



San Francisco
Water Power Sewer

SAN FRANCISCO PUBLIC UTILITIES COMMISSION 10-YEAR FINANCIAL PLAN

FY 2025-26 to FY 2034-35

A discussion of key policies, strategic goals, and assumptions that guide the 10-Year Plan.

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Financial Planning, SFPUC

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Introduction

SFPUC Overview

The San Francisco Public Utilities Commission (SFPUC) is a department of the City and County of San Francisco and is responsible for utility services associated with operating and maintaining three enterprises: the Water Enterprise, the Wastewater Enterprise, and the Power Enterprise, which includes Hetch Hetchy Power and CleanPowerSF. The Enterprises are operated and managed as separate financial entities with separate enterprise funds.

As the largest water purveyor in Northern California, the Water Enterprise serves a population of nearly 2.8 million people in over 30 cities, providing water directly to customers in San Francisco and wholesale water service to 27 water agencies. Within San Francisco, the Wastewater Enterprise provides wastewater and stormwater collection, treatment, and disposal services, managing its combined sewer system and three water pollution control plants (Southeast Treatment Plant, Oceanside Treatment Plant, and the North Point Wet Weather Facility).

To meet the electricity needs of San Francisco's municipal, business, residential, and wholesale customers, the Power Enterprise operates two retail electricity programs: Hetch Hetchy Power, San Francisco's publicly owned utility (POU), and CleanPowerSF, San Francisco's community choice aggregation program (CCA). Hetch Hetchy Power generates, schedules, purchases, sells, transmits, distributes, meters and bills electricity to retail and wholesale customers, responds to outages, and owns, operates, and maintains the majority of the City's streetlight system. Hetch Hetchy Power customers include City and County agencies and a growing number of commercial and residential customers, including those associated with the build out of redevelopment communities (such as Treasure and Yerba Buena Islands, Candlestick/Hunter's Point, and Mission Rock). CleanPowerSF schedules, purchases, and sells electricity to residential and commercial customers located exclusively in the City, and is the power provider for the majority of San Francisco's energy supply.

Purpose

The 10-Year Financial Plan (Plan) is a summary of projected revenues, expenditures, fund balances, and financial metrics for each SFPUC enterprise over a 10-year period. As required by the San Francisco Charter Section 8B.125, these long-term projections are updated annually to reflect changes in operating budgets, capital spending, and revenue generation. The financial plan concludes with a projection of the rate revenue adjustments needed to fund the ongoing activities of the enterprises. In line with SFPUC's Strategic Plan goal of Financial Sustainability, the plan serves as an opportunity to transparently evaluate the financial challenges facing each enterprise and develop strategies to meet their financial goals and obligations. In addition, it is the primary method to assess future compliance with the targets set in the agency's adopted financial policies. Consolidating these key financial indicators into the 10-Year Plan serves to inform the SFPUC's long-term planning decisions, such as the biennial operating and capital budgets, long-range capital planning, and capital financing strategies.

It is important to recognize that the adoption of the financial plan does not constitute adoption of the projected rates, but provides a rate forecast. Future rate adoption follows the approval process governed

by state and local laws, including separate Commission action. Commission rate hearings will take place in Spring 2025 to approve Power Enterprise FY 2025-26 rates and again in Spring 2026 to approve rates for all Enterprises for FY 2026-27. These rate adjustments are informed by comprehensive rate studies, which occurs at least every five years as required by the San Francisco Charter Section 8B.125.

Methodology

The financial plan is informed by the latest available financial and operational data and guided by City and Commission policies, goals, and objectives. The forecasts in this report are developed in financial models created by the Financial Planning team to address the complex financial planning needs facing the enterprises. These models allow the agency to evaluate different scenarios regarding budgets, capital planning, and customer usage behavior and their impacts on the financial health of the enterprises.

Staff incorporated historic actual revenues and expenditures, the proposed operating budget, the proposed capital plan, capital project spending schedules, updated debt service schedules for new debt issued in the latest fiscal year, customer growth and sales forecasts, and assumptions regarding capital financing costs. Staff then calculated the updated cash flow for each enterprise and the sufficiency of the revenue generated under the prior rate forecast. Upon completion of the preliminary analysis, the assumptions used were reviewed with key staff in each enterprise and proposed changes to the financial plan were presented to executive leadership.

Executive Summary

Expenses

Over the next 10-year period, costs are anticipated to go up for each of the enterprises. For Water and Wastewater, capital investments are the primary driver for cost growth. Power supply costs are the main cost for CleanPowerSF, whereas both power supply and delivery and (to a lesser extent) capital projects contribute to increased costs for Hetch Hetchy Power.

Table 1. Total Operating and Capital Expenses by Enterprise, FY 2025-26 Through FY 2034-35 (Million Dollars)

(\$M)	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual Growth
Water	\$833	\$836	\$875	\$926	\$997	\$1,050	\$1,086	\$1,092	\$1,122	\$1,135	3.4%
Wastewater	\$526	\$561	\$640	\$722	\$794	\$906	\$950	\$998	\$1,067	\$1,111	8.9%
Hetch Hetchy Power	\$386	\$411	\$460	\$480	\$559	\$618	\$690	\$680	\$745	\$781	7.0%
CleanPowerSF	\$404	\$405	\$402	\$408	\$424	\$469	\$495	\$489	\$516	\$531	1.9%

In Water and Wastewater, operating expenditure projections escalate across the 10-year planning horizon at projected inflationary rates, while Hetch Hetchy Power and CleanPowerSF's operating expenditures are largely driven by anticipated growth in power supply costs and delivery charges.

Capital expenditures in the financial plan reflect the projected cash need for each enterprise. The cash need is comprised of the appropriations for all revenue-funded capital and debt service payments for all debt-funded projects. Because SFPUC uses interim financing to lower the costs for debt-funded projects, and because debt repayment is spread out over many years, there is a lag between when funds are appropriated for debt-funded capital and when those costs begin to impact the cash flow of each enterprise. Wastewater's growing Capital Improvement Program and subsequent increases in revenue-funded capital, bond issuance, and annual debt service increase are the driver of its high annual expense growth.

Revenues

As an Enterprise department, the SFPUC receives no tax revenues and relies on utility rates as its primary source of revenue. In addition to rates, the enterprises also generate a modest amount of income from miscellaneous sources such as interest income earned on reserves, rental revenues, and non-rate penalties and fees. Table 2 summarizes the projected total revenues by Enterprise over the 10-year planning period. Utility sales comprise the majority of the revenues for each of the enterprises. Sales volumes are influenced by many external factors including weather, the economy, emergencies, conservation efforts and mandates, and long-term trends such as population growth and price elasticity.

Beginning FY 2024-25, all Enterprises assume no further recovery from decreased sales during the COVID-19 pandemic - i.e., the current levels of usage are assumed to reflect a "new normal." Water sales and

wastewater billable volumes are expected to rebound from the impact of the drought over three to four years after the drought's end in FY 2022-23. Adjustments are applied to retail water and wastewater billing to account for delayed bills during FY 2023-24 caused by metering problems; all issues are expected to be resolved by FY 2025-26. In Hetch Hetchy Power, significant growth is forecasted due to new customer acquisition and electrification. In addition to these large trends, volumetric utility sales projections include more modest adjustments to account for population and account growth, ongoing conservation, and reductions in consumption due to growing utility costs.

Table 2. Total Revenues by Enterprise, FY 2025-26 Through FY 2034-35 (Million Dollars)

(\$M)	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual Growth
Water	\$798	\$840	\$881	\$933	\$1,001	\$1,049	\$1,092	\$1,130	\$1,154	\$1,176	4.4%
Wastewater	\$488	\$560	\$640	\$727	\$815	\$900	\$957	\$1,006	\$1,058	\$1,111	9.6%
Hetch Hetchy Power	\$362	\$396	\$450	\$499	\$567	\$627	\$696	\$685	\$737	\$862	9.8%
CleanPowerSF	\$444	\$441	\$441	\$445	\$459	\$472	\$481	\$487	\$498	\$508	1.6%

Proposed Financial Plan

Table 3 provides a summary of the projected rate adjustments required by the budgets and to comply with all financial policies. For Water and Wastewater only the first year of the retail rate plan has been approved by the Commission. All years of wholesale water rates and Hetch Hetchy Power and CleanPowerSF rates have yet to be adopted. Forecasted rates will continue to change with updated data.

Table 3: Adopted () and Forecasted Rate Changes, FY 2025-26 Through FY 2034-35*

Enterprise	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Annual Avg.
Retail Water	5.0%*	7.0%	7.0%	8.0%	8.0%	7.0%	6.5%	6.5%	3.5%	3.0%	6.1%
Wholesale Water	1.9%	1.7%	3.2%	3.8%	7.0%	2.7%	1.6%	0.0%	0.0%	0.0%	2.2%
Wastewater	9.0%*	15.0%	15.0%	14.0%	12.5%	10.5%	6.5%	5.0%	5.0%	5.0%	9.7%
Hetch Hetchy Power¹	10.0%	9.5%	9.5%	8.0%	5.0%	5.0%	4.5%	4.0%	4.0%	5.0%	6.4%
CleanPowerSF Generation²	3.0%	0.0%	0.0%	0.0%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.6%

Rate adjustments in this plan are needed to cover projected costs and meet financial targets while balancing customer affordability.

¹ Hetch Hetchy Power rates shown are for retail, non-municipal customers.

² CleanPowerSF rate increases refer to the generation portion of the bill. CleanPowerSF customers also pay PG&E delivery charges and fees. A 3% generation rate increase represents an approximate 1% total bill increase.

SFPUC remains committed to financial sustainability. Adopted financial policies, including the Debt Service Coverage Policy, Fund Balance Reserve Policy, and Capital Financing Policy set targets for our long-term financial planning, while the San Francisco Charter requires the agency to establish rates sufficient to maintain high bond ratings. Prudent financial planning is all the more important since the utility industry as a whole faces growing challenges, including climate change, an uncertain economy, regulatory complexity, and aging infrastructure. The projected revenues in the 10-Year Financial Plan meet and exceed all policy requirements; however, this year's plan goes further, including concrete steps to reinforce the SFPUC's financial position so that the agency has the financial resources to cushion against unforeseen events. Long-term financial forecasts are presented transparently, with extensive capital plans to anticipate and respond to emerging challenges. Rate forecasts have been set to target financial metrics higher than our policy minimums and higher than those in last year's Plan. This includes higher debt service coverage and increasing the revenue-funded portion of the total agency Capital Improvement Plan to almost one third, reducing long-term reliance on debt and allowing for a more sustainable balance of capital financing. Sales volume, expense growth, and debt assumptions are more conservative than in prior Plans, reducing the risk of budget overruns and revenue shortfalls. This careful, conservative financial planning is crucial to sustain the vital infrastructure entrusted to our care. Moreover, it saves ratepayers money in the long term. Because the SFPUC relies heavily on debt to fund its capital plans, demonstrating a strong fiscal position to markets and creditors reduces borrowing costs – and customer bills.

Maintaining our strong financial position, while simultaneously making the large capital investments needed to meet regulatory obligations, responsibly manage our system, and improve our resilience to climate change means that utility rates must go up. The SFPUC takes customer affordability very seriously, and is one of the few utilities in the country with an official Affordability Policy. As required, this Financial Plan includes a 20-year projection of customer utility bills and incomes. Our current forecasts indicate that, absent changes, the average combined water and wastewater bill slightly exceeds the affordability targets in FY 2036-37. This forecast is the Affordability Policy in action, providing an early warning sign, a decade in advance, that action is needed. During next year's budget process, we will develop multiple strategies to address affordability concerns, and will continue to share updates on these efforts with the Commission and public.

Financial Management Policies & Practices

Background

The Commission has adopted various policies that set requirements and parameters guiding SFPUC financial activities and decision-making. These policies demonstrate to ratepayers, credit markets, investors, and rating agencies that SFPUC is committed to financial sustainability and prudent stewardship of resources. The primary purpose of these policies is to ensure each enterprise retains sufficient funds for future infrastructure needs, replacement of aging facilities,

bond reserves, and various operating expenses in a manner that mitigates unexpected disruptions to revenue or emergency expenditures. The SFPUC's Financial Policies can be found on its website, at <https://sfpuc.org/about-us/policies-plans/financial-plans-and-policies>.

SFPUC Key Financial Policies

- ✓ Debt Service Coverage Policy
- ✓ Capital Financing Policy
- ✓ Fund Balance Reserve Policy
- ✓ Affordability Policy
- ✓ Ratepayer Assurance Policy

Economic and Industry Context & Financial Management Practices

The SFPUC remains committed to financial sustainability and applies consistently conservative financial practices. Some rating agency analysts have recently expressed concern about the financial sustainability of the wider water and wastewater utility sector, particularly utilities in California. This is mainly due to the challenges many utilities (including SFPUC) are facing: aging infrastructure, large capital investment needs, increased regulatory compliance challenges, the impact of climate change, and the resulting affordability of customer bills. The SFPUC is an industry leader in transparently budgeting and planning to address climate change and regulatory obligations. Our service area has a history of fires going back to the 1906 Great Earthquake and already experiences impacts from drought and sea level rise. Protecting our system and customers from climate change is a core part of our work. For example, SFPUC already proactively invests in wildfire mitigation measures for our regional watershed, including controlled burns and vegetation thinning. Within San Francisco, city-wide fire suppression systems provide dedicated fire protection with unique capabilities, including delivering water at much higher pressures and the ability to use unlimited water from the Bay. We have made major investments in alternative water supplies to make us more resilient to drought. To respond to regulatory obligations for water quality, we have transparently included the full costs of projects like the Ocean Beach Climate Adaptation and Nutrient Reduction projects in our 10 Year Capital Plans. Public, decade-long financial forecasts of capital expenditures, associated operating cost increases, rates, and customer bills are rare in the utility sector, and this annual exercise provides a robust framework for our agency to share our proactive responses to these threats.

