



PROPOSED FY 2025 ELECTRIC FINANCIAL PLAN AND RATE CHANGES

Finance Committee

April 23, 2024

www.cityofpaloalto.org

Electric Rate Proposal

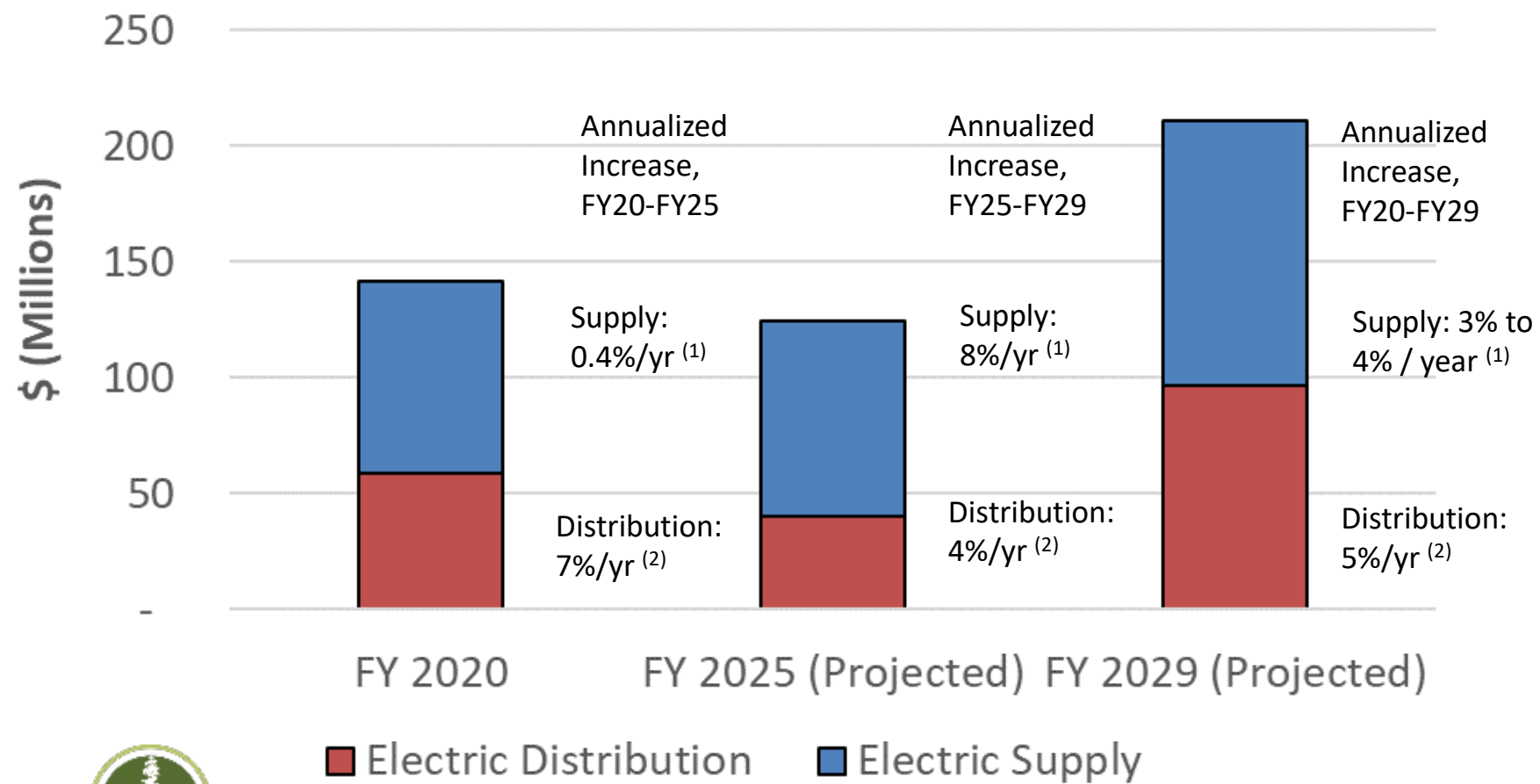
FY 2025 proposal

- Cost of Service Analysis completed March 2024 – requires rate changes varying by customer class and consumption pattern to match the cost to serve
- 9% (\$7.00/month) increase for the median residential customer
- 0.5% increase in revenue – lower than last year's 5% forecasted revenue increase
 - This is manageable due to large one-time electric supply revenues in FY 2024 – FY 2026
 - Will mitigate the bill impacts of incorporating COSA changes

Future years

- 5% rate increase per year projected for FY 2026-FY 2029
- Issue debt for Grid Modernization by end of FY25
- Reflects continuing transmission cost increases, other rising supply costs, grid modernization

LONG TERM COST TRENDS



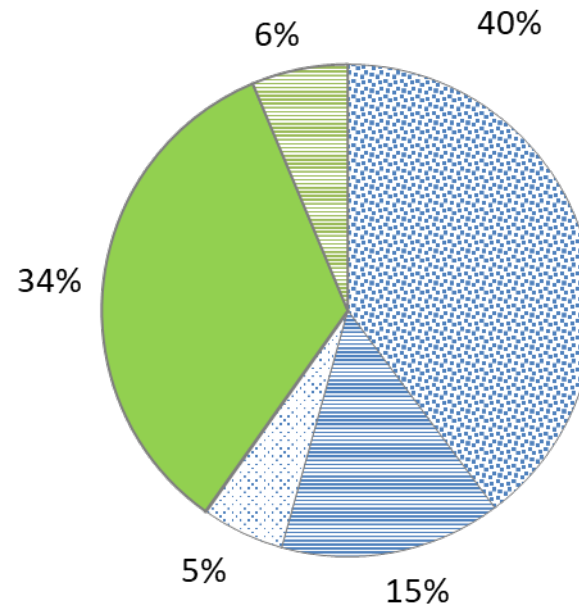
(1) The annualized increase in supply costs is skewed by one-time supply revenues in FY 2025. The annualized change from FY 2020 to FY 2029 is projected to be 3% to 4% per year.

(2) The annualized increase in distribution costs is heavily skewed by timing issues associated with major capital investments in FY 2024 and debt financing for those investments beginning in FY 2025. 7% per year represents the change from FY 2020 to the average of FY 2024 and FY 2025 distribution costs. 4% per year represents the change from that average to FY 2029. The annualized change from FY 2020 to FY 2029 is projected to be 5% per yr

Electric Utility Cost Structure (FY 2023)

Electric Supply: The cost to buy electricity and transport it to Palo Alto, including operational overhead (e.g. energy scheduling)

Electric Supply costs (in blue):
\$104 million
60%



■ Generation
■ Operations

■ Transmission
■ Capital Investment*

■ Supply Overhead

Electric Distribution: The cost to distribute electricity within Palo Alto, including: maintaining and replacing electric infrastructure, customer service, billing, administration, etc.

