

## Presentation of Recommendation to Retain the Current Resource Allocation under the 2025 WAPA Hydroelectric Contract

Lena Perkins, PhD, Utilities Dept., Senior Resource Planner  
Tim Hall, Karl Knapp Stanford Energy Graduate Summer Fellow



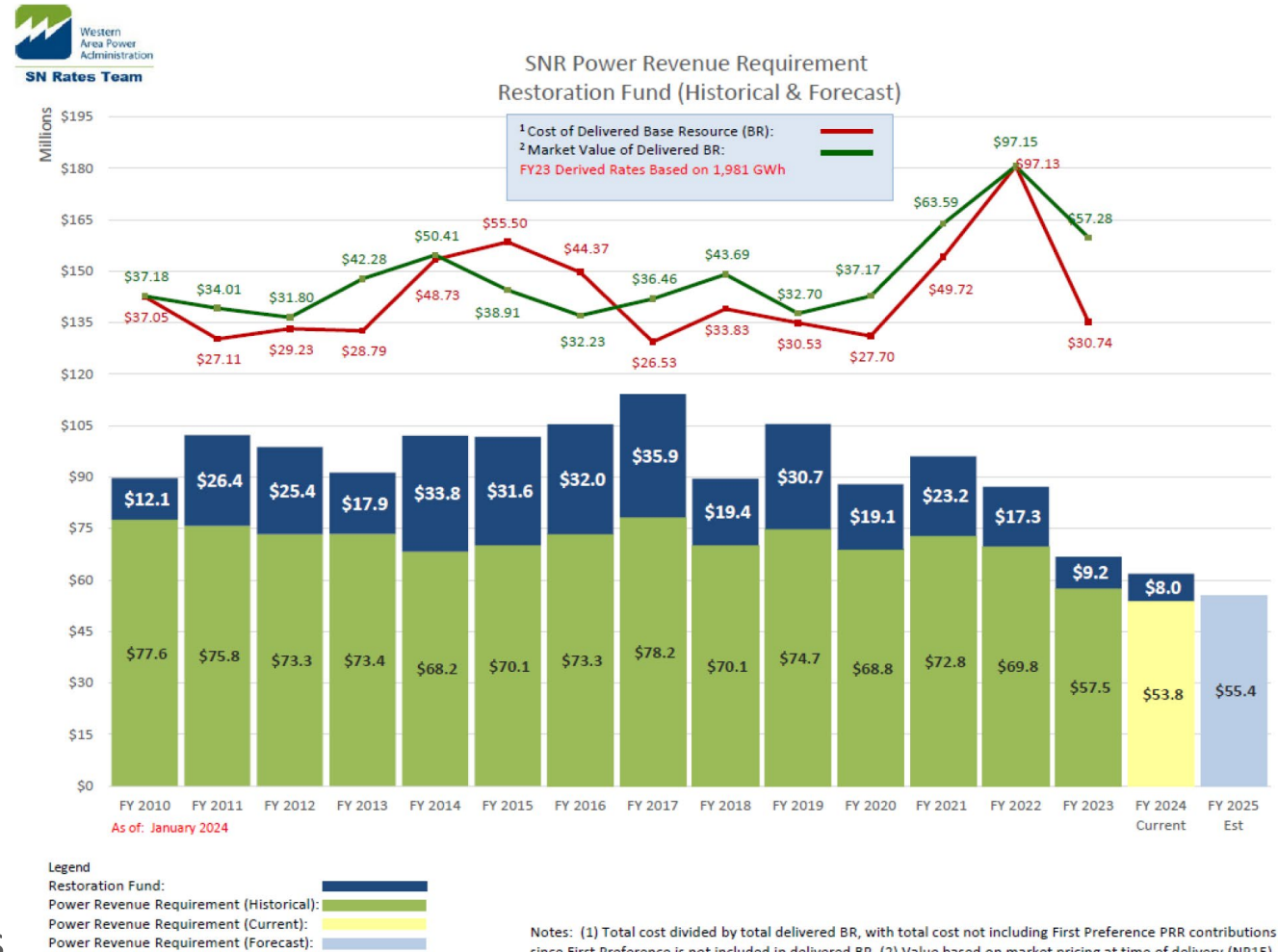
# CVP Background & CPAU History

- Central Valley Project (CVP) mostly built in 1930s & 1940s
- Federal water storage and conveyance project: 20 reservoirs, 10 generating power plants, 3 pump stations, 643 miles of canals
- Generates up to 2,000 MW, delivers ~7MAF/yr of water 500 miles south
- Palo Alto has been purchasing surplus power from CVP since 1960s
- For 2005-2024 the surplus power was packaged into a product called Base Resource electricity. It is ~ 60% of the total generation of the CVP power (surplus power not needed for pumping water south)
- City currently purchases ~ 12% of the Base Resource hydroelectricity, (~ 35% of City's electricity supply)
- Current Base Resource contract (2005-2024) has option to extend 98% of current share of WAPA Base Resource Contract through 2054
- City has option to exit or reduce 2025-2054 share until June 30, 2024
- If extended, City will also have option to exit or reduce contract in 2030



