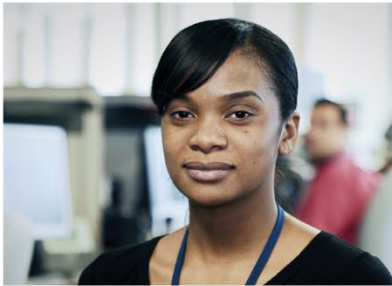


PacifiCorp's Continual Progress

May 30, 2024 Special Public Meeting

[IRP Support & Studies \(pacificorp.com\)](https://www.pacificorp.com)



Agenda

- Continual Progress
- Actual Emissions Reductions
- Forecasted Emissions Reductions and Compliance Strategies
- Modeling Improvements
 - Integration of State Requirements
 - Reliability and granularity through increased model iterations
- Customer Benefit Indicator Updates
- Stakeholder and Community Engagement
- New Resource Acquisition

Continual Progress

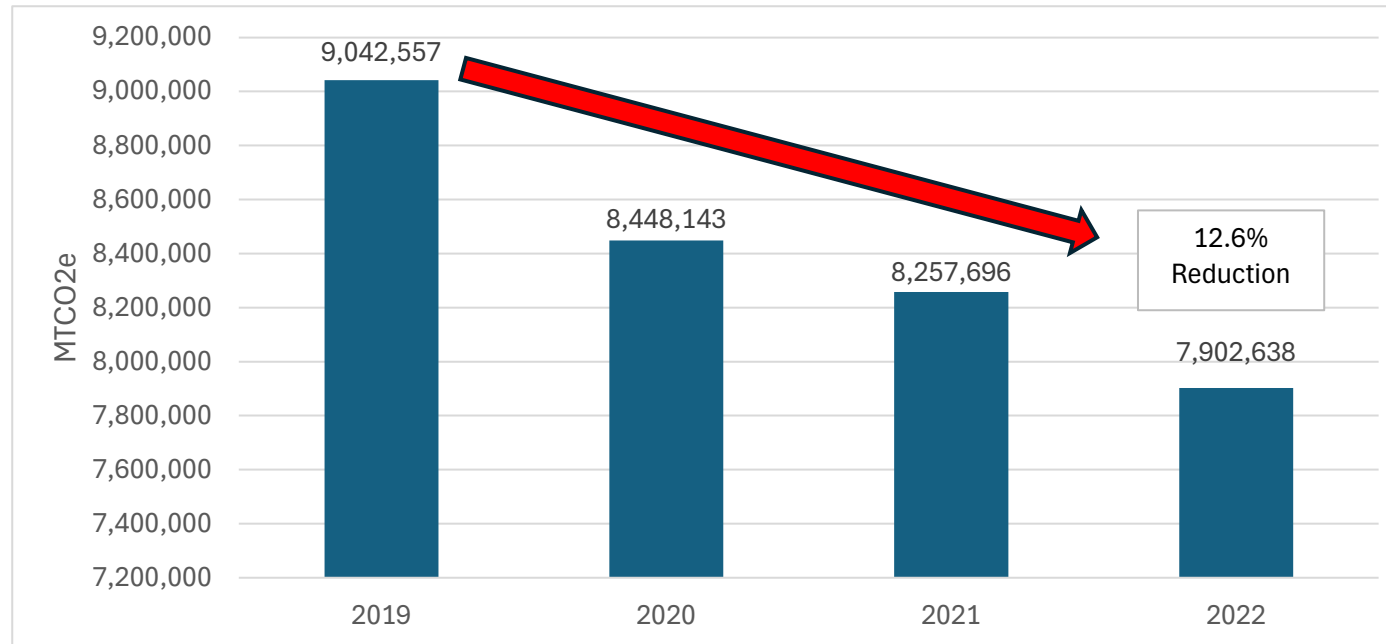
HB 2021 section 4(4) requires that CEPs “[d]emonstrate the electric company is making continual progress within the planning period towards meeting the clean energy targets . . . including demonstrating a projected reduction of annual greenhouse gas emissions.”