Recent economic trends and the post-COVID impact on employment have caused market concerns about many large cities, including San Francisco. The City & County of San Francisco's General Obligation Bonds were recently downgraded by Moody's from Aaa to Aa1, and by S&P from AAA to AA+, reflecting concerns about a weakened local economy. The SFPUC is an Enterprise department with revenue streams distinct from the City's General Fund. While changes in where employees work and where residents shop have negatively impacted "downtown" and the City's General Fund, the SFPUC has been relatively more stable.

Decreases to utility usage from fewer commuters into San Francisco represent a small percentage of total sales and have been or soon will be mitigated with one-time increases to utility rates to compensate.

Lastly, ratings agencies have expressed concerns about lower Water Enterprise debt service coverage and the forecast of lower future debt service coverage for the Wastewater Enterprise related to the large capital plan, as well as the potential erosion of reserves and growing leverage metrics. This past summer, the two rating agencies rating the sale of Wastewater Bonds affirmed Wastewater Enterprise's ratings; however, while affirming their AA Rating, S&P Global Ratings lowered the Wastewater Enterprise bonds outlook from Stable to Negative. As a result, the SFPUC has taken steps to strengthen its financial position.

The City's Charter Section 8B.125 requires the SFPUC to "establish rates... sufficient to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities of each enterprise," and the SFPUC's senior leadership has further articulated its commitment to maintaining high ratings. Because high bond ratings allow the agency to access lower interest rates on its revenue bonds, maintaining the SFPUC's current high ratings would have significant financial benefits for SFPUC ratepayers, especially considering the agency's very large Capital Improvement Plans, which are largely funded by future debt issuances. As a result, working with our Municipal Advisors, the SFPUC has undertaken a months-long reevaluation of our financial policies and practices. This review included an assessment of the financial performance and policies of highly rated peer utilities. Importantly, SFPUC management and staff have carefully assessed both the public reports and feedback received from bond credit rating agencies.

Based on this research, we have taken initial steps to reinforce the SFPUC's financial position and demonstrate an even stronger commitment to financial sustainability. More work is expected over the next year in anticipation of the next two-year budget, including potential changes to update our formal financial policies. Any policy updates would be incorporated into the FY 2026-27 to FY 2035-36 financial plans, which will coincide with adoption of new rates for all Enterprises. In the meantime, to ensure we are meeting and exceeding our minimum policy thresholds for this financial plan, we have set rate increases to target financial metrics substantially higher than our policy minimums, and higher than shown in last year's plan. This ensures that the proposed plans maintain the Enterprise's current strong financial positions and are resilient to unplanned or unforeseen eventualities. The projected financial performance of each enterprise and the forecast of our metrics are discussed below in the *10-Year Financial Plan* section.

Finally, the SFPUC continues to employ conservative assumptions in our financial planning. For instance, new revenue bond issuance uses higher interest rates than the enterprises have received in all recent sales. While our agency is actively pursuing State and Federal low-cost loans or grants, renewable tax credits available under the Inflation Reduction Act, and other measures to reduce needed rate increases, we do not assume any of these in our forward projections. Compared to prior Plans, we have lowered water sales, power sales, and wastewater billable volume projections. Ongoing efforts around drought surcharges, increases to the fixed portion of customer bills, and adopting rates for shorter time-period periods are making our revenues more resilient to future droughts, recessions, and associated demand reductions. Additional details are available in the *Revenue Forecasts* and *Expenditure Forecasts* sections.

Debt Service Coverage Policy

Adopted by the Commission in March 2017, [the Debt Service Coverage Policy](#) requires the SFPUC to maintain sufficient revenue to pay its annual debt service obligations. Debt service coverage ratios measure annual net revenues³ as a fraction of annual debt service. For example, a debt service ratio of 1.00x means that an issuer generates exactly enough in net revenues to pay its debt service obligations, with no excess funds left. Debt service ratios higher than 1.00x indicate the issuer has additional debt capacity. Note that when funds are generated in excess of net debt payments, these funds can then be applied to capital projects to reduce the need to issue future debt.

Pursuant to covenants with bondholders, enterprise revenues pledged for debt service repayment must meet minimum requirements for two different coverage ratios:

- 1) Indenture Coverage, which includes the Enterprise's unrestricted fund balance in net revenues, must equal a minimum of 1.25x annual debt service and;
- 2) Current Coverage, which includes only current year annual revenues in the sources for calculation of net revenues. SFPUC's current coverage requirement is a minimum of 1.00x annual debt service. The unrestricted fund balance included in Indenture Coverage includes funds available to minimize risk, not meant to be used for debt repayment. Current Coverage, a more standardized measurement used by credit analysts, is a better indicator of the agency's ability to sustainably pay its debt service obligations. Based on guidance from bond counsel, the Commission's Indenture documents allow for the inclusion of fund balances that have been appropriated for current year expenditures in its calculation of Current Coverage, which differs from the typical industry calculation. Therefore, SFPUC's Current Coverage is evaluated using both calculations including and excluding such appropriated balances, for planning purposes.

Financial policies that impose higher standards than the minimum indenture requirements are essential to ensuring SFPUC maintains access to low-cost capital and retains financial flexibility to manage unanticipated economic impacts. Therefore, the Debt Service Coverage policy requires each SFPUC enterprise to adopt budgets, rates, and financial plans that generate net revenues such that **Indenture Coverage shall equal a minimum of 1.35x annual debt service** and **Current Coverage shall equal a minimum of 1.10x annual debt service**. Merely meeting policy minimum thresholds may not be sufficient to maintain "high ratings;" therefore, the SFPUC is adding further cushion.

Historically, the SFPUC's current debt service coverage without any use of appropriated fund balance has been a key indicator referenced by rating agencies and other parties to assess the Enterprises' financial health. To reflect management's commitment to maintaining high ratings and strong financial resilience, as discussed above, this Plan focuses on this key metric and targets coverage higher than required policy minimums and higher than projected in last year's Plan. During the 10-year planning period (and based on planning rates which have not yet been adopted), the Water and Wastewater Enterprises are forecasting rates sufficient to meet current debt service coverage of 1.25x in all years, while Hetch Hetchy

³ Net revenue is calculated by subtracting operating expenses from total revenues.

Power's rate plan achieves a current debt service coverage of 1.7x in all years and 2.0x in most years. Refer to the *10-Year Financial Plan* section for details.

Capital Financing Policy

Adopted by the Commission in March 2017, [the Capital Financing Policy](#) requires that a minimum ranging between **15 percent to 30 percent of each enterprise's capital budget be revenue-funded** (or cash funded capital) over the 10-year planning period. Use of cash funded capital reduces the need to pay interest on debt and reduces debt burdens on future ratepayers. On the other hand, cash funding causes current ratepayers to bear the full cost of projects financed in any one year. This may limit the capacity to undertake capital costs or may result in current ratepayers bearing the full cost of facilities that will be used for generations. Therefore, using revenue funding for recurring infrastructure repair and replacement projects is a prudent and sustainable approach to funding ongoing capital investments. Similarly, funding projects that will be built and then used over many years with debt, helps to spread the rate burden to create intergenerational equity. The appropriate mix of revenue versus debt financing varies based on the capital investment lifecycle of each enterprise.

Fund Balance Reserve Policy

The [Fund Balance Reserve Policy](#) was adopted by the Commission in April 2022. The SFPUC faces several risks to revenue stability, including multi-year rate setting, economic recession, volatility in power purchase costs, regulatory changes, weather variability, drought, and rate structures that collect most revenues from volumetric rates. To ensure SFPUC can manage these risks and reduce susceptibility to emergency rate increases, each enterprise adopts budgets and establishes rates such that a reserve of undesignated fund balances provides sufficient capacity to bridge shortfalls in cash flow and cover unanticipated expenditures.

The policy requires that Water, Wastewater, and Hetch Hetchy Power maintain a Fund Balance Reserve **minimum equal to 90 days or 25 percent of annual Operations and Maintenance Expenses⁴** in each year of the 10-year planning period. CleanPowerSF is required to maintain an operating reserve fund with a **minimum equal to 150 days cash on hand or 41 percent of annual operating expenditures and a target equal to 180 days cash on hand or 49 percent of annual operating expenditures⁵** in each year of the 10-year planning period.

While CleanPowerSF operates under much of the same legal and policy framework as the SFPUC's other utility services, the program is also uniquely reliant on a volatile power supply market and faces competitive pressures that reduce its flexibility for rate increases. Moreover, CleanPowerSF's credit impacts not only lending terms, but also third-party power supply contracts, a key tool to mitigate market exposure. As such, the Fund Balance Reserve Policy was revised and adopted by the Commission in April 2022 for CleanPowerSF's reserves to be higher than in other utilities. Moreover, if CleanPowerSF's fund balance reserve ends the fiscal year below the target equal to 180 days cash on hand or 49 percent of

⁴ Inclusive of programmatic projects, but excluding all capital related expenditures

⁵ Including operations and maintenance and personnel costs in annual funds, as well as power supply costs and related expenditures, but excluding contributions to the reserve fund

annual operating expenditures, it must set budgets and rates to build back up to the target within three fiscal years.

As part of the update of this year's plan and commitment to financial resiliency, the agency is targeting higher fund balance reserves than policy minimums. During the 10-year financial planning period, we are projected to maintain at least 120 days or 33 percent of annual operating expense in Water and Hetch Hetchy Power, and 150 days or approximately 40 percent of annual operating expenses for Wastewater.

It is important to note that the "budgetary basis fund balance" used when assessing compliance with this policy for Water, Wastewater, and Hetch Hetchy Power refers only to our *unappropriated* fund balance. It excludes funds appropriated in prior budgets but not yet spent, despite the fact that this cash is "on hand" at a given time. Because the SFPUC's capital financing and budget practices require the up-front appropriation of funds often years before they will be actually spent, "days cash on hand," including these appropriated but unspent funds, is a significantly higher value. For example, in Water Enterprise in FY 2023-24, ending budgetary basis fund balance reserve was \$203.8 million, but total days cash on hand, including appropriated but unspent funds, was \$409.0 million – more than double. The SFPUC's financial statements and credit rating agencies generally reference "days cash on hand" when assessing the agency's financial strength, meaning that comparisons to projections of the budgetary basis fund balance alone are not apples-to-apples and understate the agency's financial health. The Financial Planning team is working to develop forecasts and targets for both views of reserves, and plans to include these in next year's financial plan to provide better comparisons to peer agencies.

Affordability Policy

The proposed 10-Year Plan balances affordability goals with the need to appropriately fund each enterprise's operations and to maintain long-term financial stability in the face of aging infrastructure, cost uncertainty, changing regulatory requirements, climate change, and the need for 24/7 reliable operations. As a self-sufficient City Department, the SFPUC acknowledges that its proposed capital plans and budgets rely on ratepayer dollars as its primary source of revenue.

Adopted by the Commission in November 2023, the [Affordability Policy](#) establishes agency-wide, retail performance metrics to evaluate the impact of the SFPUC's operating and capital budget on future residential rates. Each enterprise is required to measure its average individually-metered residential bill as a percentage of the 40th percentile income (Typical Customer Affordability Metric) and as a percentage of the 20th percentile income (Low Income Customer Affordability Metric) within a 20-year planning horizon. These metrics were chosen based on industry standards used by regulators, industry thought leaders, and other utilities, but adapted to fit San Francisco's local economy and policy priorities.

In the policy, the typical household is defined as the 40th percentile income, rather than the 50th percentile (median) household income so that the typical household being monitored better reflects San Francisco's high cost of living and the lower incomes of San Francisco's Black, Indigenous, and People of Color communities. The low-income household is defined by the 20th percentile household income, in line with affordability standards currently used by the Environmental Protection Agency. The addition of the low-income customer affordability metric aims to center customers who are most heavily burdened by San Francisco's high cost of living and widening income inequality. For the low-income household, bills

are calculated both at retail rates and at retail rates after accounting for applicable discount or assistance programs.

Water and Sewer bills will **target less than 3% of the Typical Customer's income, less than 7% of the Low-Income Customer's income using standard rates, and less than 5% of Low-Income Customer's income after accounting for enrollment in applicable bill discount programs.** The CleanPowerSF and Hetch Hetchy Power bills are evaluated and reported as a percentage of income under this policy, but the targets for power affordability will be developed and included in a future version of this policy.