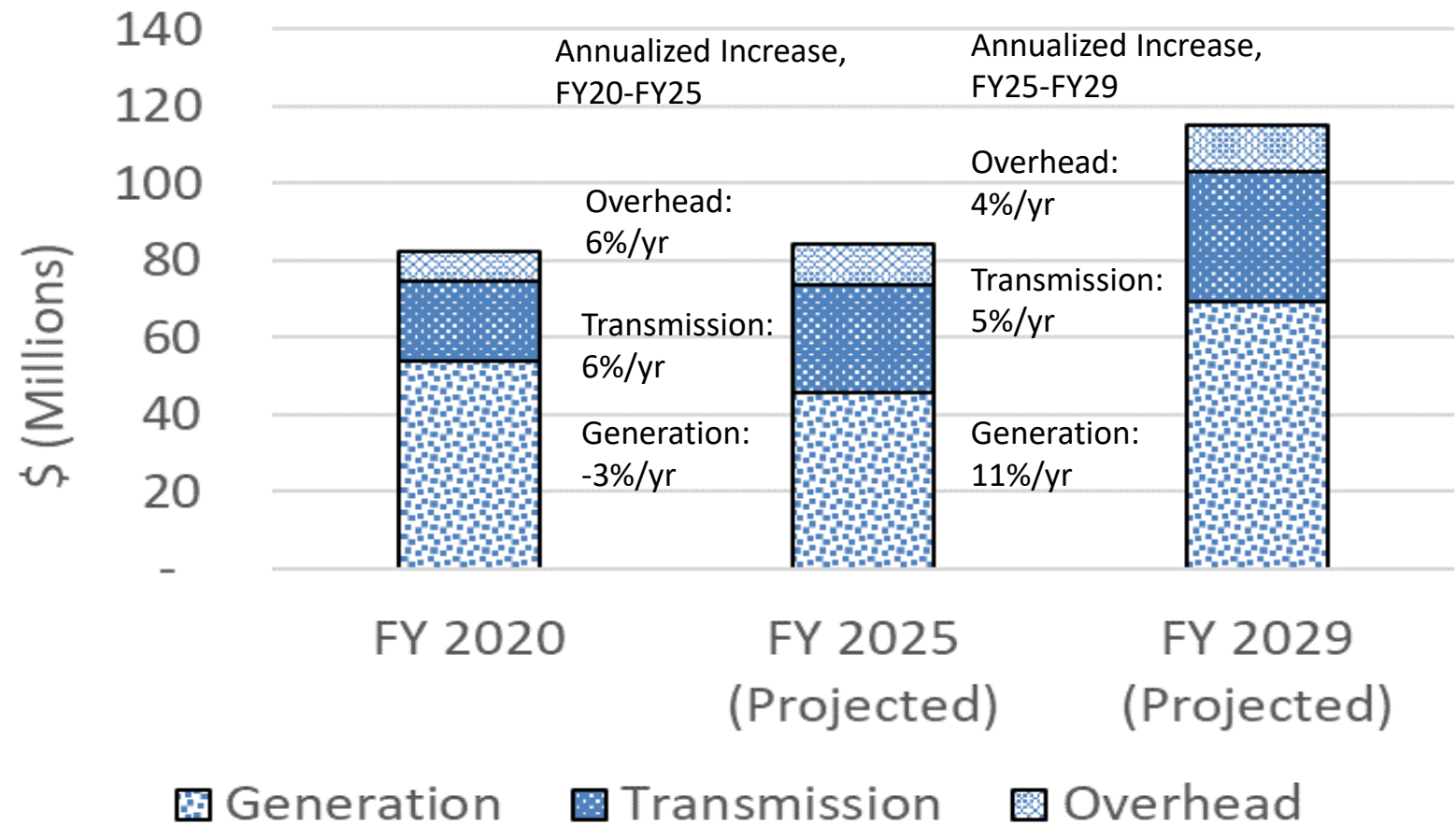


Supply Cost Drivers

- FY 2024 / FY 2025 electric supply costs are very low due to one-time surplus energy, REC, and resource adequacy⁽¹⁾ sales
- Transmission costs have been steadily increasing and this increase is projected to continue
- Resource adequacy⁽¹⁾ costs are projected to increase through FY 2029
- Hydropower costs forecasted to decline through FY 2029 due to debt service retirement for the Calaveras project
 - But additional debt may be issued for dam improvements

(1) Resource adequacy represents the cost of maintaining generating capacity to fulfill the California Independent System Operator's capacity requirements assigned to the City.