In the context of forward-looking resource planning, the Commission has issued guidance on the definition of continual progress in Order 24-002:

- Continual progress does not require utilities to peruse a “linear trajectory of expected emission reductions.”
- The Commission will instead “lean on the robust weighing of costs, risk, and forecasted emissions reduction trajectories that will occur in the IRP/CEP planning process.”
- This approach allows the Commission to “understand tradeoff around practicability, emissions reductions, and costs.”

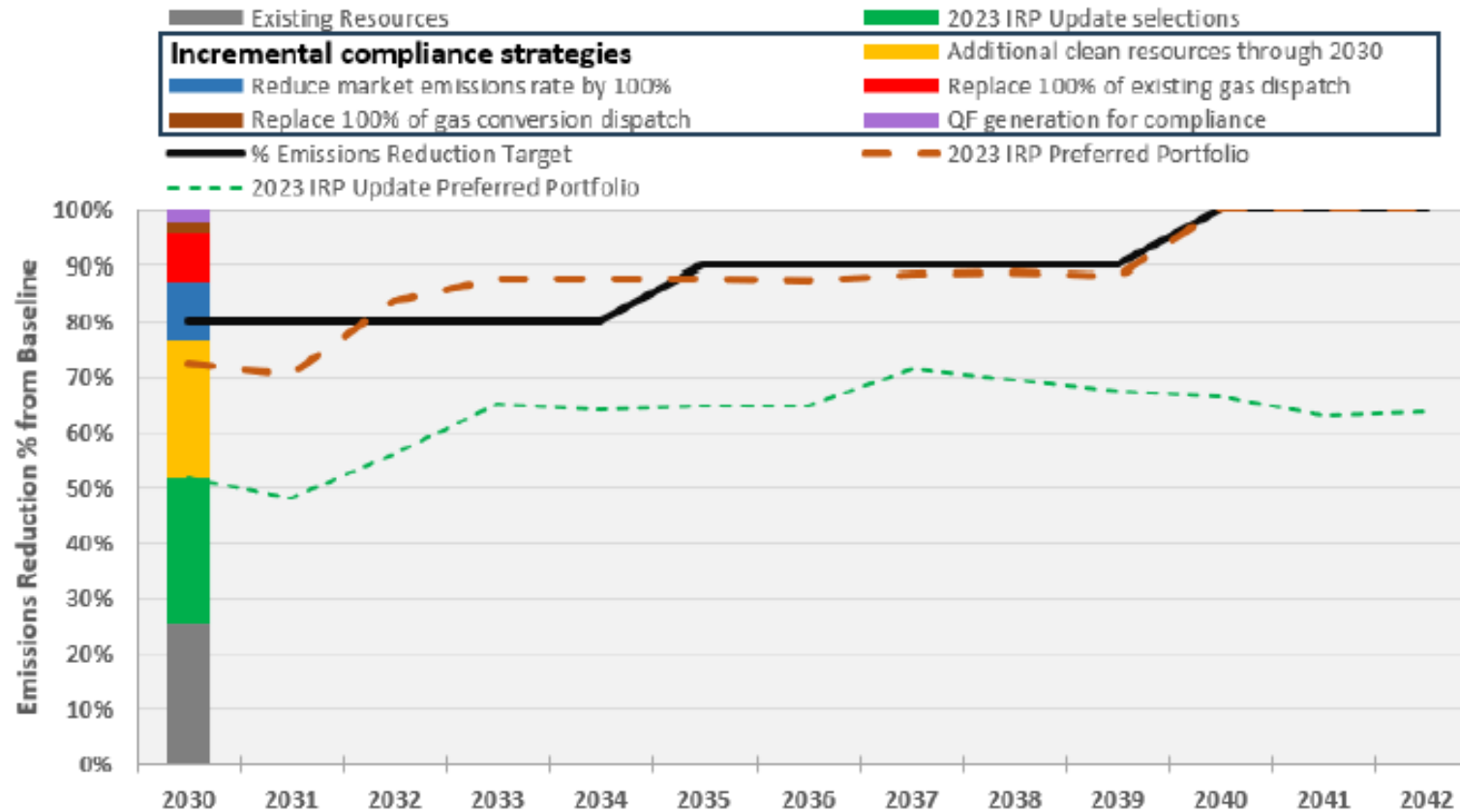
Actual Emissions Reductions

PacifiCorp has continually reduced HB 2021-relevant emissions associated with electricity provided to end-users in Oregon since at least 2019.



