Tacoma Power 2026 Integrated Resource Plan (IRP):

Preliminary Findings

May 27, 2026

Outline

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About our Integrated Resource Plan (IRP)

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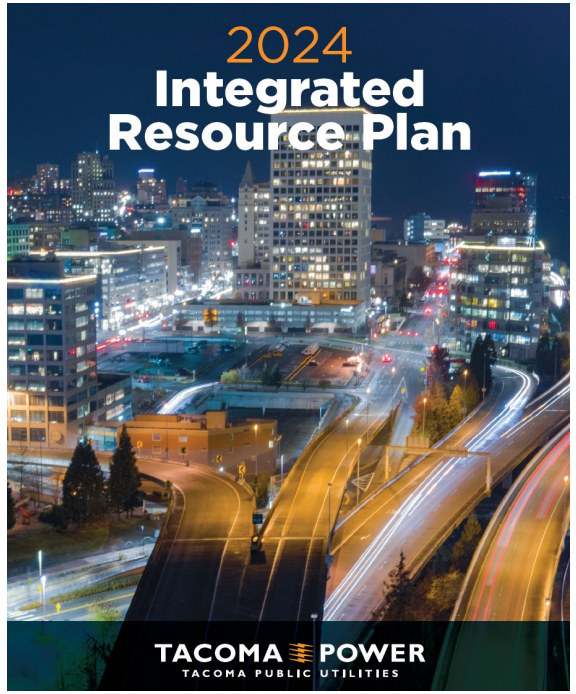
An integrated resource plan is:

- A plan for providing reliable and low-cost power in an uncertain future
- Required by Washington State law (19.280 RCW)
- Updated every two years
- Consistent with Tacoma Public Utility Board's Guiding Principle of Resource Stewardship and Sustainability



Our last IRP was completed in 2024, and the current IRP is due September 1, 2026

Link to IRP webpage: https://www.mytpu.org/about-tpu/services/power/integrated-resource-plan/