LONG TERM COST TRENDS: SUPPLY

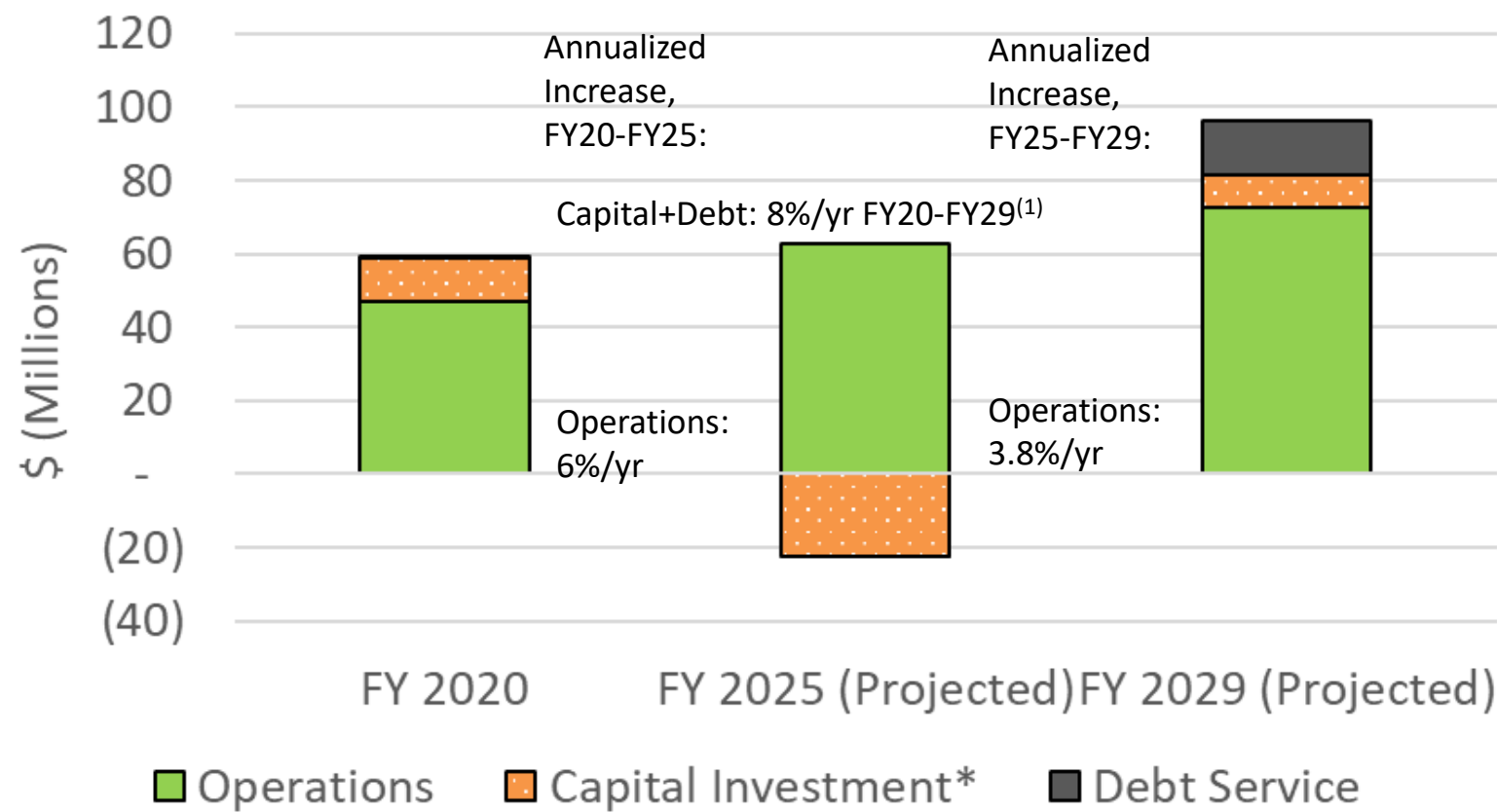




Distribution Cost Drivers

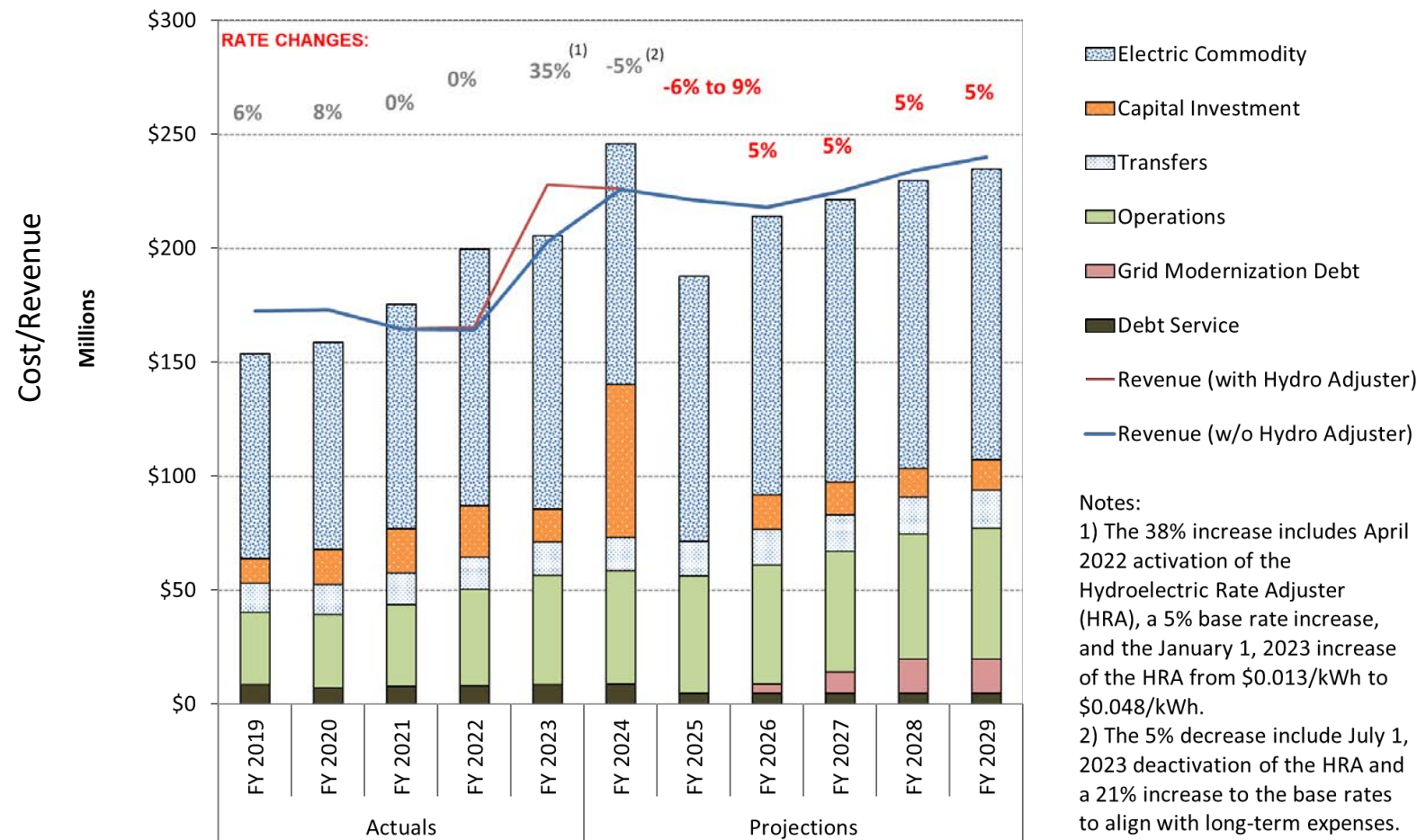
- Construction inflation, other inflation, benefit costs
- Overhead returning to historic levels as vacancies filled
- Contract line crew cost for backfilling vacancies
- Increased capital investment in the electric distribution system needed due to system age
- Debt service for Grid Modernization Project to:
 - replace aging infrastructure,
 - modernize the grid to enhance reliability
 - increase capacity for electrification
- Substantial one-time investments for Hanover Substation rebuild, Electric Utility share of Fiber Rebuild

LONG TERM COST TRENDS: DISTRIBUTION



(1) FY 2024 and FY 2025 capital and debt service numbers skewed by the timing of major capital investments and the timing of debt service to be issued to fund them, so only FY 20 to FY 29 combined annualized increases are shown.

FY 2025 Electric Cost and Revenue Projections





Basic Cost of Service Methodology

- First establish how much revenue you need
- Then use consumption patterns to allocate costs among customer classes according to how they incur utility costs
 - CPA classes: E-1 (residential), E-2 (small non-residential), E-4 (medium non-residential), E-7 (large non-res)
 - Costs allocators include things like kWh used, peak kW demand, number of customers in class
- Then design rates that provide prices that allocate costs to customers who consume in different ways.
 - Examples include tiered rates, seasonal rates, time of use rates, fixed charges, etc.



Prop 26 Considerations

- Prop 26 (2010): State ballot initiative that amended the State Constitution
- Gas and electric rates must represent the cost of service absent voter/ratepayer approval
- Cost of service analysis is the record demonstrating that the rates are cost-based
- Only applies to fees/charges imposed by local agencies (including gas/electric utility rates) – investor-owned utilities have all the latitude the CPUC will give them



Adopted Policy Guidelines (Nov 1, 2021)

1. Rates must be based on the cost of providing service. This is the overriding principle for the cost of service analysis (COSA); all other rate design considerations are subsidiary to this basic premise.
2. The effect of proposed rate design changes on low income customers should be considered, to the extent permissible within a cost-based rate structure.
3. Rates should ensure all value provided by building and vehicle electrification, including public vehicle charging, is reflected in the rates while remaining cost-based.
4. Rates should ensure all value provided by on-site generation and storage is reflected in the rates while simultaneously avoiding subsidies between customer classes and remaining cost based.
5. The COSA and rate design should support a transition to more time variant rates (such as TOU, seasonal, etc.) as AMI infrastructure is deployed.
6. The COSA should provide support for transition to fixed/minimum monthly charges.