Forecasted Emissions Reductions and Compliance Strategies

Figure 2—2023 IRP Update, 2023 IRP, and HB 2021 Emissions Reductions



Modeling Improvements: Integration of State Requirements

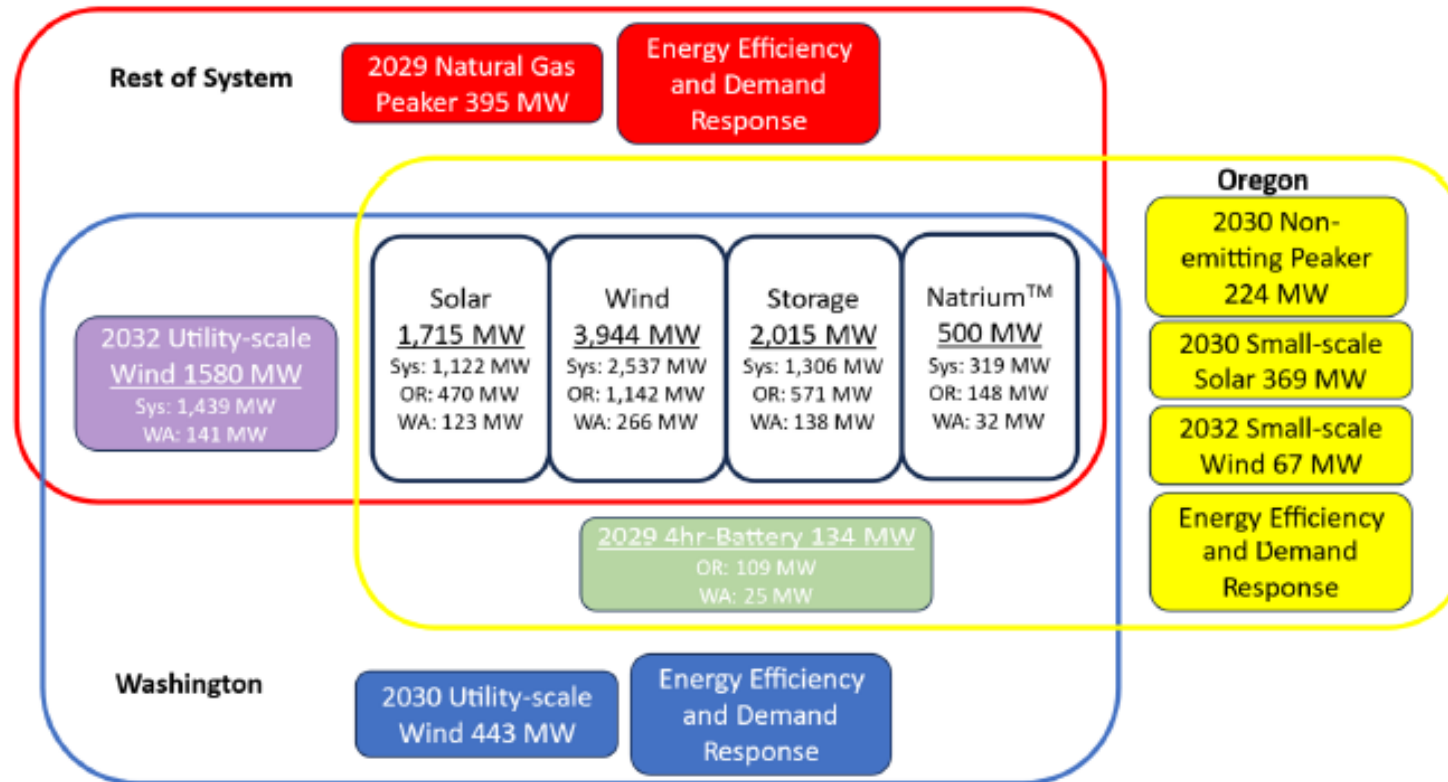
Previous IRP cycles sought to meet state level requirements through “layering on” needed resources **after** the final selection of the system-wide least cost, least risk portfolio

Moving forward, state level needs will be integrated into the preferred portfolio as part of the process and will not be added incrementally “on top.”