IRP Schedule

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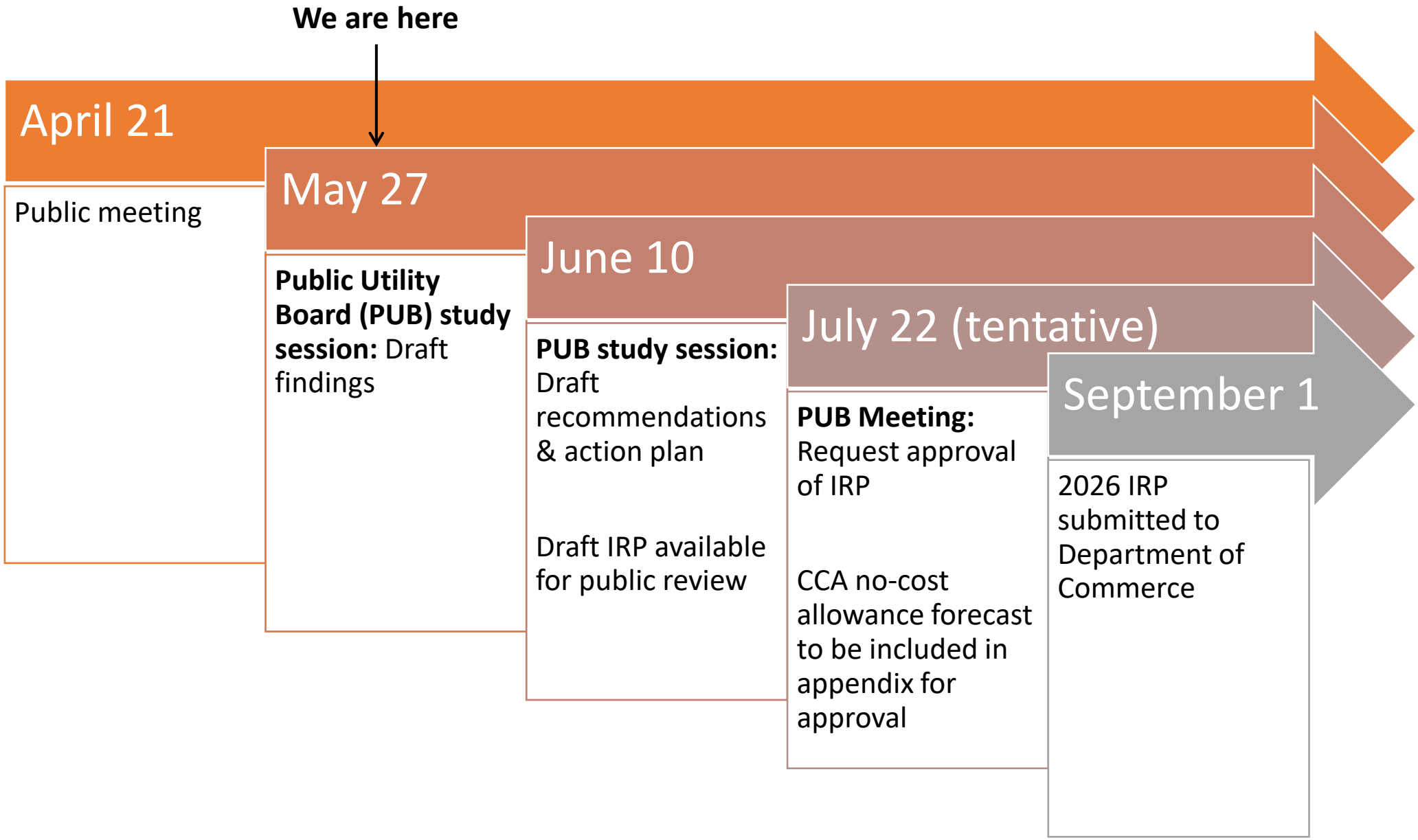
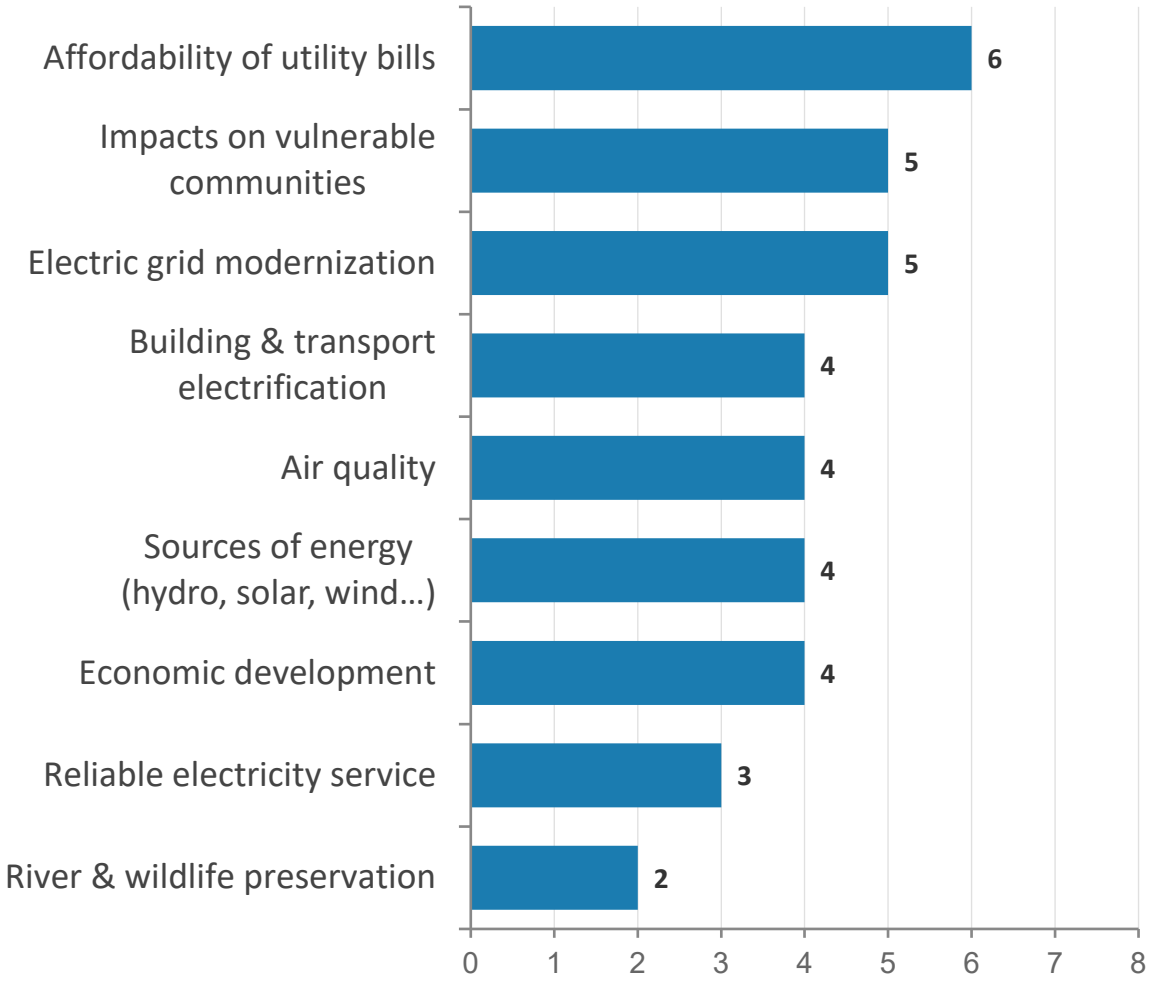