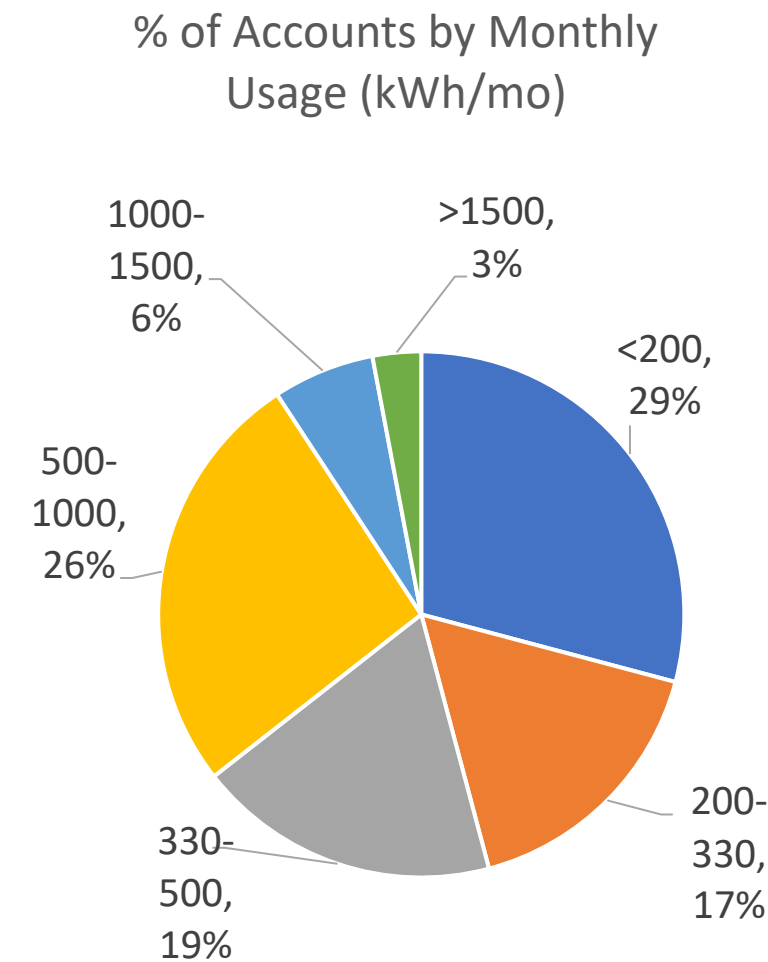
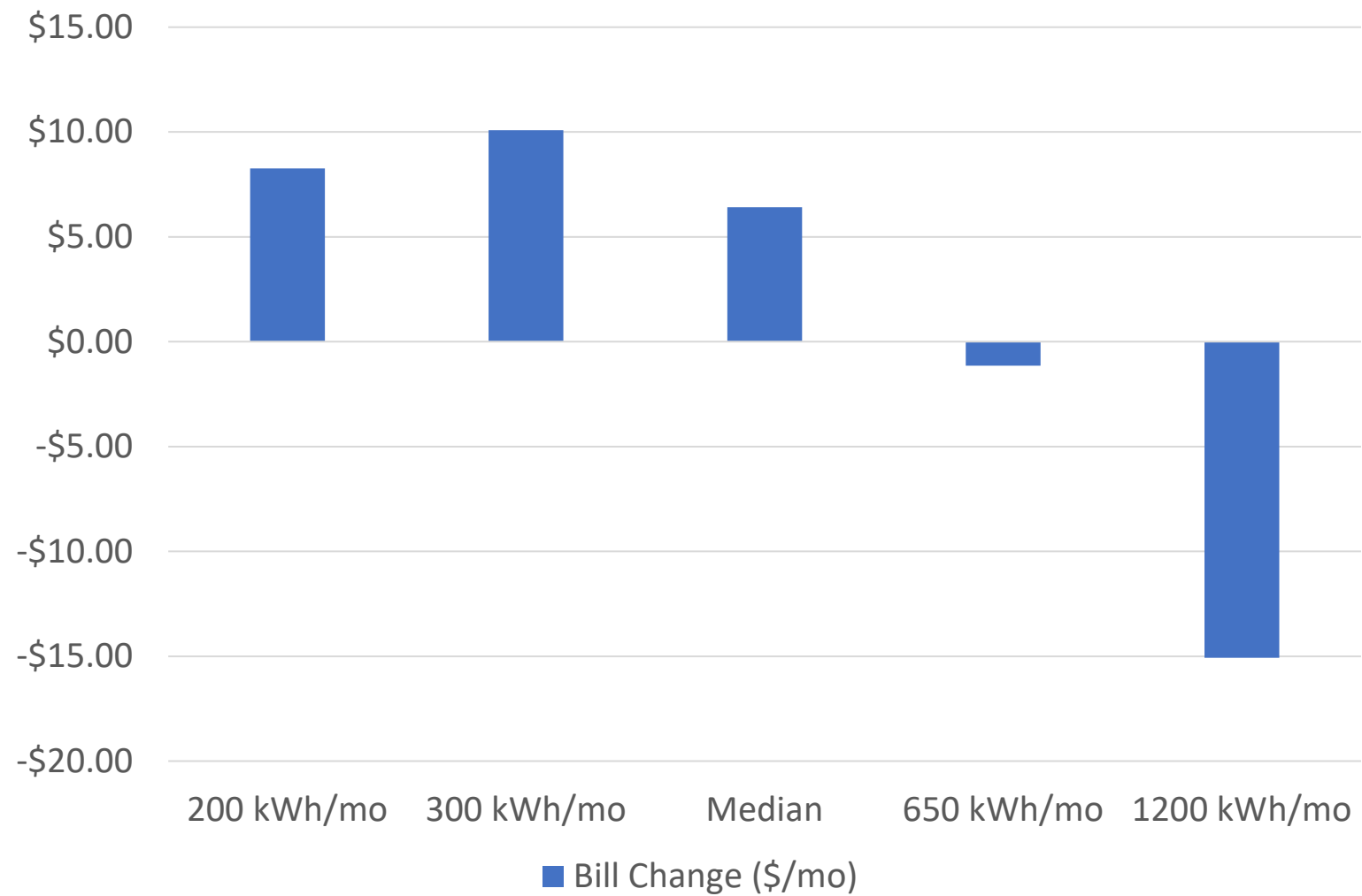
Key Results from this COSA