- State specific initial runs are completed
- These runs are compared to a fully unconstrained systemwide run
- State specific selections are incorporated into the unconstrained systemwide run at the state’s appropriate allocation

Modeling Improvements: Portfolio Integration Outcomes

Figure 1—Allocation of the 2023 IRP Update Preferred Portfolio Through 2032



Modeling Improvements: Example Integration of State Requirements

Oregon's small-scale requirement example:

Factors are applied to all modeled resources:

- Oregon's share of the resource (large=SG share, small=100% Oregon)
- A ratio requiring 1 MW of small for every 9 MW of large

A run requiring small-scale compliance for Oregon results in 550 MW of small-scale solar and 200 MW of small-scale wind

The total capacity of resources selected in the unconstrained system run and the Oregon-specific run are compared

EXAMPLE: Oregon's run has 3,800 MW of wind, the unconstrained run has 3,000 MW of wind

Approximately 25% of the 800 MW differential between the unconstrained and Oregon-specific studies (200 MW) is integrated into the preferred portfolio, and it is all assumed to be small-scale to meet HB 2021 requirements

Modeling Improvements: Reliability and Granularity through Iterations

By running many cycles of the model, PacifiCorp can directly feed short-term (ST) model results back into the long-term (LT) model as inputs to inform better initial selection of resources in a portfolio

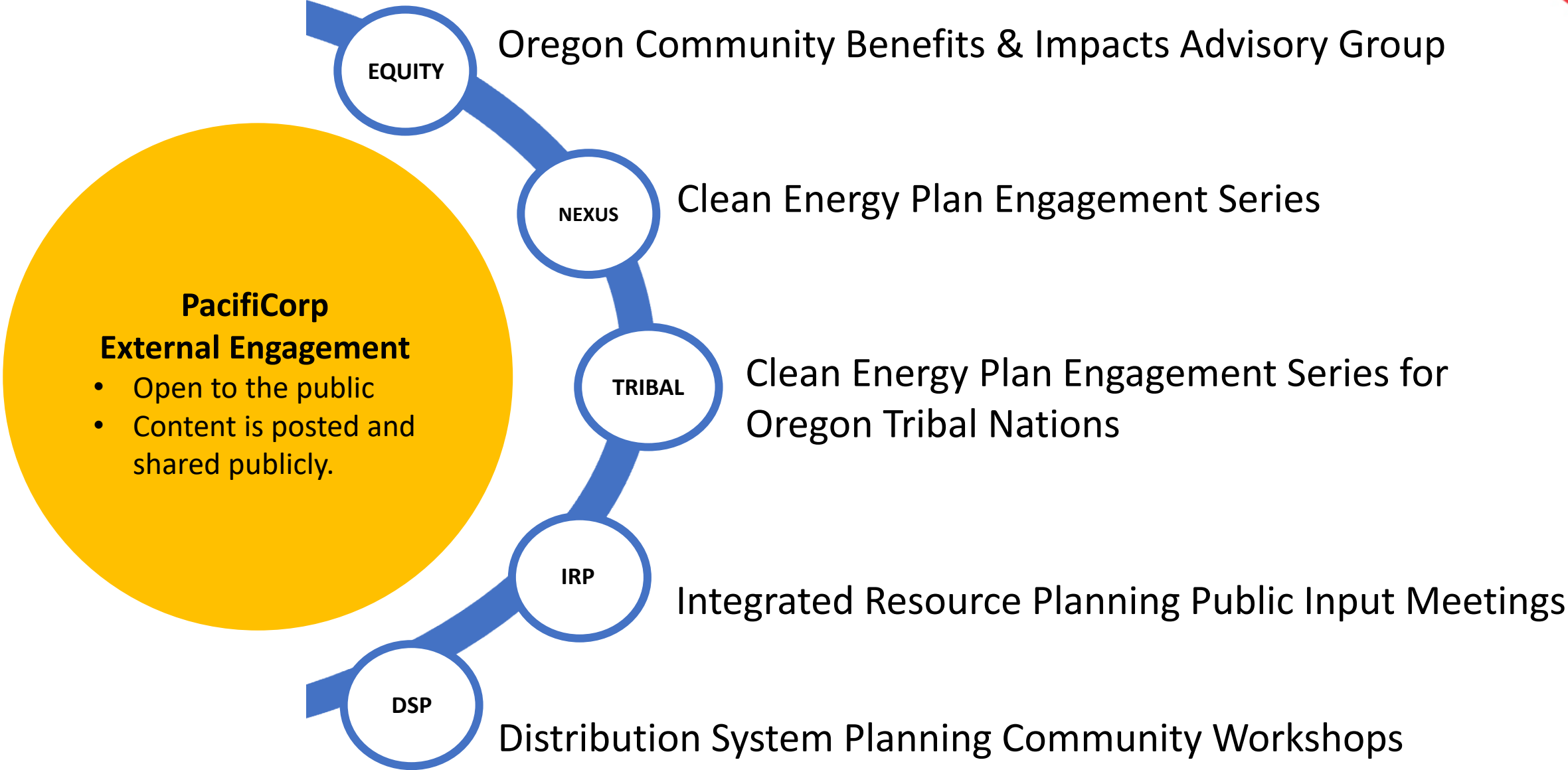
- Granularity adjustments are unique to each portfolio variant, and are changed based on the last ST model run of each variant
 - For example, resource values under a medium price, medium CO2 future will be different with and without a large new transmission line, as such the granularity adjustment for resources should be unique for a given portfolio under a given market price scenario
- Taking energy shortfalls from the ST model and adding them to the load file results in better selections in the LT model to meet periods of need
 - Given the blocking of the LT model, this approach gradually adds “load” to various hours for resource selection purposes
 - As this is only used in the LT model, it does not impact dispatch in the ST model