The Affordability Policy is intended to prompt consideration of the impact of projected rate increases on customer bills and drive the development and execution of strategies to address identified problems well in advance. These metrics are not a rate cap or similar restriction. In any instance where rate increases associated with capital and operating budgets are projected to exceed the affordability targets, Enterprise representatives will include with their budget proposal to the Commission (1) an identification of which targets are exceeded, (2) the rationale for exceeding the targets, and (3) proposed strategies to address affordability.

The Affordability Policy reflects the Commission's commitment to consider the burden imposed by SFPUC bills on ratepayers and emphasizes customer rate affordability as a foundational priority in achieving all its Charter and other legal requirements, underlying its credibility with ratepayers and its authority to provide utility services.

Ratepayer Assurance Policy

Adopted by the Commission in February 2012 and revised in 2017, the [Ratepayer Assurance Policy](#) establishes SFPUC's guiding principles for prudent use of ratepayer funds, establishment of rates and charges, and transparency in budgeting and rate-setting processes. Prudent use of ratepayer funds ensures accountability to ratepayers regarding SFPUC's mission statement, asset and personnel management, operating cost containment, and social and environmental stewardship.

The Ratepayer Assurance Policy also ensures operating cost containment, to the extent that costs are determined by the SFPUC. Budget proposals that increase these costs above the level of inflation must be deemed necessary, as they impact prudent use of ratepayer funds. Information on this requirement is reported out in budget adoption documents. The Policy also supports this prudent use of ratepayer funds by managing assets in a cost-effective manner and structuring its workforce effectively and efficiently to minimize personnel costs.

While the Ratepayer Assurance Policy does not set any specific performance standards, its principles reinforce SFPUC's commitment to developing rates and charges that are affordable, predictable, easy to understand, based on cost of service, and that generate sufficient revenue for full cost recovery.

Revenue Forecasts

Volumetric Sales Assumptions

Context for Volumetric Projections

As the SFPUC's rate structures are currently highly volumetric in nature, future rate revenue calculations are sensitive to changes in projected volumetric sales. To partially mitigate revenue volatility, the SFPUC has made changes to its rate structure in recent years to recover a higher percentage of our fixed expenditures through monthly service charges instead of variable rates. For example, the bifurcation of the sewer rates into wastewater and stormwater components has the benefit of increasing the fixed portion of wastewater revenues, as the stormwater component is not dependent on billed wastewater flows. Once the phase-in of the stormwater component is complete, the fixed portion of wastewater bills will grow from approximately 5% of revenues in FY 2022-23 to 27% of revenues in FY 2029-30. The approved retail water rates for FY 2023-24 through FY 2025-26 maintained 15% of revenues recovered through the fixed monthly service charge.

Additionally, both retail and wholesale water and sewer rates have mechanisms that allow rates to adjust if water usage drops unexpectedly. In retail Water and Wastewater, drought surcharges are automatically implemented when the Commission declares a water shortage emergency and calls for conservation. With recent emergencies – both environmental and economic – impacting sales volumes, the SFPUC is also currently adopting rates for a shorter timeframe, allowing the agency to revise rates to current usage levels more frequently and ensure revenue stability. Wholesale water rates are revised annually and include a contractual true-up mechanism to account for the higher variability in wholesale water volumes.

Rate design is a balancing act, and the Ratepayer Assurance Policy directs the agency to consider the competing goals of revenue stability, environmental sustainability, and predictability for both customers and the agency. For example, a bill with high fixed charges that does not vary based on usage removes an incentive to conserve and can make customers feel as if they have no ability to control their costs. Tradeoffs like this one are addressed during the SFPUC's required periodic rate studies, and if usage continues to decline – either per capita or due to structural changes in the region's economic health – the agency has sufficient time and safeguards in place to adapt to the changing reality and ensure sufficient revenues for continued operation of the system.

When projecting account and volumetric sales projections, it is typical for utilities to use a conservative growth outlook. This approach is geared to minimize the risk of under-collection of rate revenue requirements – if usage is higher than forecasted, future projected rate increases can be reduced, while “counting on growth” runs the risk of under-representing the cost to customers. It is worth noting that other forecasts developed by the SFPUC, such as the Water Enterprise's Urban Water Management Plans or Power's Integrated Resource Plans, may use other projections. The differences between these projections reflect the different risks faced by the different planning initiatives and are the means to hedge against undesired outcomes for customers of the SFPUC. Demand forecasts developed for supply planning are conservative by estimating high potential growth to ensure reliable supply, while demand forecasts developed for financial projections are conservative by estimating low potential growth to ensure sufficient revenues.

Volumetric Sales Methodology

For Water and Wastewater, the SFPUC's 10-year financial model uses a bottom-up approach to calculating volumetric sales, building on historic changes in account growth and water usage behavior. First, account growth assumptions are calculated for each customer class to project the total number of accounts. Second, historic usage by customer class at the account level is adjusted by multiple factors, such as price elasticity, drought and pandemic recovery, and prolonged conservation efforts. The adjusted per-account volumes are multiplied by the calculated total number of accounts for each customer class and annualized to get the total projected water sales and billed wastewater discharge volumes.

For Hetch Hetchy Power, volumetric forecasts are more granular and are made at the level of individual divisions/departments or other aggregations. For most existing customers, next year's volume is set to last year's volume. Specific projects are layered in with volumetric forecast based on timing and expectations of ramping and full utilization of supplied power. These include redevelopment projects, as well as projects in the pipeline for various departments such as Wastewater Enterprise and SFMTA.

CleanPowerSF volumetric forecasts represent both increased usage per customer from electrification, as well as any growth in customer accounts.

The sections below discuss these factors included in the volumetric forecasts for each enterprise. During plan development, staff model alternative scenarios with different assumptions to ensure that the proposed schedule of expenditures and rate increase is resilient to a range of outcomes. Some of these are discussed in the "Sensitivities" section below.

Account Growth Assumptions

In Water, Wastewater, and CleanPowerSF, only minimal growth in usage is assumed due to population and job growth. For Water and Wastewater, the 10-Year Plan begins from the assumed population and job growth assumptions from the SFPUC's 2023 Interim Water Demand Projections and BAWSCA's FY 2022-23 Annual Survey. Because these forecasts are primarily developed for water supply planning, these values are not used directly, but are used to develop trendlines over time that are first adjusted downward, then applied to current water sales levels (which are therefore lower than water supply forecasts, which are normalized to remove the impact of drought and recession). Following the Interim Water Demand Projection's methodology, all residential household growth is assumed to be in multi-family residential accounts, with no growth in single family residential. Forecasted account growth rates average around 0.97% annually for retail multi-family residential, 0.3% annually for retail non-residential and municipal, and 0.42% annually for wholesale water during the 10-year period. These account growth forecasts are lower than in last year's 10-Year Financial Plan, providing more conservatism in the face of a potentially weakening economy. CleanPowerSF assumes no long-range account growth during the planning period.

In contrast, Hetch Hetchy Power is expanding its customer base significantly. This growth is defined by new facilities built by existing customers, as well as new customers and projects altogether. Projects are modelled individually based on information from the planning teams within Power Enterprise. To allow for a gradual ramp up of power growth and to account for potential delays in construction and tenant move-in to new buildings, staff have adjusted down total load forecasts, both inserting delays in when a

project comes online and applying more conservative assumptions to the total power sales provided by project managers. As compared to last year's plan, we have both increased delays to projects coming online and decreased forecasted volumes as projects ramp-up to full load capacity to reflect potential weakness in the San Francisco economy and budget pressures on Hetch Hetchy Power's municipal customers.

The municipal customers with the largest load increases include the SF International Airport, SFPUC's Wastewater Enterprise, and the SF Municipal Transportation Agency (SFMTA). Airport loads are expected to grow by about 4 percent annually over the projection period due to load growth from new terminals and associated facilities, electric vehicle and electrification projects, and other projects from the airport's master plan. The Wastewater Enterprise construction at the Southeast Wastewater Treatment Plant will also increase power consumption, growing loads by about 5 percent annually over the planning period. SFMTA growth is primarily due to bus electrification projects.

Retail non-municipal electric load growth is generally associated with large redevelopment projects and related customer growth in the southeastern portion of San Francisco, as well as some "infill" projects throughout the city, particularly affordable housing. Current redevelopment-area customers in the plan include Alice Griffith, Candlestick Point, HOPE SF (Potrero and Sunnyside), Hunters Point, Mission Rock, Pier 70, Treasure Island/Yerba Buena Island, and Transbay Transit Center. Over the 10-year planning period, retail non-municipal load is expected to grow by a cumulative 15 percent. Notably, roughly a third of this growth comes from a single large project that is expected to come online in the last year of the Plan.

Drought Assumptions

In November 2021, the Commission declared a water shortage emergency. As governed by the San Francisco Water Shortage Contingency Plan, retail customers were requested to voluntarily conserve water by 5% compared to FYE 2020 actuals, while wholesale customers were requested to conserve water by 16%. Usage dropped across the service area in response to these voluntary calls.

In April 2023, the Commission rescinded the Water Shortage Emergency Declaration, lifting the voluntary water reduction requests and removing the subsequent drought surcharge. Despite the lifted drought declaration, the plan assumes a gradual rebound in retail water deliveries over the next 3-4 years. For wholesale customers, we assume that a portion of the drought-related conservation lingers permanently, as customers have higher per-capita usage than in San Francisco and therefore more ability to make permanent changes to save water. Per-account water and wastewater usage is projected to recover from the drought restrictions at 1.72% per year for retail customers for FYE 2024 through FYE 2026; wholesale usage is anticipated to recover from the drought at 3.09% per year for FYE 2024 through FYE 2027. While the financial plans assume normal water years going forward (i.e., no drought), mechanisms described above under *Context for Volumetric Projections* – including drought surcharges, growing fixed portions of customer bills, and adopting rates for shorter timeframes – allow the agency to recover potential revenue losses from water conservation should a drought occur.

Pandemic Recovery's "New Normal" Assumptions

Utility usage dropped precipitously during the COVID-19 pandemic. Closed offices and businesses in San Francisco, a city with a net population inflow from commuters, meant a lower demand for water, power, and sewer services. Increased residential usage with the shift to working from home slightly offset these trends, especially in the wholesale service area. When compared to pre-pandemic averages (March 2018-June 2019), retail water usage during the COVID-19 shelter-in-place orders (March 2020-June 2021) for commercial customers was down 35 percent, municipal customers' usage decreased by 26 percent, and residential customers had 3 percent higher water usage. Usage by wholesale water customers during this timeframe varied depending on the residential vs. commercial composition of each utility, but was overall 7 percent higher than during the pre-pandemic period. FY 2020-21 total overall Hetch Hetchy Power loads were down 16.4 percent from FY 2018-19, or pre-pandemic levels, and CleanPowerSF FY 2020-21 commercial loads were down 16.9 percent from FY 2018-19.

However, usage has gradually increased since June 2021, when the City completely lifted the COVID-19 shelter-in-place order. The region has inched towards a "new normal," reflecting permanent changes such as greater hybrid and remote work, reduced retail business, shifts in the population distribution, and generally adjusting the way people use utility services away from historic patterns. Currently, we assume that the majority of usage reflects this "new normal," and do not incorporate additional increases in usage to return to pre-pandemic levels of utility usage.

Adjustment for Delayed Bills

During FY 2023-24, SFPUC experienced a large increase in the failure rate of water meter transmission units (MTUs) and experienced challenges with the procurement of replacement parts due to supply chain issues. In addition, the Customer Service Bureau experienced an unprecedented high staff turnover rate. As a result, SFPUC had a number of accounts that were not receiving regular water meter reads, delaying bills for approximately 7,800 retail water and wastewater customers.

The SFPUC is legally required to bill and collect the revenues from these delayed bills. To address this challenge, the SFPUC has created a task force to strategically recover payments for the delayed bills in a way that balances the financial strain a large delayed bill might place on customers with the need to recover all costs of service and preserve the financial stability of the Water and Wastewater Enterprises. In Fiscal Year 2024-25, the SFPUC initiated issuing estimated bills for customers with failed MTUs, scaled up repair and replacement of failed MTUs, established a new internal portal that accelerates processing of delayed bills, and is backfilling vacancies and bringing on additional staff to support bill correction.

The delayed bills resulted in lower total sales volumes in FY 2023-24. However, as billing resumes into FY 2024-25, billed volumes will be higher than normal due to inclusion of delayed billable usage from prior years. The Plan incorporates adjustments to projections to account for the billing catch up during FY 2024-25 and FY 2025-26, with a return to normal sales volumes in subsequent years.

Conservation, Efficiency, and Electrification Assumptions

Beyond conservation associated with the drought, per-account usage is projected to decrease over time due to conservation. The 2020 Retail Water Conservation Plan divides conservation into active conservation, passive conservation, and onsite water reuse. Passive conservation results from the gradual

replacement of fixtures to water-efficient ones required by new plumbing codes, active conservation is driven by SFPUC activities such as fixture replacements rebates and incentives, and onsite water reuse is either voluntary or required installation of water recycling systems that reduce the need for potable water. Following the methodology recommended in the 2020 Urban Water Management Plan, we assume that price elasticity (discussed below) captures the majority of passive conservation – i.e., many customers replace water fixtures with more efficient ones when rates increase in order to save money. As a result, passive conservation is not explicitly modelled to prevent double-counting. Active conservation and onsite reuse, however, are explicitly added into the per-account growth forecasts, reducing usage over time. These assumptions are sourced from the SFPUC’s 2020 Retail Water Conservation Plan. Over the 10-year forecast period, it is assumed that active conservation and onsite water reuse cumulatively reduce single family residential per-account usage by 0.2%, multi-family residential per-account usage by 2.0%, and non-residential per-account usage by 1.4%.