# WAPA and City have worked hard to increase value & flexibility

- City staff has worked with WAPA and USBR since 2008 to increase flexibility
- Increased revenue from better flexibility has lowered our costs
- WAPA has also worked with staff to contain costs and is returning money to power customers 2019-2030
- Staff is in active collaborations with WAPA and USBR to:
  - Improve the forecasts
  - Add flexibility, potentially via pumped storage, curtailing pumps, and batteries
  - Optimize real-time emissions of operations



# Recommend keeping 100% of 2025 WAPA Contract Extension through 2030

Positive net value driven by:

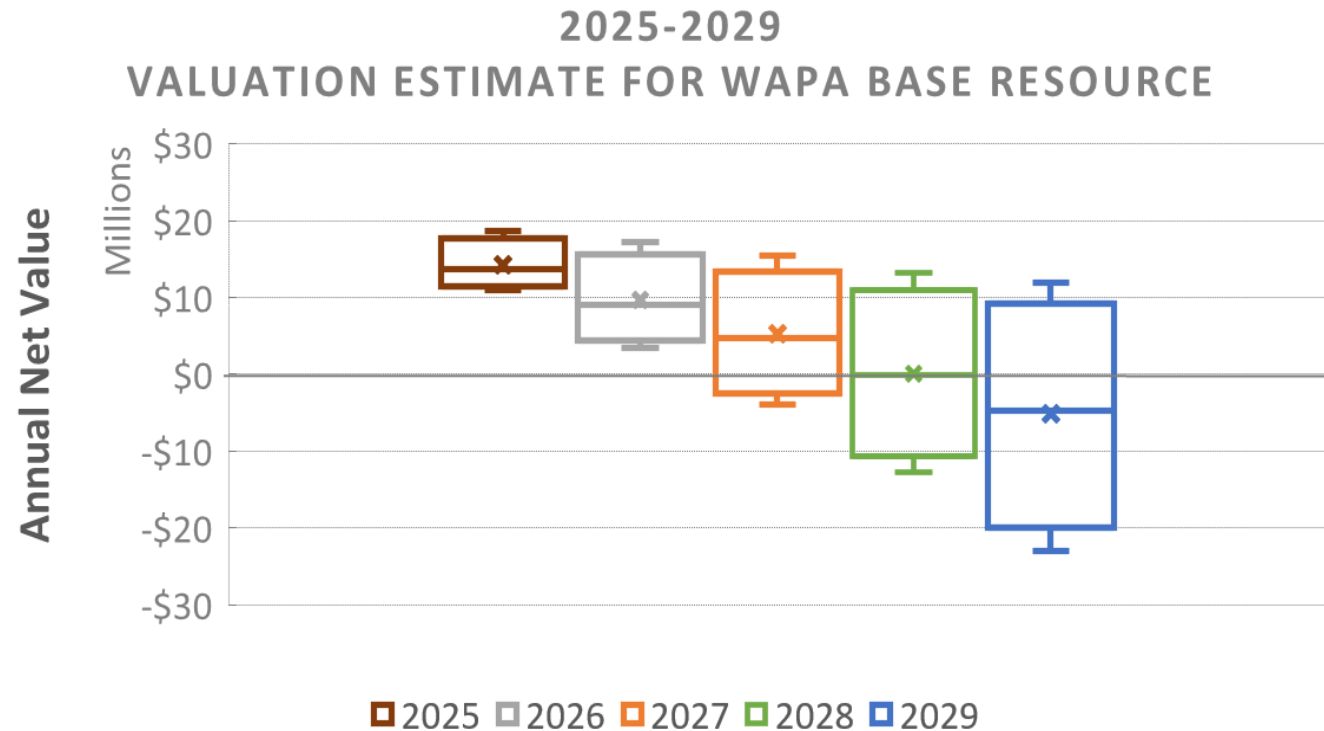
- Increased flexibility from hardware & software improvements
- High market electricity prices in evening hours
- Above average generation likely 2025 & 2026

Decreasing value over time driven by:

- decreasing power market prices
- Increasing chance of dry years from present
- Increasing cost projections

Uncertainty driven by:

- Electricity market price uncertainty & volatility
- Variability of precipitation
- Regulatory risks of lower generation & higher costs



# Recommendation

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Staff and the UAC recommend that the City Council keep the City of Palo Alto's full share of its allocated hydroelectric resource under the current hydroelectricity supply contract, the 2025 Base Resource Contract from Sierra Nevada Region of the Western Area Power Administration (2025 WAPA Contract), as approved by Council in February of 2021 (Staff Report #11679). No action from City Council is required to remain in the contract at the current resource allocation percentage. Staff will revisit project financial impact in 2029 and make a recommendation for the period of 2030 through 2034. The decision to reduce the contract allocation or terminate the contract will be revisited every five years until the last termination opportunity in 2049.

Questions?