PacifiCorp's Current CBI Framework

CBI Topic Area	CBIs (Outcomes)	Metrics
1) Resilience	a) Improve Resiliency of Vulnerable Communities During Energy Outages	SAIDI, SAIFI, CAIDI at area level including major events
	b) Reduce Frequency and Duration of Energy Outages	Energy Not Served (ENS) for IRP portfolios are included as an output from portfolio development
2) Community Health & Well-being	a) Decrease Residential Disconnections	Number of residential disconnections by census tract
3) Environment	a) Increase Energy from Non-emitting Resources and Reduce CO2e Emissions	Oregon GHG emissions (from Oregon-allocated resources)
		Oregon allocated renewables
4) Energy Equity	a) Decrease Proportion of Households Experiencing High Energy Burden	Average energy burden by census tract, for low-income customers, bill assistance participants, Tribal members and for all customers
	b) Increase Efficiency of Housing and Small Businesses in Disadvantaged Areas*	TBD
5) Economic	a) Increase Community-Focused Efforts and Investments	Headcount of DSM program delivery staff & grants
		Public charging stations
		Pre-apprenticeship / educational program participation
		Energy supply resource development - workforce and spend
	b) Reduce Barriers for Disadvantaged Communities for Company Program Participation*	TBD

*Added Fall 2023

Engagement



New Resource Acquisition

In September 2023, PacifiCorp suspended its 2022 All Source Request for Proposals (2022AS RFP), citing to:

- A federal court's stay of the Ozone Transport Rule (OTR)
- Ongoing rulemaking by the U.S. EPA regarding green-house gas emissions
- Evolving extreme weather risks affecting operational and resource requirements
- Wildfire risk and liability

PacifiCorp began re-evaluating its needs, focusing on system capacity that could come online by summer 2026 to maintain reliability while maintaining PacifiCorp's financial stability in light of wildfire risk and liability

- Progress is being made to procure battery storage capacity via new contracts that meet these criteria (400 MW procured via a contract amendment, 755 MW in advanced contract negotiations)
- This alternative procurement path is supported by outcomes in PacifiCorp's most recent resource plans

Wildfire risk and liability requires PacifiCorp to manage its cash on a day-to-day basis, and with limited capital, money needed for new transmission and new resources is constrained, which can adversely impact reliability over time