Less information is available regarding conservation’s impact on power usage, and it may be offset by the growth in electric appliances and San Francisco’s mandate that new homes be all-electric (as opposed to using natural gas). At this time, the effects of electrification and efficiency gains are expected to roughly equal each other, with only minor increases to usage for existing customers forecasted in CleanPowerSF as a result. While existing customers’ growth is flat, Hetch Hetchy Power forecasts do include several new projects that are driven by electrification, including transition to all-electric operations at the SF International Airport and new electric charging bus yards for SFMTA. Electrification and energy efficiency is an area that staff will continue to revisit in coming years to refine the volume forecasts for Hetch Hetchy Power and CleanPowerSF.

Price Elasticity Assumptions

Basic supply and demand economics operate under the principal that as the price of a good or service increases, people will purchase less of it. Price elasticity is a measurement of the change in demand for a good or service in relation to changes in its price. Different goods can be more or less elastic, with demand for elastic goods decreasing more rapidly as prices increase and demand for inelastic goods holding steadier as prices change. Utility services are generally assumed to be a fairly inelastic good because they are necessary and do not have a readily available alternative. As such, increases in price typically do not have a significant impact on the amount of the utility volumes customers use. Moreover, San Francisco’s water and wastewater usage is already the lowest in the state of California, averaging 41 gallons per person per day for the 12-month period ending October 2024. With usage this low, there is a floor beyond which most households are unable to conserve without drastic reductions to their quality of life.

Despite these considerations, it is prudent to assume that the rate increases forecasted in the 10-Year Financial Plan will cause some customers to conserve water. Because most customers pay attention only to their total bill, we are forecasting the impact of price elasticity based on the combined water and wastewater bill increase for an average residential customer. Data from the SFPUC’s 2020 Urban Water Management Plan calculated a price elasticity of -1.4% for single family residential customers, -2.0% for multi-family residential customers, -2.2% for non-residential customers. This means, for example, that a 10% increase in the combined water and wastewater retail rates would decrease single family residential usage by 1.4%.

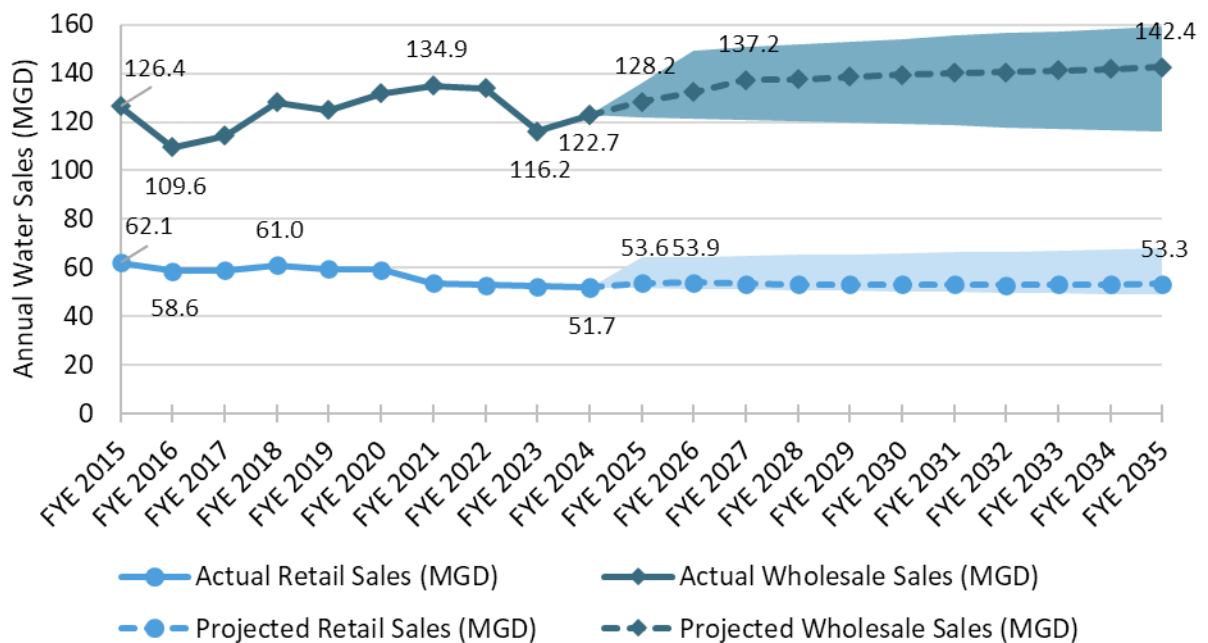
However, this analysis was based on historic data from 2010-2020, when per-capita water usage was approximately 20% higher than it is today. With increased conservation and hardened demand, it’s unlikely these elasticity impacts would be as large now as they would be going forward. We have assumed that as per capita usage drops towards low indoor usage of 40 gallons per person per day, demand becomes more inelastic. During the 10-year period, the adjusted elasticity ranges from -0.35% to -0.85%, depending on the customer class and year.

Again, less information is available on the impact of price elasticity on electricity usage. Moreover, electric rate schedules are much more complex than water and wastewater, with time-of-use periods, seasonality, and multiple rate schedule options for each customer class. Customers may respond to price increases by changing their usage patterns or rate choice rather than reducing total usage. At this time, CleanPowerSF and Hetch Hetchy Power volumetric forecasts do not incorporate price elasticity. We will continue to research this area to improve our forecasts.

Water and Wastewater Sales Projections

Water sales are depicted in Figure 1, which shows the historic and projected retail and wholesale water sales for FYE 2015 through FYE 2035. Shaded areas around the dashed forecast line reflect upward and downward sensitivities in the sales forecasts. In particular, the upside sensitivity reflects growth up to the levels forecasted in SFPUC’s 2023 Interim Water Demand Projections (adjusted to remove nonpaying usage and losses) and the BAWSCA FY 2022-23 Annual Survey.

Figure 1: Historic and Projected Retail and Wholesale Water Sales Volumes (Millions of Gallons per Day)



Overall, water sales are projected to gradually increase from recent lows in FYE 2023 and FYE 2024 caused by the combined impacts of the COVID-19 pandemic, drought, and delayed bills. The early years of the

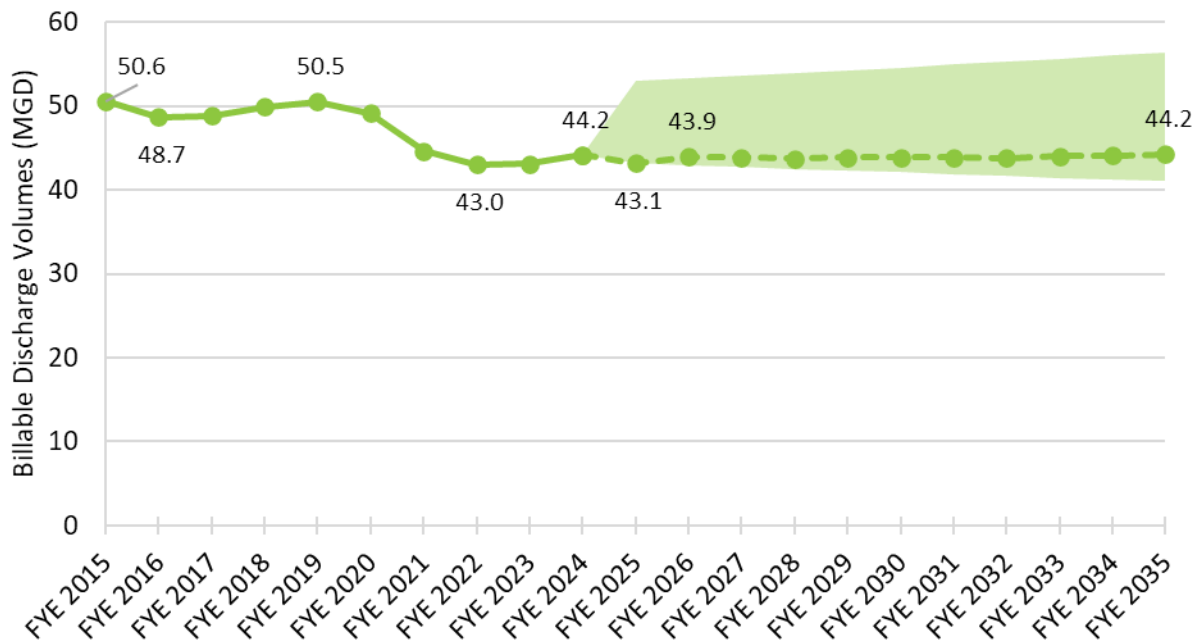
chart show the decrease in water sales through FYE 2016 during the last drought and the subsequent rebound in water use through FYE 2018.

After reaching a relatively low total sales of 116.2 MGD in FYE 2023 during the drought, wholesale usage is expected to return to pre-drought normal of 137.2 MGD by FYE 2027. Over the remainder of the plan, wholesale usage is projected to grow slightly, driven by forecasted population and job growth.

Retail sales volumes are forecasted to be essentially flat, reflecting San Franciscans’ low per capita water usage and hardened water usage levels. The most notable trend here is the combined impact of the pandemic, recent drought, and billing delays (during FYE 2024) dropping retail water sales beginning in to a low of 51.7 MGD in FYE 2024. Usage is forecasted to grow due to modest drought recovery and catch-up of delayed bills, reaching 53.9 MGD in FYE 2026 before very gradually declining through the rest of the 10-year forecast period. This long-term trend reflects the impact of price elasticity and conservation compensating for assumed job and population growth and is consistent with the observed historic trendline.

As wastewater sales volumes are based on metered water usage, the forecast of billable wastewater volumes shown in Figure 2 is very similar to that of retail water sales.

Figure 2: Historic and Projected Billed Wastewater Discharge Volumes (Millions of Gallons per Day)



Wastewater volumes are forecasted to rebound from their all-time low of 43.0 MGD in FYE 2022 to 43.9 MGD in FY 2026 as usage recovers from the recent drought. Volumes then hold relatively flat for the duration of the forecast period.

Hetch Hetchy Power Sales Projections

Hetch Hetchy Power volumetric growth is much more significant than the other business lines. Figure 3 shows the historic and forecasted change in Hetch Hetchy Power retail sales volumes over the past and future 10 years.

Figure 3: Historic and Projected Hetch Hetchy Power Retail Sales Volumes (Gigawatt Hours)

