

**Exh. ASR-19
Docket UE-220376
Witness: Andrew Rector**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**PACIFICORP, d/b/a PACIFIC POWER
& LIGHT COMPANY,**

Respondent.

DOCKET UE-220376

**EXHIBIT TO
TESTIMONY OF**

ANDREW RECTOR

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Docket UE-210223, PacifiCorp 2022 Clean Energy Implementation Modeling Workplan

October 21, 2022

Attachment A

PacifiCorp 2022 Clean Energy Implementation Plan modeling workplan

In compliance with Order 01 in Docket UE-210223 (Order 01),¹ PacifiCorp will file a draft and final Clean Energy Implementation Plan (CEIP) by November 1, 2021, and January 1, 2022, respectively. As a condition to the Washington Utilities and Transportation Commission's (Commission) extension of the CEIP filing deadlines through Order 01, PacifiCorp is required to file a modeling workplan describing its plan to ensure completion of the CEIP by the established dates. It is important to note this workplan is specific to modeling and determining specific actions and interim targets consistent with requirements of the Clean Energy Transformation Act (CETA) and does not address all requirements related to CEIP development, specifically those regarding public participation,² which are addressed via PacifiCorp's filed Public Participation Plan.

Commission Staff posed specific questions in its memo in docket UE-210223, and PacifiCorp provides the following framework to address strategic questions related to CEIP development.

CETA-related modeling inputs or parameters to reflect a Washington-specific CEIP

PacifiCorp develops the preferred resource portfolio within its Integrated Resource Plan (IRP) on a six-state basis consistent with how the company operates its system. In determining an optimized least-cost, least-risk preferred resource plan, PacifiCorp analyzes a number of potential resource futures with varying combinations of resource type, timing, size and location over its 20-year planning horizon. The preferred portfolio is intended to recommend resource locations and technologies that are likely to lead to a least-cost, least-risk outcomes relative to other alternatives while ensuring system reliability and compliance with known state and federal energy policies.³ In addition to the preferred portfolio, PacifiCorp's IRP will include consideration of the social cost of greenhouse gas emissions and the required modeling scenarios to address maximum customer benefit, alternative lowest reasonable cost, and the impacts of climate change. Each required scenario will assess impact on PacifiCorp's multi-state portfolio.

Once the preferred portfolio is identified, PacifiCorp will allocate generation to Washington based on the current agreement under the Washington Inter-Jurisdictional Allocation Methodology (WIJAM), which was approved as part of Docket UE-191024.⁴ The methodology under WIJAM includes the following allocators to determine Washington's portion of new system resources:

Transmission additions will be dynamically allocated using PacifiCorp's system generation (SG) factor

¹ *In the Matter of the Petition of PacifiCorp d/b/a Pacific Power & Light Company, For an Exemption from the Filing Deadline Established by WAC 480-100-640(1) and for Continuance of a Filing Deadline Established by Commission Order*, Docket No. UE-210223, Order 01 (July 9, 2021).

² PacifiCorp's Public Participation Plan can be found on the company's CEIP webpage and has been filed in Docket UE-210305.

³ PacifiCorp's preferred portfolio will include the 2025 and 2030 CETA requirements over the 20-year horizon. Beginning in 2025, the portfolio will begin incorporating the 2045 standard as well.

⁴ *WUTC v. Pac. Power & Light Co.*, Docket Nos. UE-191024, UE-190750, UE-190929, UE-190981, UE-180778 (cons.), Order 09 / 07 / 12 (Dec. 14, 2020).

New renewable and non-emitting resources will be dynamically allocated using PacifiCorp's SG factor

The calculation of PacifiCorp's system-wide preferred portfolio (and the calculation of the Washington-specific scenarios) will be conducted within the Plexos modeling software. Plexos outputs and IRP workpapers will be provided along with the September 1 IRP filing per WAC 480-100-620(14). The process of determining a Washington-specific portfolio will occur outside of Plexos via a separate analysis. The Washington portfolio analysis will be informed entirely by the Plexos results and will incorporate updated inputs when available.

PacifiCorp's portfolio is optimized at a system level and the planning process accounts for compliance with Washington requirements. The allocation of this optimized IRP portfolio to a Washington-specific portfolio is intended to show Washington's share of the optimized portfolio in compliance with WAC 480-100-640(6)(f) for stakeholder review and feedback.

