

Guiding Principle 14 Update

October 25, 2023

GP14: Resource Planning



GP14 Resource Planning



Tacoma Public Utilities' highest priority is providing safe and reliable power, water, and rail services that meet or exceed customer needs over the long term (20 to 60 years).



Power Resource Planning



Power Integrated Resource Plan (IRP)

- Two-year cadence, per state law (RCW 19.280)
 - Full update every 4 years
 - Smaller update every 2 years
 - Last IRP completed August 2022
 - Work under way for 2024 IRP (full update)
- 20-year outlook
- Public input process accompanies each IRP



<https://www.mytpu.org/about-tpu/services/power/integrated-resource-plan/>

Key recommendations from 2022 IRP

Continue to acquire conservation target identified in Conservation Potential Assessment

- **On track** to meet biennium target

Continue to develop capability to acquire Demand Response (DR)

- **In progress.** Residential water heater DR pilot well under way and working to pilot industrial DR opportunities.

Make final decision on joining Western Resource Adequacy Program (WRAP)

- **Complete.** Committed to participate in WRAP binding program in late 2023.

Conduct further work to settle on a solid approach to incorporating climate change into modeling

- **Complete.** Climate change trends will be incorporated into core IRP model runs in 2024.

Conduct more comprehensive analysis on potential impacts of electrification

- **In progress.** Rigorous study of impacts will be complete by Dec 2023 and presented at Study Session Jan 10.

Key questions for 2024

1 Which BPA product will best meet customer needs in the next contract period?

2 How might electrification of vehicles, buildings and industry affect future resource needs?

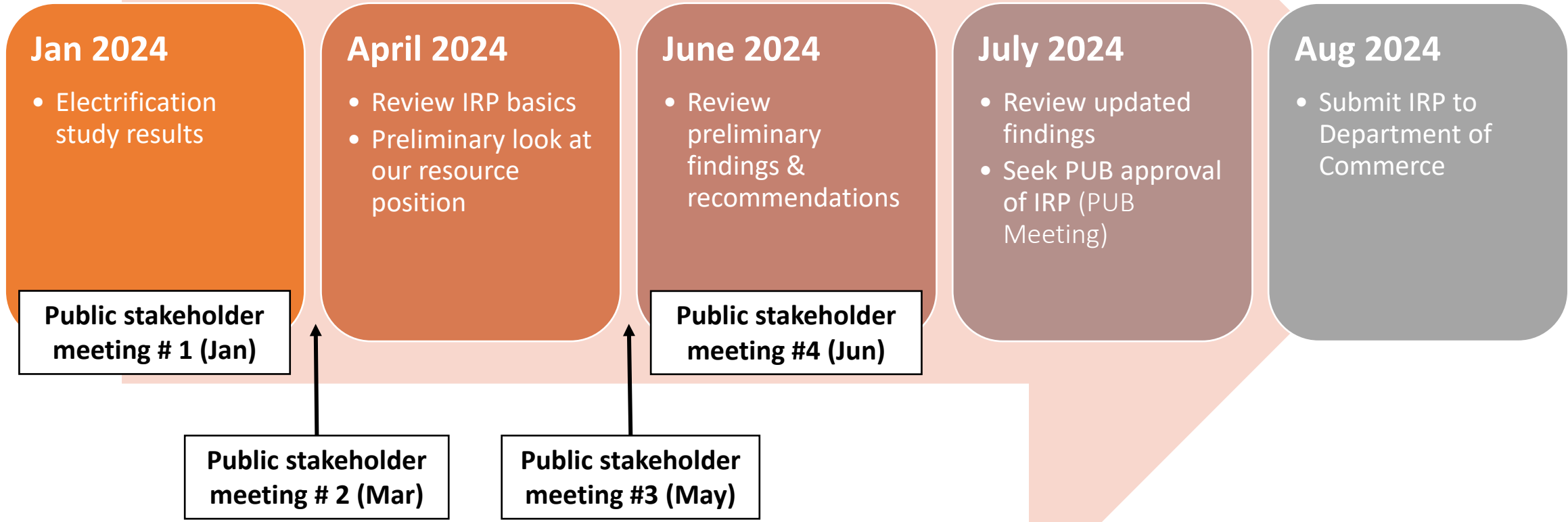
3 How might industrial load growth affect our future resource needs?