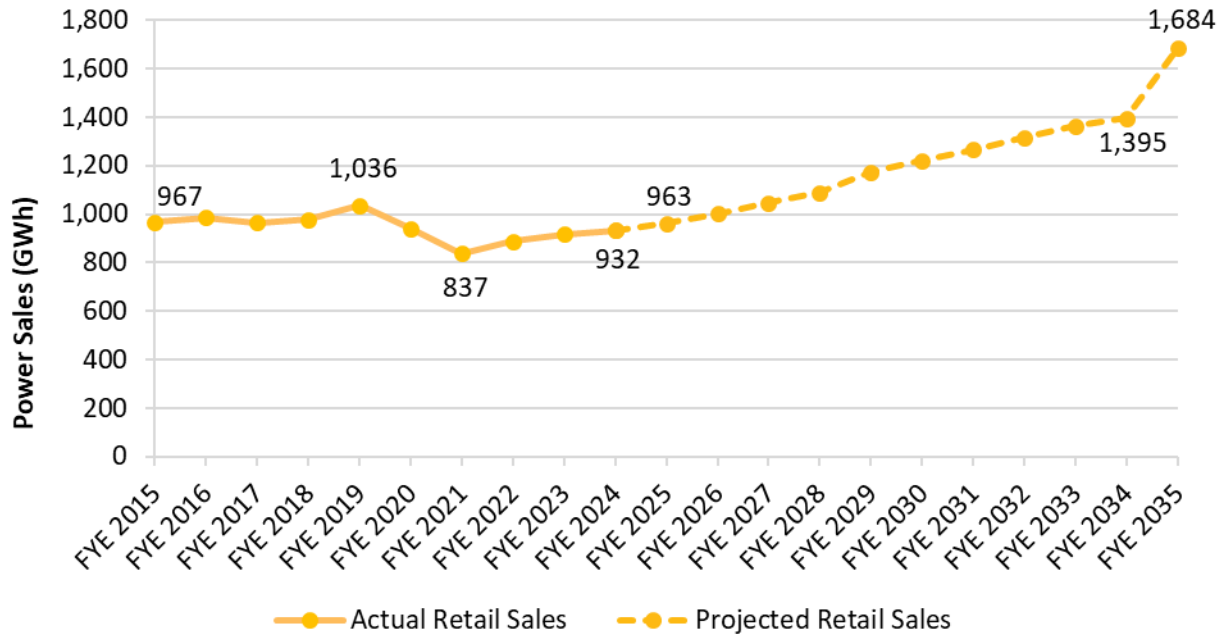


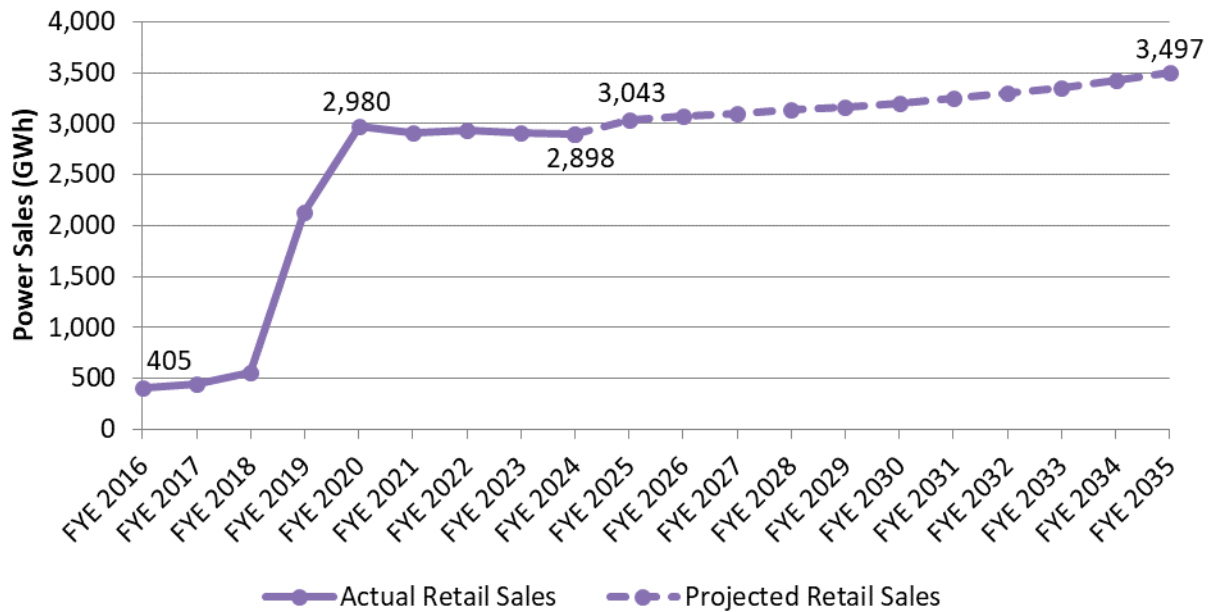
Figure 3 shows the drop in Hetch Hetchy Power sales due to the pandemic, with recovery to a “new normal” slightly below pre-pandemic levels with sales of 963 GWh in FYE 2025. The forecasted increase shown in Figure 3 is based on projected electricity demands from new municipal facilities that are planned or under construction. Many of these are electrification projects as the City looks to move away from natural gas, gasoline, and diesel to heat buildings, power vehicles, and produce emergency power.

Loads are projected to grow by a compound annual growth rate of 5.8% over the ten-year planning period, with the increase in FYE 2035 from one very large customer significantly driving up the percentage. While this growth is a key component of Power Enterprise’s business plan, it also means that their rates trajectory is dependent on economic growth that may be delayed or never materialize due to possible recession or other factors. With San Francisco’s struggling economic recovery and a history of project delays, the projections in this Financial Plan reflect several adjustments to the original load forecast for conservatism, as discussed in the *Account Growth Assumptions* section above. These adjustments aim to strike the right balance of correctly budgeting for the cost of servicing new customers (discussed below in the Expenditure Forecasts section) without under-projecting rate increases by assuming major new developments move at an aggressive schedule.

CleanPowerSF Sales Projections

Figure 4 shows the significant growth in CleanPowerSF from its launch in FYE 2016 through FYE 2020 as phased enrollment successfully grew the program to its current size.

Figure 4: Historic and Projected CleanPowerSF Retail Sales Volumes (Gigawatt Hours)



While usage dropped moderately during the pandemic, the impact was not as significant as the other Enterprises, and volumes have seen a bump up due to new enrollments of commercial customers. The plan projects loads to increase an average 1.4% over the course of the 10 years, reflective of overall growth from electrification of household appliances and private vehicles, population growth, and other longer-term electric trend projections.

Adopted Rate Changes

The SFPUC historically adopted multi-year rate packages, approving a series of rate increases over several years. This improves the certainty of financial planning for both the agency and customers but reduces the ability to react to changes in costs or volumetric sales. With significant uncertainty in recent years, from the COVID-19 pandemic and drought’s impact on sales volumes to huge fluctuations in the prices in the power supply market, the agency has reduced the time period covered in its rate proposals.

For years in which rates are not already adopted by the Commission, the 10-Year Plan forecasts what rate increases are needed to cover expenditures and comply with financial policies. These projections are presented at the end of this report. The following section describes the status of ongoing rate studies, and already-approved rate increases during the plan period.

Retail Water and Wastewater Rates

The most recent cost of service study for Water and Wastewater was completed in Spring 2023, with new rates adopted in May 2023. This study is the basis for three years of retail water and wastewater rates that have been adopted by the Commission for FY 2023-24 through FY 2025-26. For each of the three fiscal years, water rates increased by 5%, and sewer rates increased by 9%. Rate increases become effective on July 1, the beginning of each fiscal year.

Wholesale Water Rates

Wholesale water rates are set on an annual basis following the process established by contract under the long-term Water Supply Agreement (WSA). The rates are driven by the estimated wholesale share of Water Enterprise and Hetch Hetchy Water operating and capital expenditures and forecasts of wholesale sales volumes. A true-up after each fiscal year provides a mechanism to adjust future rates for under- or over-collection in prior years. An 8.8% increase in the wholesale water rates was adopted for FY 2024-25. Wholesale water rates are adopted annually, so rates for FY 2025-26 will be approved by the Commission in Spring 2025.

Power Rates

The most recent power rates study was completed in Spring 2022 for both Hetch Hetchy Power and CleanPowerSF. Using the results of the study, the Commission approved Hetch Hetchy Power rates for FY 2022-23 and FY 2023-24 and CleanPowerSF rates for FY 2022-23. Rates through FY 2024-25 were subsequently approved by the Commission in Spring 2023 and Spring 2024. FY 2024-25 retail rates for Hetch Hetchy Power increased by 12%. CleanPowerSF's FY 2024-25 rates reflect an 8.5% rate increase, though individual rate classes had lower or higher changes depending on their specific cost of service.

For both business lines, the 2022 rate study ended the historic practice of following PG&E rates, either directly or at a differential above or below comparable PG&E rates. Instead, power rates change at the beginning of each fiscal year based on the SFPUC's own cost of providing service. This significant improvement allows for more robust financial planning, ensuring the Power Enterprise has the revenues needed to fund its operating and capital needs.

Adopted Hetch Hetchy Power rate increases completely overhauled Hetch Hetchy Power's legacy rate structure and were redesigned to gradually shift the business line towards standardized cost-of-service-based rates for all customer classes. In particular, municipal customers on General Use (GUSE) rates (for example, SF General and Laguna Honda Hospital, SFMTA's rail lines, streetlights, and SFUSD public schools) were realigned from the legacy flat \$/kWh rate for all customers to standard customer class rate structures and will be incrementally brought to cost-of-service rates at an effective increase of \$0.03/kWh each fiscal year. This translates to a FY 2024-25 GUSE adopted rate increase of 18.6%, as compared to the retail rate increase of 12%. All non-GUSE customers have been consolidated as retail customers with the same tariffs beginning FY 2023-24.

In the near term, Power Enterprise rates for both CleanPowerSF and Hetch Hetchy Power will be adopted on an annual basis due to significant volatility in energy markets and supply chain disruptions caused by the pandemic, geo-political conflict, changing relationship with Pacific Gas & Electric Company, and other environmental factors. Utilizing an annual power rate adoption allows the Power Enterprise to reevaluate

is revenue requirements with stronger confidence, as staff are able to update rates in a more timely and precise manner in reaction to market factors. To calculate the rate increases, staff update the rate models developed in the 2022 rates study with new expense and customer data. More complex changes to power rate structures are not expected until the next power cost of service and rate study, which will begin soon and be completed in Spring 2026 for rates effective FY 2026-27.

Non-Rate Revenues

While utility rate revenues comprise the vast majority of each Enterprises' income, each enterprise also collects revenues from additional sources. Assumptions regarding these revenues vary based on the source:

- Interest income is calculated by multiplying an interest rate by the available fund balance in each Enterprise. Interest rates are estimate based on the U.S Treasury yield curve, with adjustments down to reflect conservatism and economic uncertainty.
- Certain water revenue bonds and the 525 Golden Gate Certificates of Participation receive Federal Build America Bonds subsidies on the interest cost of the bonds. Forecasts for these revenues are based on the debt service schedules of these bonds and the assumed reduction applied due to federal sequestration, resulting in a projected average 33% annual subsidy.
- Rental revenue from SFPUC-owned properties is provided by the Real Estate Services division and inflated by the forecasted Consumer Price Index.
- Revenue from miscellaneous fees, including water service installation charges, capacity charges, and permit issuance fees, is estimated for the current fiscal year, then inflated by the forecasted Consumer Price Index.
- Revenues designated for capital projects in Hetch Hetchy Power include Distributed Antenna System licensing fees, California Cap & Trade auction revenues, and Low Carbon Fuel Standard credits. These forecasts are developed by Power Enterprise staff.
- Due to its hydroelectric supply, Hetch Hetchy Power's generation has strong seasonal trends. During the spring runoff season of March-June, the melting snowpack tends to provide Hetch Hetchy Power with excess power beyond what its customers use, providing the opportunity to sell to the wholesale power markets. The plan models excess power sales based on the detailed monthly forecasts described in the expenditure section below. Price assumptions are assumed conservatively for sales – more so even than power purchase assumptions – since wholesale revenues are not the program's main business line and represent potential upside rather than an expectation.

Non-rate revenues offset a portion of expenditures, and therefore allow for lower rate increases.

Expenditure Forecasts

Operations and Maintenance Expenditure Assumptions

Operations & Maintenance Budget and Escalation

For all Enterprises, operations and maintenance expenses are based on the SFPUC's adopted two-year budget for FYE 2025 and FYE 2026, with proposed minor changes for FYE 2026. Beyond the budget years, the 10-Year Financial Plan for all enterprises assumes an annual 3 percent increase in operations and maintenance expenditures for most expense types. This assumed annual increase represents a proxy for the long-term average annual rate of inflation, as well as an assumption for increased operation and program spending. Inflation projections in fringe benefits, such as retirement, health care, and disability services, are based on projections of various expense types as listed in the Mayor's 5-Year Financial Plan. A small subset of expenses, including programmatic expenses, grant programs, and some services of other departments are projected to remain level over the ten-year projection window.

Power Purchases & Delivery Charges

In Power Enterprise, including Hetch Hetchy Power and CleanPowerSF, purchased market power, resource adequacy purchases, and delivery charges such as Transmission Access Charges (TAC) and Wholesale Distribution Tariffs (WDT) vary based on the total customer loads or demand served in a year, as well as the forecasted price of these line items. Forecasts for these expenditures are developed collaboratively by Power Enterprises' Risk Management and Business Analysis team, Retail Services team, Origination and Power Supply team, and Financial Planning. Assumptions regarding load projections are discussed above. Power expense forecasts are developed monthly to account for significant seasonal variations in power markets, owned generation, and customer usage.

Purchased Power Supply Costs

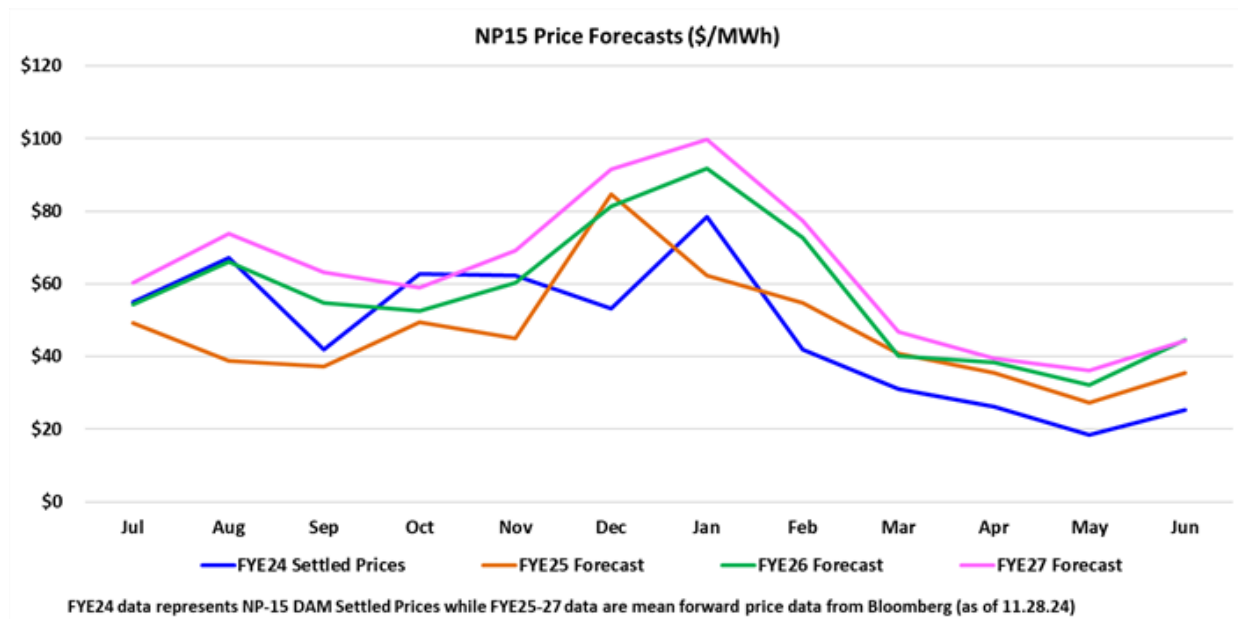
CleanPowerSF's energy portfolio throughout the 10-Year Plan includes existing and potential storage and renewable projects based on recent bid responses to its long-term power purchase Request For Offers. Hetch Hetchy Power's generation forecast is developed by Hetch Hetchy Water based on weather and asset maintenance projections.

