a forecasted increase of 11.52 percent more CETA-compliant energy to serve Washington customers in 2026, when compared to

Direct Testimony of Rohini Ghosh

A.

⁸ *In re PacifiCorp's 2023 Biennial CEIP Update*, Docket No. UE-210829, at 9 (Nov. 1, 2023) (available here: https://apiproxy.utc.wa.gov/cases/GetDocument?docID=629&year=2021&docketNumber=210829).

the same results under the WIJAM, as shown in Table 1. This increases the

Company's progress to 2030 CETA standards, as expressed by its interim target, by

3.63 percentage points under the new allocation methodology.

Table 1: Comparison of CETA-Compliant Energy under the Existing and Proposed Allocation

	2026	
	2026 Protocol	WIJAM
Load	4,441,744	4,441,744
Retail Sales Adjusted	4,028,099	4,028,099
CETA compliant energy	1,416,636	1,270,302
CETA Interim Target	35.17%	31.54%
Change in interim target	3.63 percentage points	
Increase in CETA compliant		
energy	11.52	%

4 Q. How did you forecast CETA-compliant energy for 2026?

As described in Company witness Ramon J. Mitchell's testimony, the Company uses

Aurora to simulate operation of the Company's power system on an hourly basis and

for this filing, prepared a forecast for calendar year 2026. The net power cost report

includes monthly generation outcomes by resource.

To forecast CETA-compliant energy, I summed annual Washington-allocated resource generation from the net power cost report that is assumed to be renewable or non-emitting energy. Where a resource would not generate RECs (or otherwise provide CETA-eligible nonpower attributes (NPA)) because it is either an emitting resource or the Company is not entitled to the REC or NPA, the generation is not assumed to be CETA-compliant, even if it serves Washington customers.

The Company's CETA obligation is determined by retail sales, which is the Company's Washington energy sales adjusted for line losses and is typically net of

9

10

11

12

13

14

15

PacifiCorp's clean energy planning?
How does moving to fixed allocation factors under the 2026 Protocol impact
resource that is allocated to Washington customers.
difference in resulting CETA-compliant energy is driven by the share of each
the same for all resources, and total load and retail sales are unchanged. The
not part of the obligation under CETA. 10 Underlying forecasted energy outcomes are
adjusted down by the amount of Washington's qualifying facilities' generation that is
PacifiCorp's 2023 IRP, equal to 10.11 percent. ⁹ This retail sales value is further
between the annual jurisdictional load and actual retail sales, as reported in
using a line loss factor based on the five-year average of the percent difference
energy efficiency and customer generation. Here, retail sales are approximated by

Long-term resource planning, and hence, planning to make progress towards clean energy standards as defined by CETA, requires making assumptions about the future. There is necessary uncertainty in these planning processes because of unknown future outcomes. Fixed cost-allocation factors in the 2026 Protocol used to allocate both generation and costs for Washington customers reduces one degree of certainty future allocations of generation will not fluctuate based on underlying demand patterns.

For example, under the current WIJAM, when relative jurisdictional loads change, so do system generation (SG) factors. If Washington's load does not grow at the same rate as other jurisdictions, dynamic SG factors result in Washington

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

A.

⁹ In re PacifiCorp's 2023 IRP, Volume II, at 10 (Mar. 31, 2023) (available here: https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2023irp/2023 IRP Volume II A-P.pdf).

¹⁰ RCW 19.405.020(36)(a).

customers receiving a smaller share of resources than previously forecasted. Fixed allocation factors introduce a degree of certainty to help the Company more adequately plan for future resources to serve Washington customers, while it works towards meeting CETA obligations.

IV. CLIMATE COMMITMENT ACT IMPACTS

Q. Can you explain the Company's obligations under the Climate Commitment Act (CCA)?

Yes. The CCA directs the Washington Department of Ecology (Ecology) to administer the state's cap-and-invest program to reduce statewide greenhouse gas emissions. ¹¹ The CCA establishes a declining cap on greenhouse gas emissions from covered entities, and directs the state to invest revenue from the program in projects that address climate change. Covered entities must obtain allowances equal to their total covered emissions and retire them to meet annual and compliance period obligations.

As an electric utility, PacifiCorp is responsible for calculating and reporting emissions covered by the CCA. Generally, there are three categories of emissions: 1) direct emissions from in-state generation; 2) emissions from imported electricity from the PacifiCorp system outside Washington that is allocated to serve Washington customers; and 3) emissions from wholesale imports not used for retail customers, where PacifiCorp can be identified as the first jurisdictional deliverer of electricity into the state.

A.

¹¹ RCW 70A.65.060.

1		As PacifiCorp's emissions decline over time, PacifiCorp is responsible for
2		either reducing its required greenhouse gas emissions under the CCA, or otherwise
3		meeting its compliance obligation with no-cost allowances, or allowances purchased
4		in the market.
5	Q.	How does the proposed new allocation methodology impact the calculation of
6		greenhouse gas emissions under the CCA?
7	A.	The proposed new allocation methodology will change PacifiCorp's forecast of CCA
8		covered emissions in 2026, as compared to the Company's forecast of emissions
9		under the WIJAM.
10	Q.	How does this impact PacifiCorp's allowances under the CCA?
11	A.	Under the CCA, Ecology distributes no-cost allowances to electric utilities subject to
12		CETA to mitigate the cost burden of the program on electricity utility customers. 12
13		However, Ecology only distributes no-cost allowances to utilities in the amount of
14		emissions associated with energy allocated to serve Washington retail customers
15		under a cost allocation framework approved by the Washington Utilities and
16		Transportation Commission (Commission). The allocation of no-cost allowances to
17		each qualifying electric utility must be consistent with a forecast of a utility's
		resource-specific supply and retail electric load approved by the Commission. ¹³ In

essential pillar of the program, and reinforces CETA as the key driver for

addition, the forecast must reasonably predict the way the utility intends to comply

with CETA. The distribution of no-cost allowances to qualifying utilities is an

decarbonization of the electricity sector.

19

¹² RCW 70A.65.120.

¹³ RCW 70A.65.120(2)(b)-(d).

Q.	Does this conclude your direct testimony?
	V. CONCLUSION
	Commission's decision on PacifiCorp's CCA supply and demand forecast.
	request Ecology update PacifiCorp's no-cost allowance, consistent with the
	new allocation methodology discussed in this proceeding. PacifiCorp will then
	approve a revised CCA supply and demand forecast for 2026 that incorporates the
	the WIJAM. In a separate proceeding, PacifiCorp will request that the commission
	that are eligible for no-cost allowances under the CCA compared to emissions under
	generation entirely to Washington customers. This increases the amount of emissions
	PacifiCorp's proposed 2026 Protocol re-directs emissions from in-state

A.

Yes.