- No time of use (TOU) rates for E-1 (residential) and E-2 (small commercial) yet – likely July 1, 2026, will explore earlier options
- Changing the time periods for existing medium commercial (E-4 TOU) and large commercial (E-7 TOU) time of use rates
- Median residential bill increasing 9% due to three factors:
 - Residential class needs increase in revenue to meet cost of service while commercial classes need decreases
 - Addition of fixed charge
 - Flattening of tiers due to change in residential consumption
- All three factors impact lower users most
- Not increasing revenue this year to avoid larger impacts

Estimated Bill Changes

Rate Schedule	Usage (kWh/mo)	Peak Demand (kW-mo)	Bill under Current Rates (\$/mo)	Bill Under Rates Proposed 7/1/24 (\$/mo)	Change	
					\$/mo	%
E-1 (Residential)	300	N/A	\$52.57	\$63.02	\$10.46	20%
	(Summer Median) 365	N/A	\$66.46	\$75.67	\$9.22	14%
	(Winter Median) 453	N/A	\$88.16	\$92.87	\$4.71	5%
	650	N/A	\$136.75	\$135.95	(\$0.81)	-1%
	1200	N/A	\$272.42	\$256.22	(\$16.20)	-6%
E-2 (Small Non-Residential)	1,000	N/A	\$225.93	\$213.72	(\$12.21)	-5%
E-4 (Medium Non-Residential)	160,000	274	\$31,580	\$30,693	(\$887)	-3%
	500,000	856	\$98,680	\$95,667	(\$3,014)	-3%
E-7 (Large Non-Residential)	2,000,000	3,424	\$348,247	\$340,864	(\$7,383)	-2%

Residential Bill Changes by Usage Level (\$/month)



Current Electric Bill Comparisons *(\$/Mo. or Yr.)*

Residential

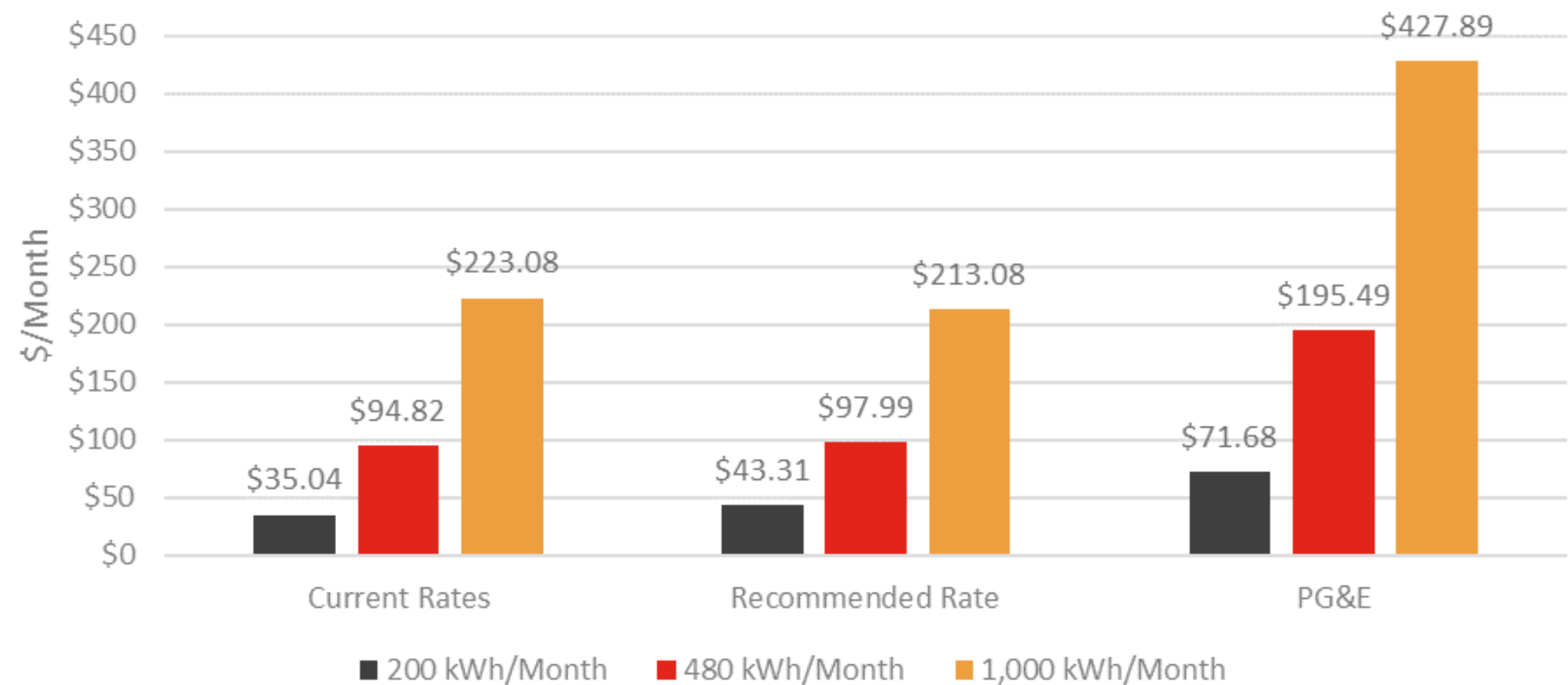
Season	Usage (kwh)	Palo Alto	PG&E	Santa Clara
Winter	300	52.56	126.03	49.02
	453 (Median)	88.16	191.88	74.93
	650	136.75	295.44	108.29
	1200	274.41	584.55	201.42
Summer	300	52.56	130.78	49.02
	(Median) 365	66.45	153.33	60.03
	650	136.75	314.76	108.29
	1200	282.18	603.87	161.54