PacifiCorp's current agreement for allocation of new resources under the WIJAM runs through December 31, 2023. After December 31, 2023, PacifiCorp assumes the allocation methodology is tied to a forward-looking load and resource balance for each jurisdiction and that any resource added to the portfolio specifically to meet a state's policy objectives will be situs assigned to that state. Any allocation methodology ultimately agreed upon in the multi-state process will require Commission approval and will only supersede WIJAM following appropriate regulatory review and approval. Allocation assumptions for new resources will continue to be updated in future CEIP development cycles.

CEIP-specific Scenarios and/or Sensitivities

The preferred portfolio developed through PacifiCorp's 2021 IRP will reflect compliance with CETA targets and requirements within the 20-year planning horizon of the IRP. For the 2021 IRP, this will include the 2025 coal standard, the 2030 greenhouse gas neutrality standard, and a pathway toward approaching the 2045 100 percent renewable and non-emitting standards.⁵ In addition, the IRP will consider the impact of the social cost of greenhouse gas emissions and will describe the approach to – and outcomes of – the required maximum customer benefit scenario, the climate change scenario, and the alternative lowest reasonable cost scenario. The modeling conducted within PacifiCorp's IRP process is compliant with WAC 480-100-620 and will be used to inform draft interim and specific targets and specific actions for public feedback throughout the 2022 CEIP development process.

As directed in WAC 480-100-640(2)(a)(iii) the interim targets in PacifiCorp's 2022 CEIP will stretch beyond the 2040 IRP time horizon and will include targets through the 2045 requirement for 100 percent renewable and non-emitting resources. As part of the CEIP development process, the company will assess its potential 2045 compliance position based on the pathway set by the 2021 IRP preferred portfolio. If there is a projected shortfall, PacifiCorp will conduct additional modeling specific to providing projections for how the company intends to progress toward the 2045 requirements. This

⁵ Full compliance with the 2045 standard will be included once it is within the 20-year planning horizon.

additional analysis may be within the Plexos model, and/or be conducted or supported by separate analyses outside of Plexos. All analyses will be made available as part of the CEIP process.

Following the filing of the IRP on September 1 (and in addition to the 2041-2045 analysis described above), PacifiCorp will continue to work with stakeholders to determine whether or if additional sensitivities would be helpful in refining Washington's portfolio view or to provide greater insight into the specific actions proposed in the 2022-2025 CEIP cycle. Whenever possible, PacifiCorp will include updated scenarios and sensitivities for review within the 2022 CEIP. For analyses that are unable to be completed in a schedule that allows for the analysis in the 2022 CEIP, PacifiCorp will consider the requested analysis for inclusion in the 2023 IRP.

Feedback Loops to Align 2021 IRP Preferred Portfolio to CEIP

PacifiCorp's 2021 IRP preferred portfolio determines a least-cost, least-risk resource strategy that complies with all state laws and requirements across the six states that PacifiCorp serves. The preferred portfolio will include the removal of coal-fired generation from Washington's allocation of electricity by December 31, 2025, and will build a portfolio that will comply with the 2030 standards. Although 2045 is outside of the 2021 IRP portfolio study horizon, the addition of new renewable and non-emitting generation in pursuit of the 2030 standard will set PacifiCorp on the path toward 100 percent renewable and non-emitting compliance. As described above, the CEIP compliance discussion will include 2041-2045 through an analysis in addition to the timeframe of the 2021 IRP.

Once PacifiCorp's IRP preferred portfolio is known, the company will begin the iterative process of presenting the preferred portfolio (and preliminary calculations of how this portfolio would be allocated to Washington under WIJAM) to Washington stakeholders⁶ for their review and feedback as PacifiCorp works to determine the CEIP strategic roadmap.

During the three CEIP public input meetings – in September, October, and November – PacifiCorp will seek and incorporate feedback on the interim and specific targets, the potential specific actions, and how the customer benefit indicators will help inform the specific actions ultimately chosen for proposal to the Commission as part of the 2022 CEIP. As part of the stakeholder feedback process, PacifiCorp will explain the technical process of allocating the Washington portfolio, and will seek input on any additional technical analyses that could provide insight to stakeholders on how Washington's allocation of the optimized system portfolio will fully comply with the requirements of CETA. This may involve scenarios, sensitivities, and/or additional data discussions.