For both business lines, any power demand beyond existing resources is procured from the market, and any excess generation above what customers use is sold back to the market. From July-February, Hetch Hetchy Power's generation is generally less than is required to fully meet its customers usage and it is normal for Hetch Hetchy Power to purchase additional energy from the wholesale power markets during this timeframe. In contrast, during the Spring runoff season of March-June, the melting snowpack tends to provide Hetch Hetchy Power with excess power beyond what its customers use, providing the program with the opportunity to sell to the wholesale power markets. CleanPowerSF looks to add new long-term power purchase agreements to meet its demand and other supply requirements as older contracts expire, and assumes higher prices for new solar and storage contracts due to proposed tariffs from the federal government.

Load and energy supply are both assessed against forward energy price projections (available from Bloomberg Intercontinental Exchange data and/or Aurora Energy Research forecasts) and consider

weather simulations and market impacts such as natural gas supply and demand, and the Russia-Ukraine war. Because these energy price forecasts are updated daily and reflect the volatility of the energy market, contingencies are set to capture some of the higher end energy price projections seen at the time of the plans’ development. The outlook for power purchase costs can be volatile based on both weather, which impacts the generation outlook for Hetch Hetchy, and energy market prices. Figure 5 shows the power market supply cost for FY 2023-24 and forecasts for the next three fiscal years. The 10-Year Plan incorporates forward market pricing that forecasts a slight increase from FY 2023-24 prices over the next few years and through the end of the Plan.

Figure 5: Historic and Forecasted Power Market Supply Costs (Dollars per Megawatt Hour)



Prices for other supply categories such as resource adequacy, renewable attributes, delivery charges, and CAISO charges are forecasted based on market broker quotes received by the Origination and Power Supply team, third-party forecasts (e.g. Flynn Resource Consultants), or recent historical averages, depending on availability. Renewable attributes and resource adequacy (also known as capacity costs) have been a growing expenditure for CleanPowerSF in particular, as new-build renewable energy project delays throughout California have caused prices to rise dramatically over the past year for both products as demand exceeds supply. Prices for renewable attributes have decreased slightly from its highest point but are anticipated to remain at high levels for the next few years.

During the past few years, the available resource adequacy capacity on California markets in many months was barely enough to meet the needs of all regulated utilities, leading to enormous price increase and challenges fulfilling regulatory obligations. Moreover, fundamental regulatory changes to the [Resource Adequacy Program](#) effective 2025, add complexity and uncertainty to the market. Current modelling suggests that CleanPowerSF has sufficient capacity to meet Resource Adequacy Program requirements under the new framework through 2029 due to existing contracts, but will need to continue strategizing for the outer years of the plan. Long-term forecasts are generally not available for these supply categories;

the 10 Year Plan assumes prices will gradually decrease over time and slowly return to year 2022 levels by the end of the Plan.

Purchased Power Delivery Charges

Hetch Hetchy Power also incurs purchased delivery charges, including Transmission Access Charges (TAC) paid to the California ISO and the Wholesale Distribution Tariffs (WDT) paid to Pacific Gas & Electric.

For Transmission Access Charges, our plan considers expected growth in loads while also incorporating estimated annual increase in these TAC rates. Our TAC rates are based on estimates from Flynn Resource Consultants and grow by a compound annual rate of 6.7% through FYE 2035. The potential for continued rapid increases in transmission costs across the state is an area of focus for staff in the near-term.

Hetch Hetchy Power's Wholesale Distribution Tariffs (WDT) are based on our demand expectations and WDT rates, which are set by PG&E. These distribution expenses have been highly volatile over the past few years; they nearly quadrupled from FYE 2021 to FYE 2023 due to a change made by PG&E in the formula for calculating these expenses (the "WDT4" methodology), and sharp WDT rate increases in calendar year 2023 resulted in a period of large adjustments and significant true-ups. Although FYE 2023 saw a marked 29% increase in distribution expenses driven by major WDT rate increases, FYE 2024 saw a 17% decrease in these expenses, while FYE 2025 appears positioned to see further distribution expense decrease of 7% followed by a sharp 40% increase in FYE26. In order to minimize these swings, our WDT rate forecasts remove any impacts from true-ups or other one-time adjustments and assume a 4% annual rate increase. Despite the near-term positive outlook for distribution expenses, we continue to be cautious on the long-term outlook given the volatility in these WDT4 rates.

Power Supply & Delivery Contingencies

Due to potential volatility in power supply and delivery charges, both CleanPowerSF and Hetch Hetchy Power budget for a contingency above and beyond the forecasted amount for these costs. Doing this ensures the programs can quickly access the funds needed to secure power supplies on the open market without a need for a supplemental budget appropriation process, which can take many months. As a conservative approach to estimating costs and net revenues, the financial plans treat the contingency budget as if it will be spent each year. Any savings in a given year will fall to fund balance as a positive variance and may be used to reduce rates in future years. For purposes of calculating the fund balance reserve or days cash on hand targets, the contingency is considered a contribution to reserve and not included in annual operating expenses.

For this plan, staff generally performs scenario analyses of price and/or load volatility to determine if contingencies need to be increased, separate from the update to the baseline budget in this area. For CleanPowerSF, the budgeted contingency is 10% of power supply costs, resource adequacy, and renewable attributes, rising to 11% in the latter years of the plan.

Hetch Hetchy has recently changed its risk contingency methodology to reflect the impact of volatility implied in market price curves on its market purchases and sales. This new methodology incorporates conservative assumptions – i.e., assuming high prices when purchasing power and low prices when selling

power – and allows for individual calculations for each Fiscal Year reflective of market signals. At this time, Hetch Hetchy’s Risk Contingency ranges from \$6 million for FYE 2025 up to \$17 million for FYE 2035.

Execution Factors & Budget Carryforwards

A feature of the financial model is the use of “execution factors” on the operating budget. These factors are based on review of actual expenditures as a percent of the revised budget (including the new annual budget and any carryforwards from prior years) for FY 2019-20 through 2023-24. The goal of the execution factors is to project a revenue requirement that more accurately reflect the anticipated spending, rather than the budgeted authorities to spend.

Table 4 through Table 7 summarize the findings of the budget to actual analysis and the execution factors that have been applied to each forecast year in this 10-year plan.

Table 4. Water Enterprise Percent of Budget Execution and Execution Factor Applied to All Future Years

Expense Type	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	Applied
Salaries	94.4%	98.8%	93.4%	96.5%	98.8%	100.0%
Mandatory Fringe Benefits	95.4%	99.0%	94.0%	95.7%	96.0%	100.0%
Non-Personnel Services	72.5%	64.1%	50.7%	62.4%	88.6%	85.0%
Materials and Supplies	86.2%	73.5%	76.1%	83.5%	94.6%	95.0%
Capital Outlay	36.4%	32.4%	35.6%	37.1%	30.2%	55.0%
Overhead and Allocations	102.0%	96.3%	76.2%	76.1%	77.5%	100.0%
Services Of Other Depts	87.1%	89.6%	86.3%	86.5%	83.9%	100.0%
City Grant Program	9.0%	21.8%	3.1%	11.7%	28.9%	60.0%
Transfers Out	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5. Wastewater Enterprise Percent of Budget Execution and Execution Factor Applied to All Future Years

Expense Type	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	Applied
Salaries	93.8%	93.2%	88.8%	93.4%	92.8%	95.0%
Mandatory Fringe Benefits	94.0%	92.5%	87.3%	88.0%	90.3%	95.0%
Non-Personnel Services	90.0%	77.6%	79.0%	83.0%	81.6%	92.0%
Materials and Supplies	80.7%	73.2%	84.9%	94.5%	33.8%	96.0%
Capital Outlay	42.6%	25.5%	36.1%	26.6%	56.3%	45.0%
Overhead and Allocations	93.2%	89.4%	88.2%	87.6%	78.3%	94.0%
Services of Other Depts	96.5%	93.4%	96.8%	95.8%	87.4%	98.0%
City Grant Program	1.9%	54.4%	47.2%	43.4%	58.3%	55.0%
Transfers Out	28.5%	27.7%	26.8%	25.9%	25.0%	30.0%

Table 6. Hetch Hetchy Water Division Percent of Budget Execution and Execution Factor Applied to All Future Years

Expense Type	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	Applied
Salaries	95.6%	101.3%	95.8%	96.4%	98.7%	100.0%

Mandatory Fringe Benefits	103.4%	108.4%	99.8%	100.0%	103.9%	100.0%
Non-Personnel Services	90.8%	73.3%	69.0%	72.5%	46.2%	92.0%
Materials and Supplies	91.5%	92.3%	87.6%	92.7%	93.3%	95.0%
Capital Outlay	38.3%	13.4%	16.6%	15.8%	23.3%	45.0%
Overhead and Allocations	94.2%	88.9%	89.9%	86.9%	79.2%	96.0%
Services of Other Depts	75.8%	93.7%	108.8%	100.7%	95.0%	100.0%

Table 7. Hetch Hetchy Power Division Percent of Budget Execution and the Execution Factor Applied to All Future Years

Expense Type	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	Applied
Salaries	94.8%	102.1%	104.5%	104.1%	101.7%	100.0%
Mandatory Fringe Benefits	100.9%	102.2%	99.2%	111.6%	97.4%	100.0%
Power Supply and Delivery Charges	87.5%	80.4%	79.1%	83.8%	59.7%	100.0%
Other Non-Personnel Services	55.2%	84.6%	67.4%	103.0%	61.1%	100.0%
Materials and Supplies	110.9%	56.7%	80.1%	78.5%	89.6%	100.0%
Capital Outlay	13.6%	22.2%	66.2%	100.1%	1.9%	100.0%
Overhead and Allocations	113.4%	106.7%	91.2%	89.5%	80.3%	100.0%
Services of Other Depts	79.6%	70.6%	63.6%	91.2%	70.0%	93.0%
City Grant Program	N/A	N/A	100.0%	N/A	N/A	100.0%
Transfers Out	100.0%	100.0%	100.0%	100.0%	88.6%	100.0%

No execution factors are currently applied in CleanPowerSF; however, operating expenses besides power supply purchases make up only a small percentage of the entity's annual costs, so this change would have only a minimal effect. We plan to incorporate execution factors for CleanPowerSF in future years.

In the City's budget system, unspent operating budgets in a given year will by default "close out" to fund balance. However, departments may submit requests to "carryforward" some portion of the unspent budget to future years. The models assume that a portion of the unexecuted budget is closed out and that a portion is carried forward to future years. The carryforward amount is based on the historic percent of each expense type which is generally carried forward, and cannot exceed the unexecuted budget savings.

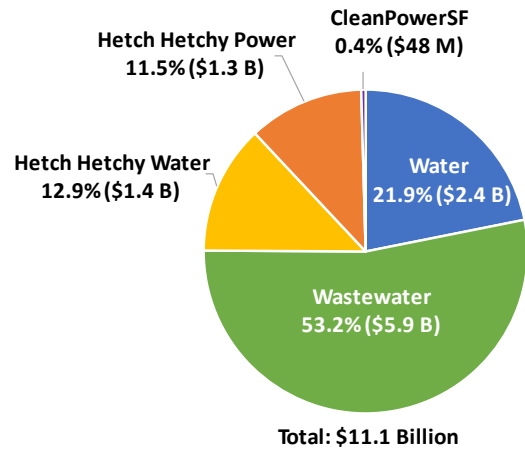
Capital Expenditure Assumptions

10-Year Capital Plans

The SFPUC adopts a 10-Year Capital Improvement Plan (CIP), which details the specific projects planned for each enterprise. Every year, the CIPs are updated to reflect the capital priorities of each enterprise

over the next 10-years. Every other year, a biennial budget is adopted, which includes the adoption and appropriation of CIP funding for the first two years of that plan. The Financial Plan includes the proposed FY 2025-26 budget and the capital project appropriations from the 10-Year CIP through FY 2034-35.