Commercial

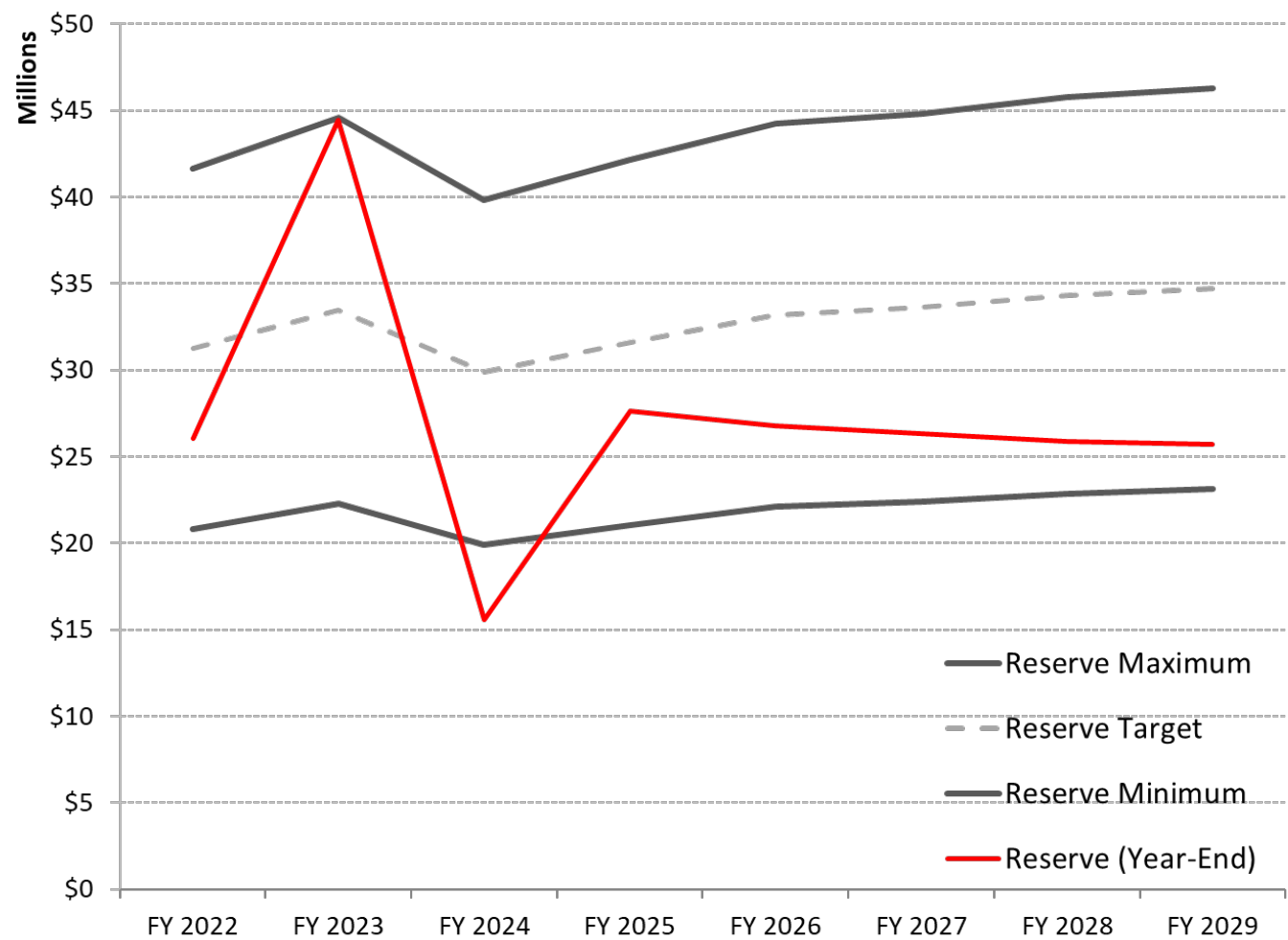
Staff is in the process of doing a more extensive review of commercial competitiveness and will provide updates in the future

Palo Alto median residential bill was about 40% below PG&E's for CY 2023, before the large PG&E January 1, 2024 rate increases. Now 50% to 60% below

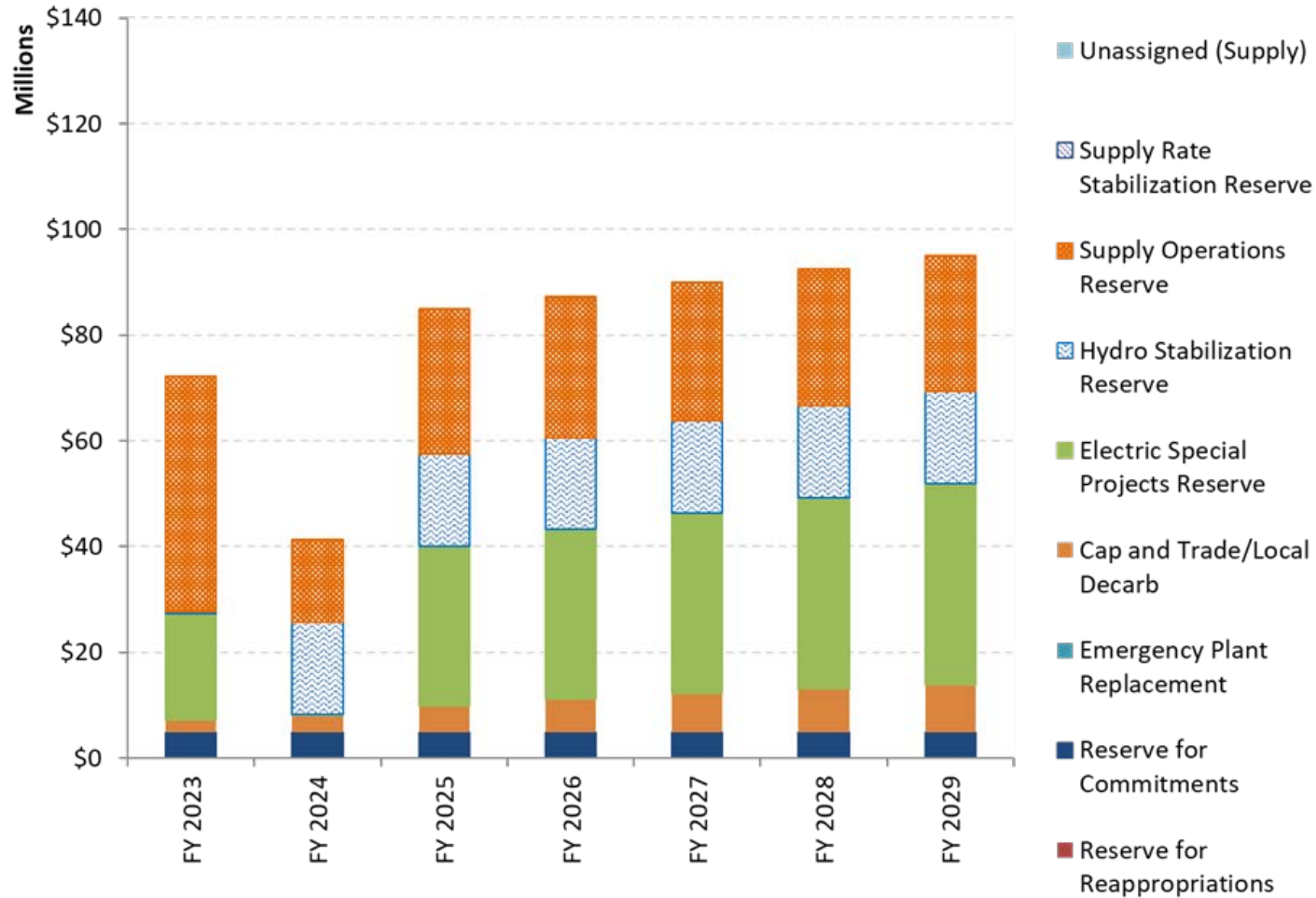
Residential Bill Comparison by Usage Level