Community input process

- Community input process advertised through multiple channels
  - Website, social media, newsletter announcements, tabling at community events, and direct outreach by TPU community & business liaisons
- Four ways to participate

Community survey to identify priority topics	• 8 respondents
Public meeting discussing draft results	• 7 participants representing a variety of interests • 2 large commercial and industrial customers • 2 City of Tacoma staff members • BPA account executive • 1 residential customer
Submit comments online via email	• None received so far
Comment on draft IRP before it is final	• To be circulated by June 10

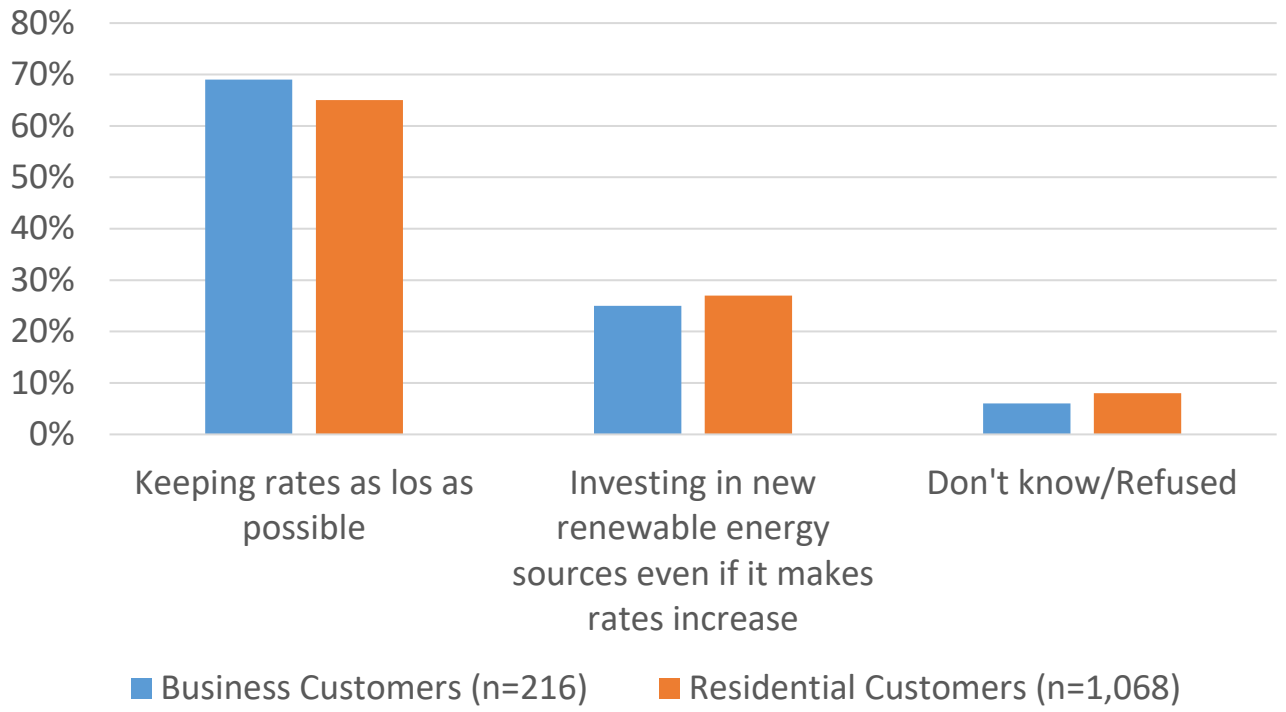
Affordability was topic of most interest in IRP community survey