As with the development of interim and specific targets and specific actions, PacifiCorp's IRP preferred portfolio will be used to determine the incremental cost of compliance.⁷ Within the IRP portfolio development process, PacifiCorp will compare the preferred portfolio – which is CETA-compliant – with the alternative lowest reasonable cost and reasonably available portfolio, which represents actions the utility may have taken in the absence of CETA's clean energy requirements. The delta between the two portfolios will serve as the basis for calculating incremental cost, and the CEIP will provide detail on incremental cost along with the proposal of specific actions in the 2022-2025 CEIP. PacifiCorp will

⁶ As noted in the table, PacifiCorp will distribute any data/results to all Washington advisory groups and will make the data available via the company's CETA webpage.

⁷ WAC 480-100-640(7).

calculate the portfolio delta within the Plexos modeling tools, and the incremental cost calculation will be further refined in separate spreadsheets to calculate a revenue requirement view.

CEIP Modeling Timeline

Table 1 – IRP-to-CEIP Timeline

Deliverable/Action	Timing
IRP Preferred Portfolio Determined	August 2021
PacifiCorp IRP Filed	September 1, 2021
CEIP Public Participation meeting to discuss initial CEIP targets. Targets will be informed by IRP preferred portfolio – allocated to Washington – and the initial targets will be presented for discussion.	September 8, 2021
Draft CEIP Specific Actions shared with stakeholders (distributed to all advisory groups and posted to PacifiCorp’s CETA webpage)	October 1, 2021
CEIP Public Participation meeting to discuss potential specific actions	October 6, 2021
Identify any additional actions needed to support CEIP development in response to stakeholder feedback. If additional actions are identified, they will be distributed to the advisory groups as posted to PacifiCorp’s CETA webpage.	By October 15, 2021
File draft CEIP	November 1, 2021
CEIP Public Participation meeting to receive feedback on draft CEIP filed November 1	November 10, 2021
Updated portfolio results – incorporating previous feedback on interim and specific targets and specific actions – provided to all advisory groups and posted to PacifiCorp’s CETA webpage	December 1, 2021
Stakeholder feedback on draft CEIP incorporated	December 15, 2021
2022 CEIP Filed and posted to https://www.pacificorp.com/energy/washington-clean-energy-transformation-act-equity.html	No later than January 1, 2022

Once the IRP preferred portfolio is determined and the portfolio allocation to Washington has begun, PacifiCorp will reach out to technical stakeholders in Washington and throughout the region to discuss the potential for holding technical workshops throughout the development of the CEIP. In response to stakeholder feedback, PacifiCorp will explore the possibility of adding workshops to discuss portfolio modeling and development. Additional workshop dates, if added, will be posted on PacifiCorp’s CEIP website.⁸

PacifiCorp has assembled a cross-functional team with leadership from the company’s Resource and Commercial Strategy, Regulation, Customer Solutions, Load Forecast, Customer Care, Communications, Revenue Requirement, and Environmental Policy teams. This group of subject matter experts is working to build a CEIP that is responsive to feedback from Washington communities and sets ambitious targets in anticipation of the CETA requirements. The company resources – indicated by PacifiCorp team directly

⁸ <https://www.pacificorp.com/energy/washington-clean-energy-transformation-act-equity.html>.

leading the development of each CEIP topic area – working to develop the 2022 CEIP are summarized below.

Table 2 – PacifiCorp resourcing to prepare 2022 CEIP by topic area

Interim and Specific Targets	Specific Actions	Incremental Cost	CBI Development and Public Participation	Compliance
Resource Planning	Acquisitions/origination	Retail Rates/Pricing	Communications and Customer Care	Environmental Policy
Environmental Policy	Customer Solutions (demand-side programs)	Revenue Requirement	Environmental Policy	Legal
Customer Solutions (customer programs)	Resource Planning	Load Forecast	Load Forecast	Resource Planning
RMI – through public participation process	Regulation	Resource Planning	RMI – through public participation process	Regulation

As part of the development of the CEIP, PacifiCorp will present analyses underlying how the company has allocated the preferred portfolio to Washington to inform the development of interim and specific targets and specific actions. For processes that are likely to inform the selection of specific actions – such as the 2020 All Source Request for Proposals Final Short List – PacifiCorp will make this data available via its CETA webpage.

As part of its final CEIP filing January 1, 2022, PacifiCorp will include with the filing its analysis and workpapers in accordance with WAC 480-100- 620(14) and -640(3)(b). PacifiCorp will also provide the upstream analyses underlying the development of the preferred portfolio as part of the IRP filing in September 2021 as specified in WAC 480-100-620(14).