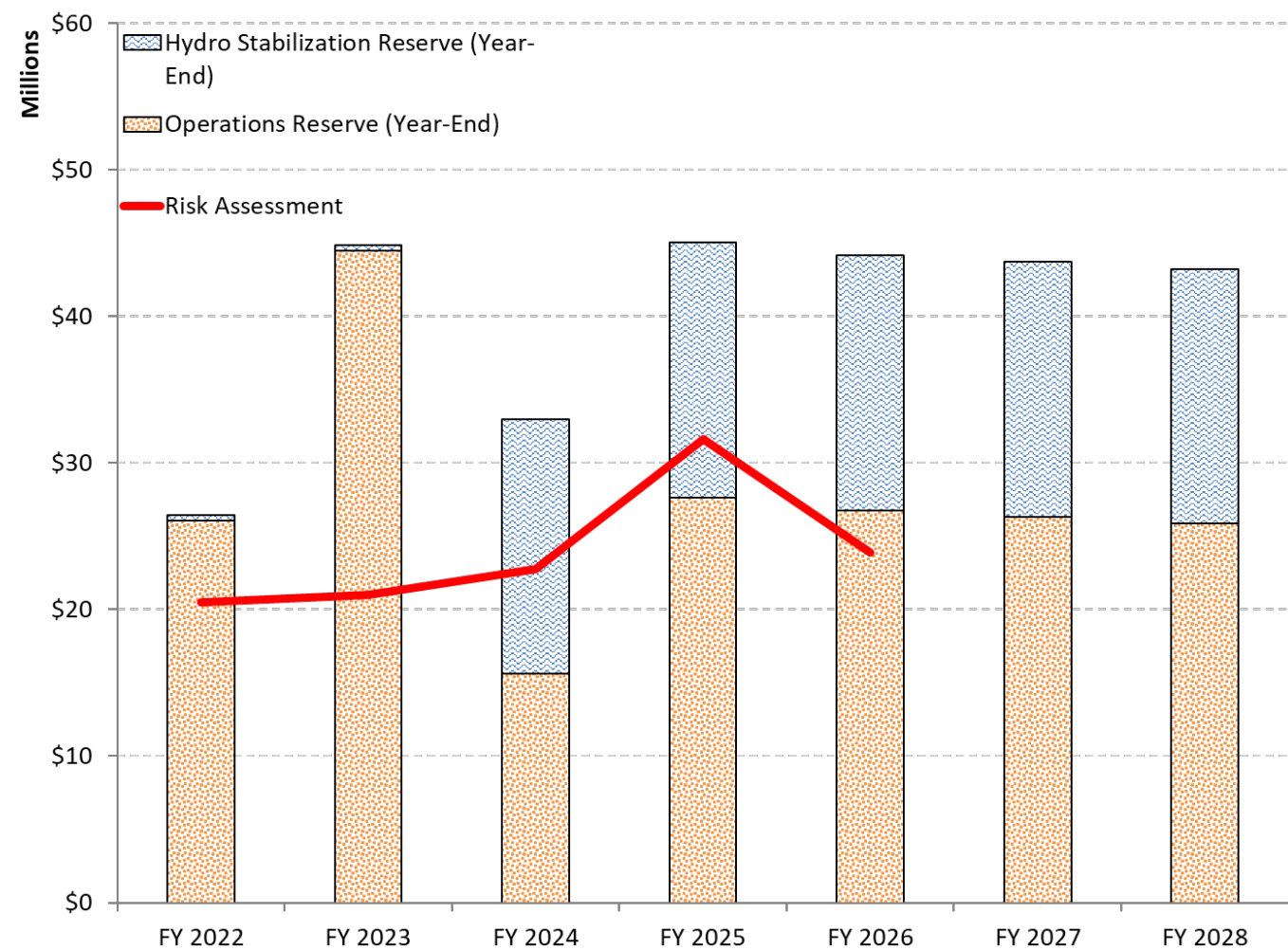
Electric Supply Operating Reserve Projections