IRP Survey Question: "What part of the energy puzzle would you like to understand better?" (select all that apply)
Total respondents: 8

Interest in affordability is consistent with broader TPU customer surveys identifying affordability as top priority

Question: *Which do you feel is more important for TPU to prioritize…?*



Overview of our Power Supply

Our power sources

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Cushman Hydroelectric Project

Cushman No. 1

Cushman No. 2

LaGrande

Wynoochee River Project

Wynoochee

Nisqually River Project

Alder

Conservation

Contracts

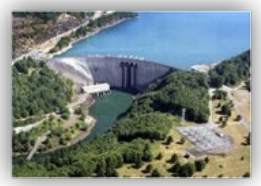
BONNEVILLE POWER ADMINISTRATION

Grant PUD

Columbia Basin Hydropower

Mayfield

Mossyrock



Cowlitz River Project

Tightening Regional Power Supply

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Multiple studies of power supply in the Northwest project that the region **will not have enough supply to meet demand** within the next 5 years

- Growth in electricity demand from vehicle electrification, building electrification and data centers
- Resource retirements
- Speed at which new resources are being built is not keeping pace with need
- Low water years

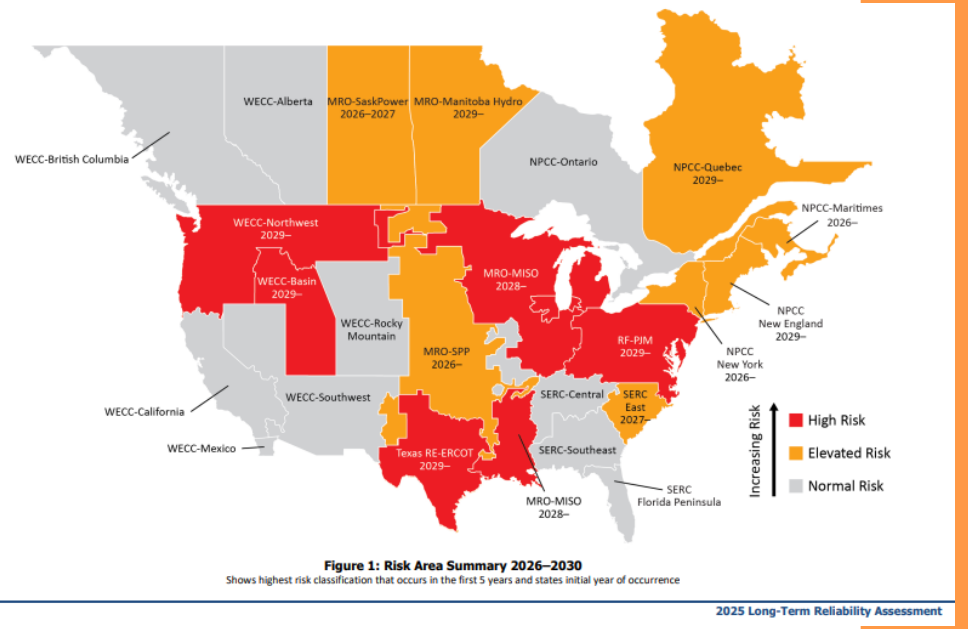


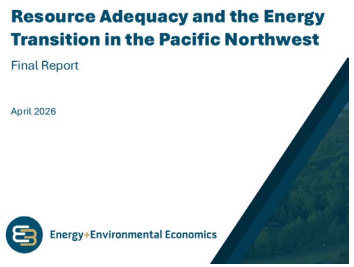
Figure 1: Risk Area Summary 2026–2030
Shows highest risk classification that occurs in the first 5 years and states initial year of occurrence