Figure 6: FY 2025-26 to FY 2034-35 10-Year Capital Improvement Plan by Enterprise



The CIP also identifies the funding sources for each year in the plan. Generally, funding is either 1) revenue-funded (also referred to as “pay-as-you-go,”) or 2) debt-funded using tax-exempt revenue bonds. However, in practice, the SFPUC actively seeks out lower cost borrowing opportunities through other borrowing sources when available such as State Revolving Fund (SRF) or Water Infrastructure Financing and Innovation Act (WIFIA) loans. The following section outlines how these capital spending plan and financing strategies are projected to impact the cash flow for each of the enterprises.

In general, capital expenditures are the primary driver of increased costs in the Financial Plans for each Enterprise. **Error! Reference source not found.** provides a summary of the total budgeted capital appropriations for each of the enterprises. The combined CIP totals \$11.1 billion, of which over half is for Wastewater Enterprise. A brief summary of each enterprise’s CIP is provided below.

Water Enterprise Capital Improvement Program

The Water Enterprise 10-Year Capital Improvement Plan includes \$2.4 billion in total spending, with \$934 million being revenue-funded (39 percent) and \$1.5 billion debt-financed (61 percent). The largest projects of the FY 2025-2026 to FY 2034-35 Water Capital Improvement Plan are local water pipeline replacements (\$507 million), new City Distribution Division (CDD) headquarters (\$266 million), and the Millbrae Yard Campus improvements (\$399 million).

Water Enterprise and water ratepayers also pay for a portion of the projects in the Hetch Hetchy Water and Power CIP, following the allocations described in the *Cost Allocations* section below. The Water share of that plan totals \$625 million; debt funding makes up \$591 million of the CIP and cash funding covers the remaining \$35 million. The largest water- or joint-funded projects include the Moccasin Penstock Rehabilitation Project (\$315 million total project) and the Moccasin Dam & Reservoir Long Term Improvement (\$128 million total project).

Combining both the Water Enterprise and water share of Hetch Hetchy costs, revenue-funded capital comes to 37 percent of the total Water CIP. This is above the minimum 15 to 30 percent range required by SFPUC’s Capital Financing Policy.

Wastewater Enterprise Capital Improvement Program

The Wastewater Enterprise 10-Year Capital Improvement Plan is \$5.9 billion in total spending, with \$1.3 billion (23 percent) being revenue-funded and \$4.5 billion (77 percent) debt-financed.

The primary cost drivers of the Wastewater Capital Improvement Plan are the Biosolids and Digester Project (\$539 million), Small Diameter Sewer Improvements (\$487 million), Large Diameter Sewer Improvements (\$495 million), and the Southeast Plant Mainstream Nutrient Reduction Project (\$1.2 billion).

The Wastewater Enterprise's revenue-funding of 23 percent of the 10-Year Capital Plan exceeds the minimum required by SFPUC's Capital Financing Policies of 15 percent to 30 percent.

Hetch Hetchy Water and Power Capital Improvement Program

The Hetch Hetchy Water and Power Capital Improvement Plan is \$2.7 billion, of which \$2.1 billion is allocated to Power Enterprise. The Water portion of the plan is discussed above. The Power Enterprise is debt funding \$1.4 billion (66 percent) of its share of the Hetchy CIP and cash funding the remaining \$700 million (34 percent).

The Hetch Hetchy Power Capital Improvement Program includes increased investment to serve new Hetch Hetchy Power customers. The major in-City projects included in the Power Enterprise Capital Program are SFO Substation Improvements (\$228 million) and the Carbon Free Steam Projects (\$217 million). For major upcountry projects, the main drivers include the Moccasin Powerhouse & GSU Rehabilitation Project (\$39 million) and the Transmission Line Clearance Mitigation Project (\$59 million).

Together, the Hetch Hetchy Water and Power Capital Improvement Plan, including Water's share of costs, is 33 percent revenue funded. This is currently above the minimum 15 to 30 percent range required by SFPUC's Capital Financing Policy.

CleanPowerSF Capital Improvement Plan

CleanPowerSF's Capital Improvement Plan is \$48.4 million in total spending over the next 10 years, with 100 percent of its fundings sources coming from customer revenues. 99 percent of CleanPowerSF's CIP is the Local Renewable Energy Program, a \$48.3 million project over the plan period.

Capital Expenditures After the 10-Year Capital Plan

To enable long-term levelized rate adjustments, it is important to account for large expenditures that may occur after the 10th year of the plan. By doing so, SFPUC can prepare our rate plan and capital financing strategies well in advance of these projects – optimizing our use of cash- and debt-funded resources and avoiding sudden rate increases as new projects are added to future 10-Year capital plans.

These longer-term capital spending projections include ongoing repair and replacement (R&R) projects, projects that are currently in the CIP but extend beyond our 10-year planning window, known projects with preliminary cost estimates outside of the 10-year planning window, and placeholders. For ongoing projects, such as repair and replacement, we forecast future spending using an assumed 4% annual escalation in costs beginning in FY 2035-36. For one-time projects that begin during the 10-year CIP, we utilize their spending plan for the years outside of the 10-year planning horizon, if available, or identify the remaining project costs and spread them through the end of the project's planned project construction period. In some cases, placeholder amounts have been added to years past the CIP to approximate an expected level of spending. Finance, Infrastructure, and Enterprise staff will continue to

meet to populate the future spending horizon with the best available information and enable our 10-year plan to reflect the full projected cash need for each enterprise.

Capital Projects' Impact on Cash Flow and Rates

As described above, the financial plan projects funding sources for the CIP using either current cash on hand or revenue bonds. The CIP is a budget document, and therefore lists sources and uses of funds in the year they are appropriated – not necessarily the year they will be spent. Indeed, most capital project expenditures happen over several years, and there is significant unspent appropriation from prior fiscal years in addition to the new appropriation in each CIP. For financial planning purposes, how the capital expenditures impact cash flow depends on whether they are revenue-funded or debt-funded.

Pay-as-you-go funding, as the name implies, requires funds to be available immediately. This may be from a specific revenue source earmarked for capital projects.⁶ If these dedicated sources are insufficient to cover the total revenue-funded sources, the remainder is appropriated from the Enterprises' available fund balance. Due to the requirements of the City's budget, it does not matter when the cash funded expenditures will happen – the funds are appropriated immediately. This means that rates must cover the necessary appropriations for revenue-funded capital in the year they are shown on the CIP.

Debt-funded capital is much more complex, as the SFPUC's Capital Finance team performs financial engineering to smooth expenditures over many years, reduce interest costs, and take advantage of low-cost grant and loan programs. Debt-funded projects will eventually be funded by a state or federal loans or by the sale of revenue bonds. These loans and bonds require annual debt service payments, and revenues are needed only to make the debt service payments, not the appropriated amount in the budget. As a result, there can be a significant delay between the year of appropriation for a debt-funded project and the year that revenues are needed to pay for it. The following section describes the assumptions for capital financing of debt-funded projects.

Finally, Financial Planning worked with Enterprise and Infrastructure staff to develop assumptions around actual spending of appropriated funds. This task recognizes that appropriation is an authorization to spend up to a certain limit, but spending may not all happen in the year of appropriation. With that understanding, the plan spreads budgeted expenditures over multiple years based on the project schedule and the stage of the project (i.e., is the project in design or construction). These assumptions assisted with the smoothing of cash flow needs and especially the timing of debt issuance, limiting the risk of raising rates ahead of when the funding is needed. This is a process staff will continue to refine as we continue to track our ongoing delivery of project budgets.

Capital Financing Expenditure Assumptions

The SFPUC's Capital Finance team leverages a variety of tools to finance the enterprises' capital programs. These tools help to better align the payment for capital assets to the use of the assets so that current ratepayers are not bearing the full cost of projects that may be used for 40 or more years. In addition,

⁶ Examples include capacity charges in Water and Wastewater, or Distributed Antenna System licensing fees in Hetch Hetchy Power.

these capital financing products allow for more gradual rate adjustments even when large assets are brought online over a short period.

A variety of capital financing decisions are made each time the SFPUC issues debt to finance capital projects to obtain the optimal interest rates and financing terms, based on prevailing interest rates and interest rate trends, market demand and other considerations. Due to the uncertainty of how each of these factors may change over time, several simplifying assumptions are incorporated in the planning process to project future debt service. However, many of the factors that determine future borrowing costs are beyond the SFPUC's control, including interest rates, inflation, federal and state policies, and the volatility that has recently marked the global financial markets. There are high levels of uncertainty in projecting future debt service costs given the extended capital project planning horizon; therefore, debt service cost assumptions should be sufficiently conservative to mitigate risk and be reasonable in both historical context and current market expectations. The key assumptions governing new capital financing projections are discussed below.

The SFPUC works with an array of financial and legal advisors on its bond programs. Beginning in 2022 the SFPUC engaged PFM Financial Advisors to provide broad strategic advice in managing the overall bond program in addition to the transaction advice provided by advisors on individual transactions. As the market continues to experience volatile interest rates, the Capital Finance team continues to meet regularly with PFM on broader capital financing strategy and financing approaches, adjusting bond issuance strategies accordingly, by reevaluating past approaches, adjusting average life of borrowing, and taking advantage of lower interest costs options like tax-exempt bonds, shorter term notes, federal and state loans, and other federal programs such as direct pay tax credits made available in the Inflation Reduction Act (IRA).

Fixed Interest Rate Debt

Fixed-rate debt is a form of borrowing in which the interest rate is determined when the borrowing is made and fixed throughout the life of the debt. In view of Federal Reserve actions to reduce inflation and the resultant interest rate volatility and rapid pace of Federal Reserve interest rate increases experienced beginning in FY 2021-22, combined with significant uncertainty related to the in-coming Presidential Administration's impact on markets, the SFPUC continues to assume a 6 percent interest rate for future long-term financings through FY 2034-35.

Given the SFPUC's success in selling revenue bonds at interest rates considerably lower than the 6% assumed rate, these assumptions are appropriate given the recent interest rate volatility observed in the capital markets. The rate assumption for projected debt issuances of 6% over the next 10 years allows for continued conservatism in projections and better aligns with assumptions used by other City agencies and peer public utilities. To the extent future bonds are issued at lower interest rates, this will free up funds for revenue-funded capital, reducing the need for borrowing and improving debt service coverage metrics that underpin our ratings; using insufficiently conservative assumptions would have the opposite effect.

The SFPUC's fixed-rate debt includes fixed-rate revenue bonds and fixed-rate direct loans. Fixed-rate revenue bonds typically have long repayment periods and market-rate interest levels. The 2024 Wastewater Revenue Bond Series A was issued at a 3-year fixed rate to provide interim financing for a

project to allow for optimization of tax-exempt financing and potential tax credits under the Inflation Reduction Act, if still available when the project is completed. The plan assumes that the principal for these bonds will be re-financed at maturity using the same assumptions as all long-term fixed-rate debt. Fixed-rate direct loans, such as Water Infrastructure Finance and Innovation Act (WIFIA) and State Revolving Fund loans, provide financing at below-market interest rates and over longer terms in some cases. The current plan assumes regular draws on the SFPUC's existing WIFIA and SRF loans throughout the construction period of the funded projects, with interest accruing at the loan rates established for each agreement until the start of repayment. The SFPUC assumes all long-term fixed-rate debt, including WIFIA loans, to be amortized over a 30-year term. While both longer- and shorter-term debt will be considered when bonds are actually sold, 30 years represents a more conservative planning assumption.

Variable Interest Rate Debt

Variable-rate debt is a form of debt that carries an interest rate that changes over the life of the debt, depending on market conditions throughout the life of the debt. Examples of variable-rate debt include variable rate demand obligations, put bonds, auction rate securities and commercial paper. Variable-rate debt typically has interest rates set based on shorter periods and provides financing at lower costs than fixed-rate bonds because they are marketed to investors to be held for a shorter period. For example, the commercial paper is typically marketed to investors for 30- to 120-day periods (although they could legally be remarketed for up to 270 days) even if the commercial paper is not taken out by bonds for a longer period. All variable-rate bonds are assumed to be amortized over a 25-year term.

To mitigate interest rate risk and ensure financial sustainability, SFPUC's debt management policies stipulate that no more than 25 percent of any enterprise's long-term debt be in variable-rate mode. The Wastewater Enterprise is the only Enterprise that has outstanding long-term variable rate debt, which had consisted of the 2018 Wastewater Revenue Bonds Series C issued in August 2018 with a "soft put" provision requiring that purchasers of the bonds tender or "put" the bonds back to the SFPUC on a date established at the time of issuance (the "put date"). The bonds are then remarketed to new purchasers at interest rates that reflect the length of the new put period and market conditions at the time of the remarketing. In April 2023, the Series 2023 Series C bonds were issued as tax-exempt Green Bonds to refund all of the outstanding 2018 Series C bonds with a "put date" of October 1, 2029. These bonds make up 4.9 percent of the Enterprise's outstanding revenue bond portfolio and are assumed to be refinanced at the SFPUC's long term rate assumption of 6%.

Commercial Paper ("CP") is a form of short-term variable-rate debt that is used by the SFPUC as interim finance to be repaid from proceeds of new revenue bonds. While CP has a maturity of 270 days or less, principal payments on maturing CP and interest due at each maturity are usually funded by issuing new CP, a process referred to as "rolling" or "remarketing" the CP. Bank facilities, typically in the form of a letter of credit or liquidity facility, are used to guarantee that funds are available to pay investors at each maturity in the unlikely event of a failed remarketing or inability of the SFPUC to fulfill CP repayment. Commercial paper interest coupon rates are currently assumed to be 3.5 percent (which does not include bank facility and dealer costs which are separately assumed as described below).