4 How will climate change affect our future resource needs?

5 What additional resources might we need to meet customer demand?

6 What changes to our hydropower capacity might we pursue in our next set of FERC licenses?

Tentative schedule of Study Session check-ins for 2024 IRP



Water Resource Planning

Water Integrated Resource Plan (IRP)

- Not required by law, update our IRP every 6 years
 - Last IRP completed in 2018
 - Work is underway for 2024 IRP (Final at end of Q2)
 - 60-year Outlook

Public Engagement

- Stand-up Public Advisory Committee in November of 2023
- Solicit informed perspectives on a number of topics including groundwater, lower future demands, and climate change
- Increase awareness of current and future management strategies
- Develop key relationships for ongoing public engagement



Working-on from previous IRP

Additional Water Supply Project (AWSP) Phase 1 (Howard Hanson Fish Passage)

- **On track.** Long-range goal of being on-line in 2031.

Partnering with Corps on Forecast iNformed Reservoir Operations (FIRO)

- **In progress.** Deploying Weather Monitoring equipment.

Exploring use of groundwater for current and future demands

- **In progress.** Many changes due to PFAS, and demand changes such as loss of WestRock.

Improving and developing new tools from the Yield model

- **In progress.** Presentation tools for both short-term and long-term modeling being created and refreshed.

Continuing to work towards Conservation Goal established in 2018 IRP

- **On track.** 10 year goal.

Key Objectives for 2024 IRP

1 Update Climate change information in model

2 Fold-in new Tacoma Water Demand forecast

3 Emphasis on groundwater, including PFAS

4 Incorporate loss of WestRock demand into plans

5 Modify Wells Master Plan

6 Changes to Presentation of results

Tentative schedule for 2024 IRP

Oct 2023

- Begin work

Fall 2023 into early 2024

- Groundwater evaluation
 - Quantity
 - PFAS

February 2024

- Updating of Climate Change portion of Yield model
- Check-in with Utility Board

May 2024

- Draft report
- Check-in with Utility Board

June 2024

- Final IRP

Public stakeholder meeting times TBD

Rail Resource Planning

Areas of focus for Rail

Locomotive Assets

Ongoing efforts toward fleet rationalization and modernization:

- Total of thirteen locomotives in active service – down four in 2023
 - 8 Non-regulated / 2 with Positive Train Control (PTC)
 - 2 EPA Tier-0
 - 2 EPA Tier-2 / Equipping 1 with PTC equipment in 2023 and 1 in 2024
 - 1 Tier-3
- Average age of current locomotive fleet is 31-years
- Three are less than 10-years old

Areas of Focus for Rail

Battery-Electric Locomotive Project: Funding awarded \$12,740,000

Funding Partnerships:

- Puget Sound Clean Air Agency as Co-applicant for Puget Sound Regional Council (PSRC) funding.
 - \$3,645,000 awarded
- U.S. DOT Consolidated Rail Infrastructure and Safety Improvement (CRISI) program.
 - \$4,095,000 awarded
- Washington State appropriation from Carbon Emissions Reduction Account.
 - \$5,000,000 awarded
- Tacoma Rail to cover costs if they exceed the partnership funding.

Areas of Focus for Rail

Oil Spill Contingency Plan

- 5-year renewal submitted on October 4, 2023
- Planning standards incident recovery meet state and federal requirements

Ongoing activities

- Operating protocols
- Track inspection and maintenance protocols

South Intermodal Yard (SIM)

- Current lease with the Port set to expire in 2025
- Interested parties:
 - Port of Tacoma, Class I railroads, SSA Marine, and ILWU Local 23 (Longshore Labor)