2025 Long-Term Reliability Assessment

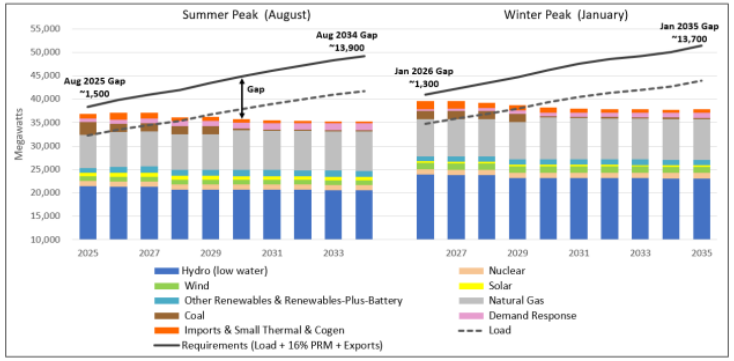
[NERC Long Term Reliability Assessment]

The 9th Northwest Regional Power Plan

[NW Power and Conservation Council NW Regional Power Plan]



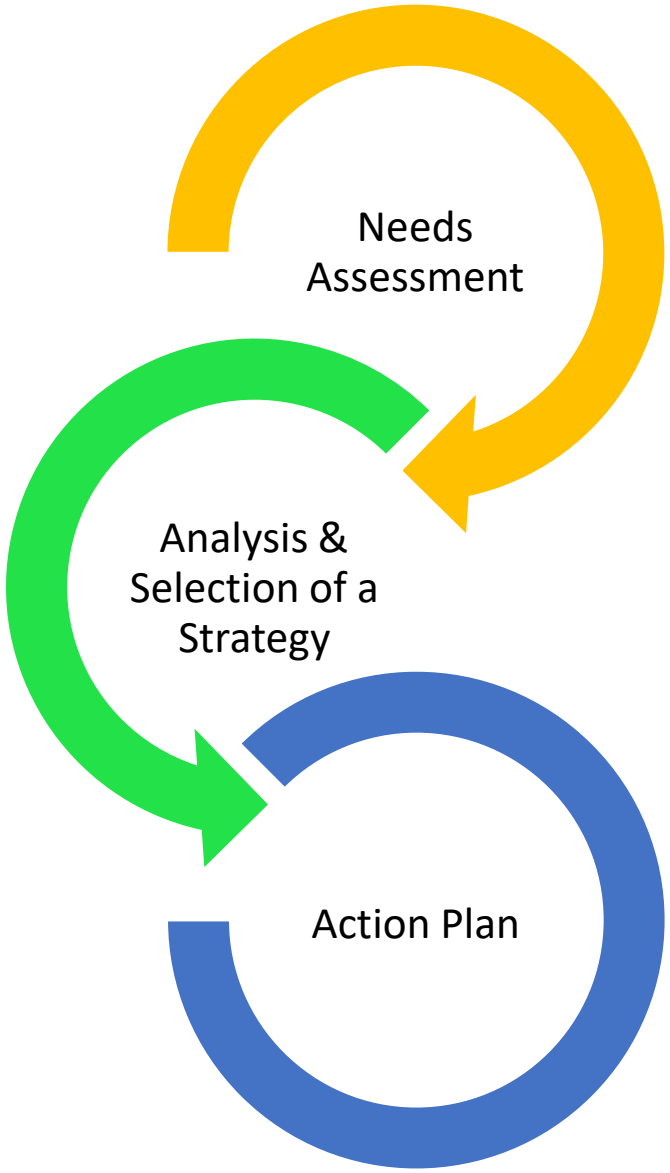
[Resource Adequacy and the Energy Transition in the Pacific Northwest - E3]



[Northwest Regional Forecast – Pacific Northwest Utilities Conference Committee]

Our Analysis Process

Overview of IRP Process



Do we have enough resources to meet our load under ***most*** conditions?

Which set of resources best meet our needs, risk tolerance and values?