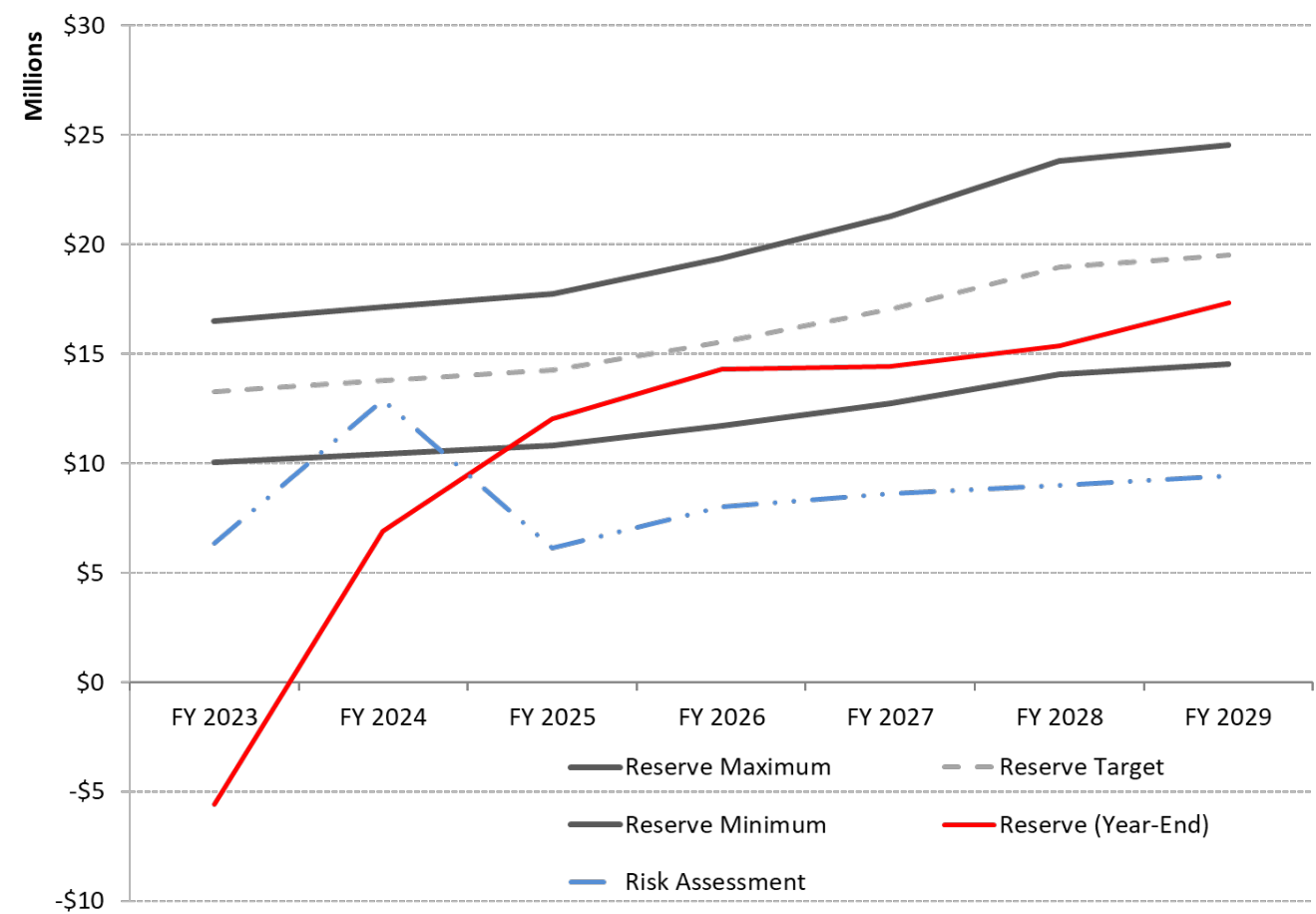
Electric Supply Reserve Projections



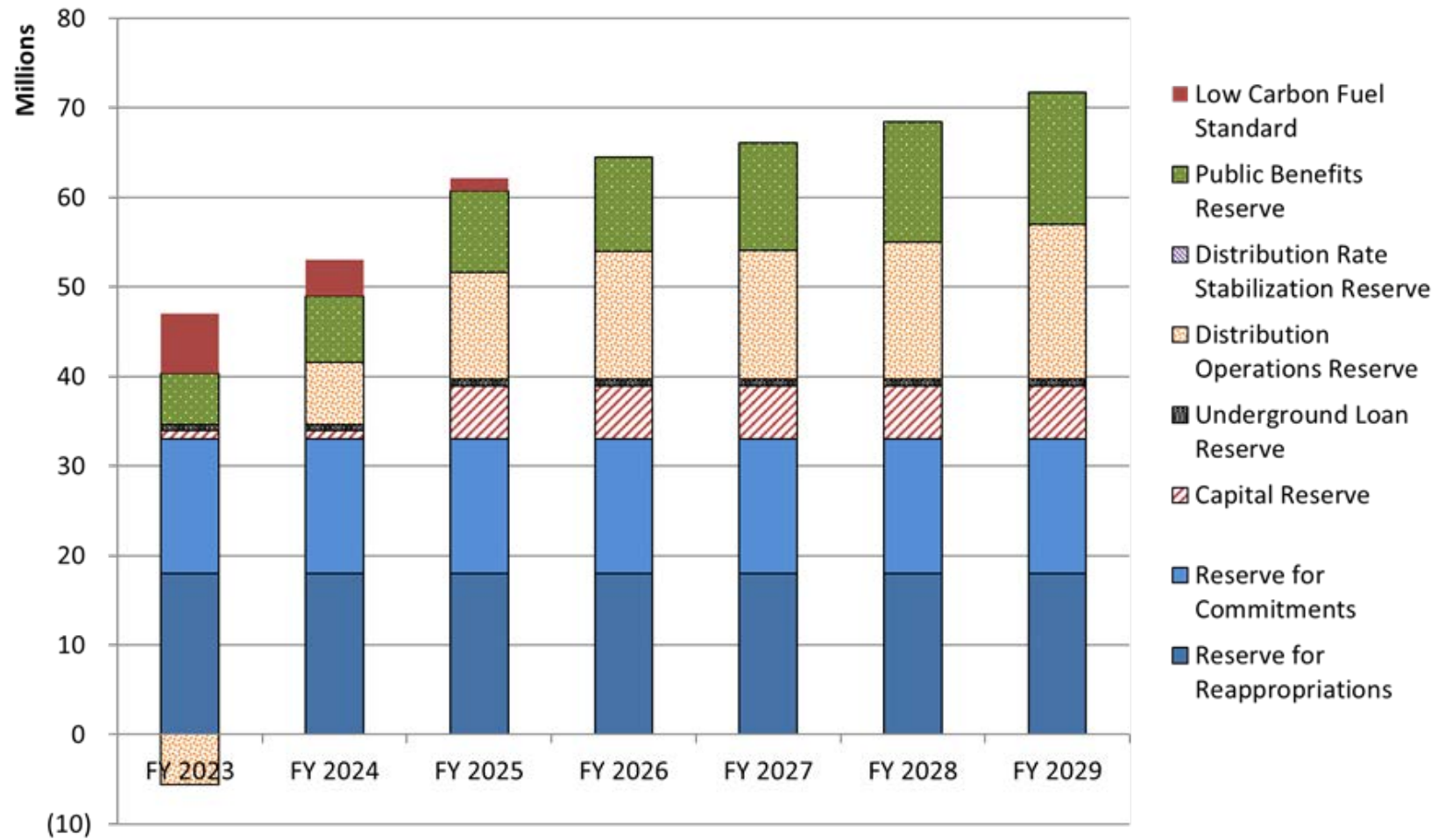
Electric Supply Reserve Adequacy



Electric Distribution Operating Reserve Projections



Electric Distribution Reserve Projections



ELECTRIC RECOMMENDATION

Staff recommends the FC recommend that the City Council adopt a resolution:

1. Accepting the 2024 City of Palo Alto Electric Cost of Service and Rate Study (Exhibit 1)
2. Approving the FY 2025 Electric Financial Plan (Exhibit 2), which includes the following actions:
 - a. Amending the Electric Utility Reserves Management Practices (Attachment B), to direct staff to transfer to the CIP reserve, at the end of each fiscal year, any budgeted capital investment that remains unspent, uncommitted, and which is not proposed for reappropriation to the following fiscal year and to clarify how the Cap and Trade Program Reserve is adjusted each year.
 - b. Approving the following transfers at the end of FY 2024:
 - i. Up to \$20 million from the Electric Special Projects Reserve to the Supply Operations Reserve;
 - ii. Up to \$17 million from the Supply Operations Reserve to the Hydroelectric Stabilization Reserve;
 - iii. Up to \$58 million from the Supply Operations Reserve to the Distribution Operations Reserve; and
 - c. Approving the following transfers in FY 2025:
 - i. Up to \$26 million from the Distribution Operations Reserve to the Supply Operations Reserve;
 - ii. Up to \$30 million from the Supply Operations Reserve to the Electric Special Projects Reserve; and
 - iii. Up to \$5 million from the Distribution Operations Reserve to the CIP Reserve;

ELECTRIC RECOMMENDATION (CONTINUED)

Staff recommends the FC recommend that the City Council adopt a resolution:

3. Amending the following rate schedules effective July 1, 2024 (FY 2025), (Exhibit 3):
 - a. Changing retail electric rates E-1 (Residential Electric Service), E-2 (Small Non-Residential Electric Service), E-4 (Medium Non-Residential Electric Service), E-4 TOU (Medium Non-Residential Time of Use Electric Service), E-7 (Large Non-Residential Electric Service), and E-7 TOU (Large Non-Residential Time of Use Electric Service) by varying percentages depending on rate schedule and consumption with an overall revenue increase of 0.5% effective July 1, 2024;
 - b. Decreasing the Net Surplus Electricity Compensation (E-NSE-1) rate to reflect 2023 avoided cost, effective July 1, 2024;
 - c. Decreasing the Export Electricity Compensation (E-EEC-1) rate to reflect current projections of FY 2025 avoided cost, effective July 1, 2024; and
 - d. Updating the Residential Master-Metered and Small Non-Residential Green Power Electric Service (E-2-G), the Medium Non-Residential Green Power Electric Service (E-4-G), and the Large Non-Residential Green Power Electric Service (E-7-G) rate schedules to reflect modified distribution and commodity components, effective July 1, 2024.