What are our next steps?

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If you are sure of tomorrow, there is no fool greater than you!

Mehmet Murat ildan

Major uncertainties we address

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Weather	• Multiple different water and temperature conditions • Range of climate change adjustments
Customer demand	• Different trajectories of growth in residential and commercial demand (e.g., electrification, Home in Tacoma, etc.) • Significant industrial load growth
Resource Capabilities	• What if restoration of Riffe Lake elevation takes longer than planned?
Changes to the larger grid	• Broad range of price assumptions used for resource evaluation

Our Resource Position

How we measure our position

Peaking capacity

- Ability to meet high demand for **a few hours**

Sustained capacity

- Ability to meet high demand **over multiple days**

Monthly energy

- Ability to meet demand **over the course of a month**

100 meter sprint

5,000 meter run

Marathon

Changes to energy position over time

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1. **New BPA contract (October 2028):** Change to contract formula means we will get a little more energy in worst winter droughts and less in summer

2. **Load growth (continuous):** Energy needs grow as electrification progresses, but BPA contract adjusts so long as growth is not too high

3. **Climate change (continuous):** We expect to get more energy in winter and less in summer because of climate change, but changes are not dramatic enough to compromise our energy position

Major risk factors:

- Steep acceleration of load growth would necessitate new energy resource acquisition by early to late 2030's, depending on the pace of growth

Result: We **do not** have an imminent need to acquire additional energy resources beyond conservation.

Changes to peaking capacity position over time

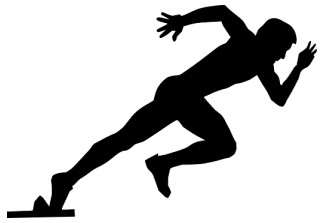
1. **New BPA contract (October 2028):** Change to contract formulas means we will have less capacity in both winter and summer

2. **Peak demand growth (continuous):** As electrification progresses, peak demand growth outpaces energy growth

3. **Riffe restoration (October 2033):** Riffe Lake restoration restores capacity lost during extended drawdown

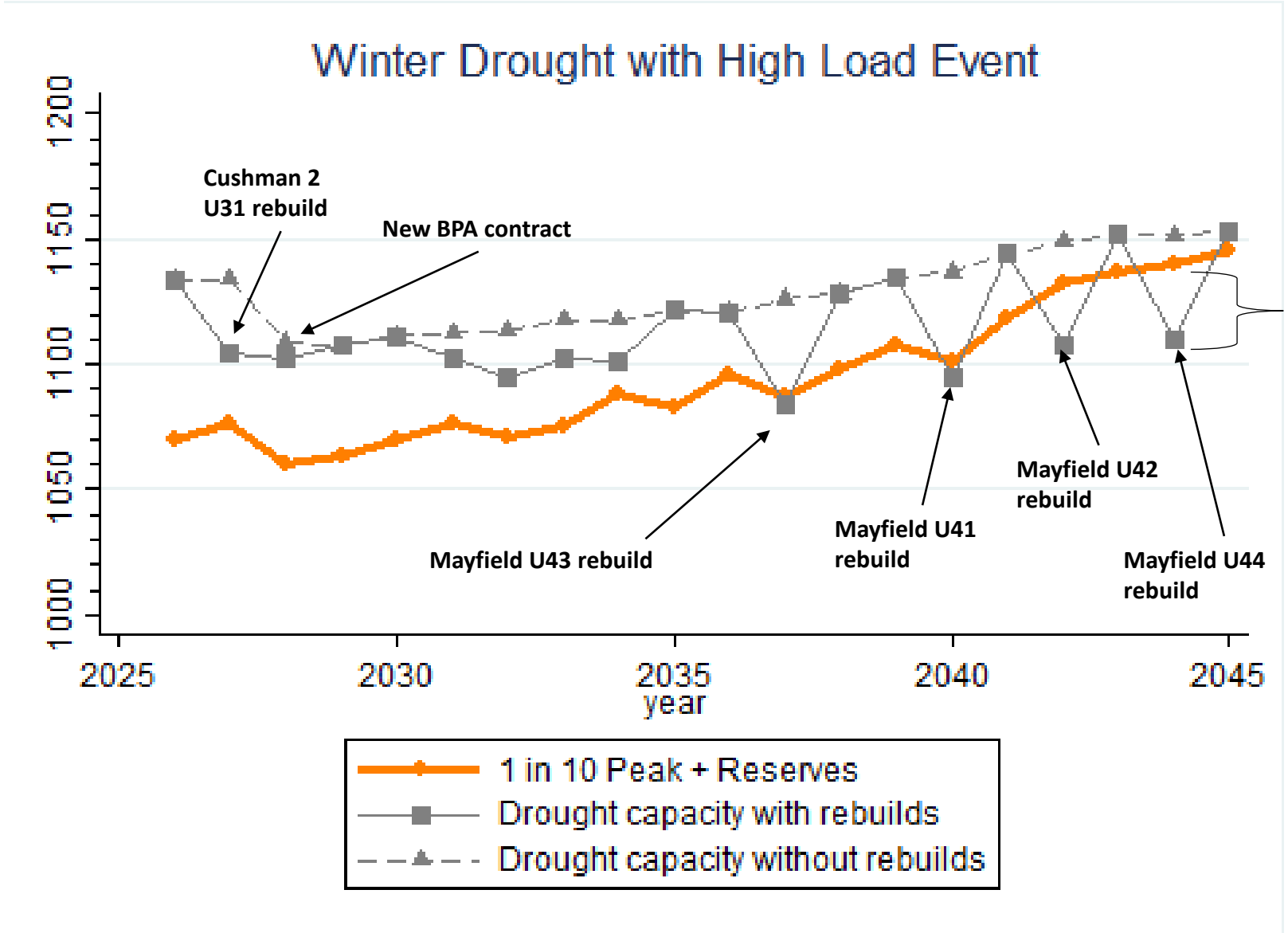
Major risk factors

- Delays in restoration of Riffe Lake restoration
- Rebuilds needed on aging generator infrastructure could cause temporary gaps in early 2040's
- Acceleration of load growth would require new capacity resource sooner than anticipated



Result: We will **likely** need additional capacity by the early 2040's. Need is intermittent until after 2045 if peak demand grows as expected and consistent if growth is slightly accelerated.

As peak demand grows, our position tightens and shrinks nearly to zero



Tightening capacity position combines with generators being offline for rebuild work to produce intermittent gaps of 25 to 30 MW in the early 2040's.

Summary of needs assessment

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1. We **do not** have an imminent need for additional energy resources

- Even with expected changes to climate, current resources are enough to meet energy needs under most likely load scenarios

2. We will **likely** need additional capacity resources to maintain our ability to meet high load events during drought years starting in the late 2030's or early 2040's.

- Around 30 MW in certain years only in early 2040's under base case, around 15 MW to 30 MW by mid-2030's under somewhat higher electrification growth

3. We would need additional energy and capacity resources to meet growth from a steep acceleration of electrification

- 30 MW to 40 MW of energy and 100+ MW capacity by the mid to late 2030's

4. We would need additional energy and capacity resources to meet demand from new large industrial loads

- Specific need will depend on specifics of the industrial load

5. We have time to prepare

Options for filling the gaps

Early findings

Resource options modeled in our IRP

Utility-scale Resources

- Wind
- Solar
- Nuclear
- Short-duration battery
- Addition hydro capacity
- Pumped storage hydro
- Natural gas peaking plant

Demand-side (Customer) Resources

- Energy efficiency/ Conservation
- Demand response
- Rooftop solar

Preliminary recommendations and findings on resource options

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Recommendations

- Acquire all energy efficiency identified as cost-effective in CPA
- Ramp up demand response efforts to manage peak demand
- Develop strategy to prepare for intermittent capacity risks during generator rebuilds

Other findings

- It is worthwhile to conduct further analysis on opportunities for adding hydro capacity
- Battery storage is next-best capacity alternative that complies with 2045 100% carbon-free requirements
- A combination of energy and capacity would be needed if load growth accelerates steeply
  - Wind typically “wins” as lowest-cost energy resource in model but does not provide sufficient capacity
  - Carbon-free capacity resources do not provide energy

Next steps

IRP Schedule

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