Issuance Costs and Capitalized Interest

Bond Issuance costs are projected at 0.40 percent of the par amount of each issuance, including bond underwriting fees. Issuance costs include underwriting fees, legal fees, financial advisory fees, credit enhancement fees, and other miscellaneous fees typically associated with a bond financing. Other issuance costs include the costs of interim, short-term funding for projects by each enterprise's Commercial Paper Program, such as accrued interest and credit bank and dealer fees associated with outstanding commercial notes. These costs are not treated as part of the bond issuance costs cited above, but instead are fixed costs related to the Commercial Paper Program added to the par value of each bond issuance when it occurs.

Capitalizing interest is a financing technique the SFPUC has used in the past based on the fundamental principle of not passing on capital financing costs to ratepayers until the asset is completed and placed into service. Borrowing additional funds to pay interest for the early years of the debt can also assist with smoothing rate increases by delaying the impact of interest repayment from rates for several years after bond issuance. It also aligns with SFPUC's rigid budgeting process, which is adopted on a fixed biennial basis. However, this comes with a cost, as it increases the par value of bonds and therefore future debt service costs by approximately 13%, though these costs are partially offset by interest earnings. Reducing the assumed capitalized interest period in our financing plan substantially reduces debt service interest over the life of the bond but accelerates the assumed impact of borrowing costs on ratepayers. The prior 10-Year Plans assumed 24 months of capitalized interest on all revenue bonds. To increase conservatism, this plan aims to phase-out the assumption of capitalized interest, while still allowing for its use as a strategy to respond to market conditions or budgetary need. The Hetch Hetchy Power plan assumes 6 months of capitalized interest for issuances during the first five years of the plan (through FYE 2030), and then eliminates it for the remainder of the plan. The Water and Wastewater financial plans continue to assume 24 months of capitalized interest through FYE 2035. The Financial Strategy team recommends decreasing these assumptions further. But since doing so would require near-term increases to rates, will continue to evaluate this area in future plans to balance long-term affordability with short term rate pressure.

Debt Service Reserve

While the SFPUC has previously issued bonds with Debt Service Reserve Funds – bond proceeds equal to approximately 10% of the par size or a smaller amount as permitted by tax law – in recent years the SFPUC had stopped funding such reserves, thereby reducing the size of the bond transactions. New debt issuance projections do not assume a funded debt service reserve fund due to the SFPUC's Aa/AA credit quality, which has provided the market sufficient assurances on debt service repayment. The Water, Wastewater, and Power indentures do not require a debt service reserve be funded but the SFPUC will continue to evaluate whether tools such as a funding a Debt Service Reserve, purchasing insurance products or other credit enhancements could be beneficial to future transactions as municipal credit analysts view such reserves more favorably. The relative advantage or disadvantage of such funds can shift over time based on the relationship between short-term earnings rates and long-term borrowing rates and credit outlook.

Timing of Debt Issuance

The timing and sizing of debt issuance is typically reflective of the projected financing needs of each enterprise over the 10-Year Financial Plans. The debt issuance schedule reflects coordination with the needs of capital project managers and the reality of contract bidding and execution. Timing and issuance amounts are subject to market conditions and actual project spending.

When the Board of Supervisors approves the SFPUC's capital budgets, these amounts are placed on Controller's reserve and only released when funding is available. Generally, the SFPUC uses low-cost bank facilities that are part of the SFPUC Interim Funding Program authorized by the Board of Supervisors and the availability of Federal and State loans to demonstrate the availability of funds to secure those releases, rather than issuing bonds before they are needed. This approach reduces overall costs to the SFPUC, and is described below. This Interim Funding Program has been sized at \$1.5 billion across all three enterprises, and the Board of Supervisors authorized the SFPUC in 2024 to expand that program by another \$950 million of facilities over time.

To further lower costs and the impact of capital expenditures, the SFPUC's enterprises first borrow funds from the Interim Funding Program which includes various bank agreements and the ability to issue commercial paper within the commercial paper programs established for each enterprise. Before the capacity of each commercial paper program is exhausted, the commercial paper typically is refinanced with long term financing in the form of revenue bonds or federal and state loans, therefore freeing up the commercial paper capacity again. This process of issuing smaller commercial paper tranches of borrowing allows the SFPUC to try to borrow funds only when really needed, while allowing for further efficiencies and economies of scale in aggregating these bonds into larger, long-term bonds. The proceeds of these future revenue bonds are used for capital improvements, to retire outstanding commercial paper, to fund capitalized interest, fund reserves when those are advantageous, and pay the costs of issuing bonds. Projected financial plan bond issuance amounts do not estimate future refinancing opportunities, although the Capital Finance Team is continually exploring opportunities to refinance and reduce debt service costs. When such opportunities exist based on interest rate dynamics, the SFPUC often refinances some outstanding debt in conjunction with the issuance of new debt. The following table shows the assumed par amounts (which are the amounts borrowed, not the net proceeds available for construction) of revenue bond issuances for each enterprise for the Plan.

Table 8: Projected Annual Par Amounts of Revenue Bond Issuance by Enterprise (Million Dollars)

(\$M)	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Total
Water	\$0	\$1,083	\$0	\$0	\$1,045	\$0	\$0	\$771	\$0	\$0	\$2,899
Wastewater	\$931	\$0	\$1,733	\$0	\$0	\$0	\$1,739	\$0	\$0	\$1,580	\$5,982
Power	\$0	\$496	\$0	\$0	\$448	\$0	\$0	\$0	\$457	\$0	\$1,401
Total	\$931	\$1,579	\$1,733	\$0	\$1,493	\$0	\$1,739	\$771	\$457	\$1,580	\$10,282

Cost Allocations

Some operating and capital expenditures are allocated to specific customers, and only influence the rates of those customers.

In the Hetch Hetchy Water Division (aka “Upcountry”), all costs associated with water operations within Hetch Hetchy Water and Power are funded by the Water Enterprise, while all costs associated with power operations are funded by the Power Enterprise. For projects that benefit both Enterprises, the costs are shared jointly, with 45 percent of the costs paid by the Water Enterprise and 55 percent paid by the Power Enterprise. In the Hetch Hetchy Water and Power financial model, each line item is allocated between water and power. The water share of expenses, net of any water-related revenues, is paid for by a transfer in from the Water Enterprise.

In the Water Enterprise, “Regional Water” costs are shared between wholesale and retail customers based on their proportional annual volumetric water use. “Local Water” costs are paid solely by retail water rates. The Water financial model tracks these costs separately, and rates for each customer class are set to cover only the costs allocated to them.

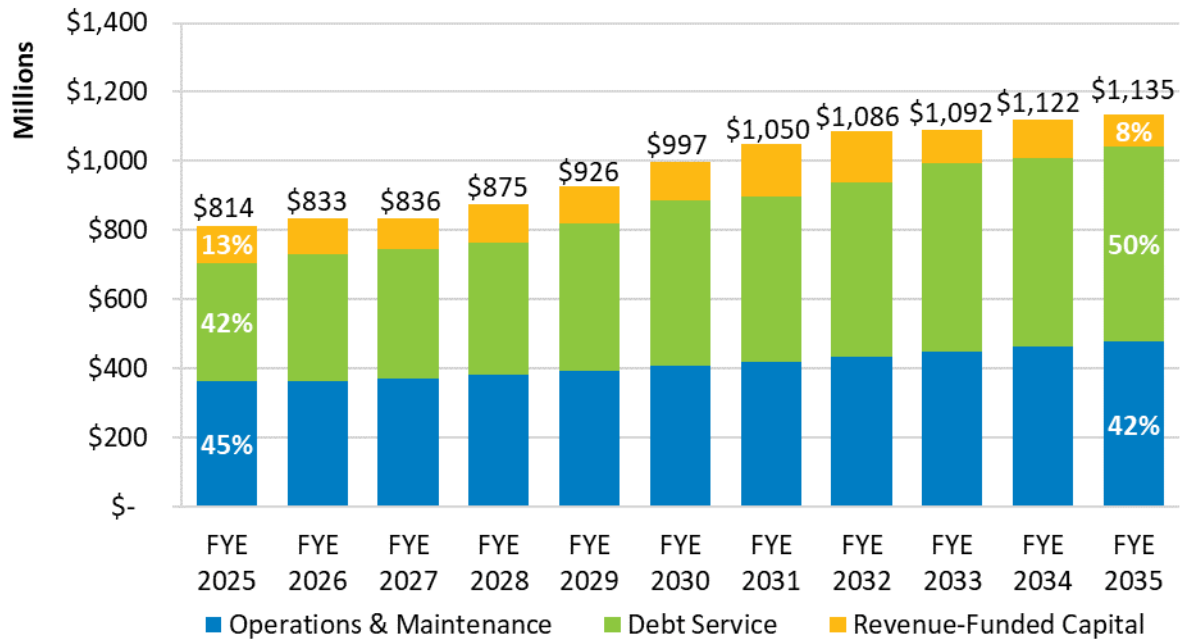
Annual Cash Expenditures

The section below provides a summary of the total cash needs, comprised of the annual operations and maintenance expenses and the various forms of capital expenses, for each enterprise over the 10-year forecast period.

Water Enterprise

Water Enterprise expenses are expected to grow from \$814 million to \$1.14 billion during the 10 years (an average of 3.4 percent per year), as shown in Figure 7. The bulk of this growth is in debt service, as funding for capital projects increases the annual debt service payments by approximately \$32 million per year over the 10-year projection horizon. As Water Enterprise is already coming out of the completion of the Water System Improvement Program and has the most debt outstanding of any Enterprise, these increases are fairly manageable. In addition, it’s important to note that water costs are split between the retail and wholesale customers, and this larger population base over which to allocate costs reduces the burden of increases on any one group of customers.

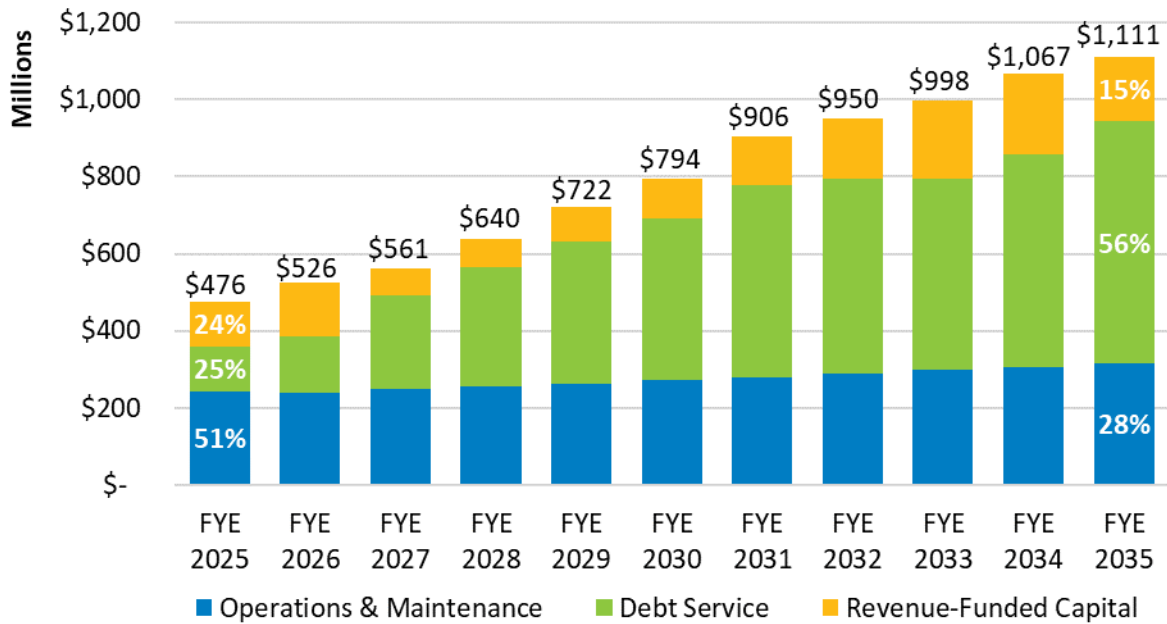
Figure 7: Projected Water Enterprise Annual Expenditures (Million Dollars)



Wastewater Enterprise

Wastewater annual expenditures more than double from \$476 million in the current year to \$1.11 billion in FY 2034-35, as Figure 8 shows – an average of 8.9 percent annually. This increase is predominantly driven by the growth in debt service, which increases from 25% of annual expenses to 56% by the end of the ten-year period, or from \$117.8 million in FY 2024-25 to \$626.1 million in FY 2034-35. This increase in debt service over the ten-year plan is driven by the Enterprise’s large Capital Improvement Plan and represents a major financial challenge. While the projects being financed under this plan are all critical for responding to climate change, meeting regulatory requirements, and maintaining aging infrastructure to ensure system reliability, the SFPUC is actively pursuing ways to achieve these goals without requiring massive rate increases for retail customers. Refer to the *Financial Plan* and *Affordability* sections of this report for more discussion of the agency’s approach to this issue.

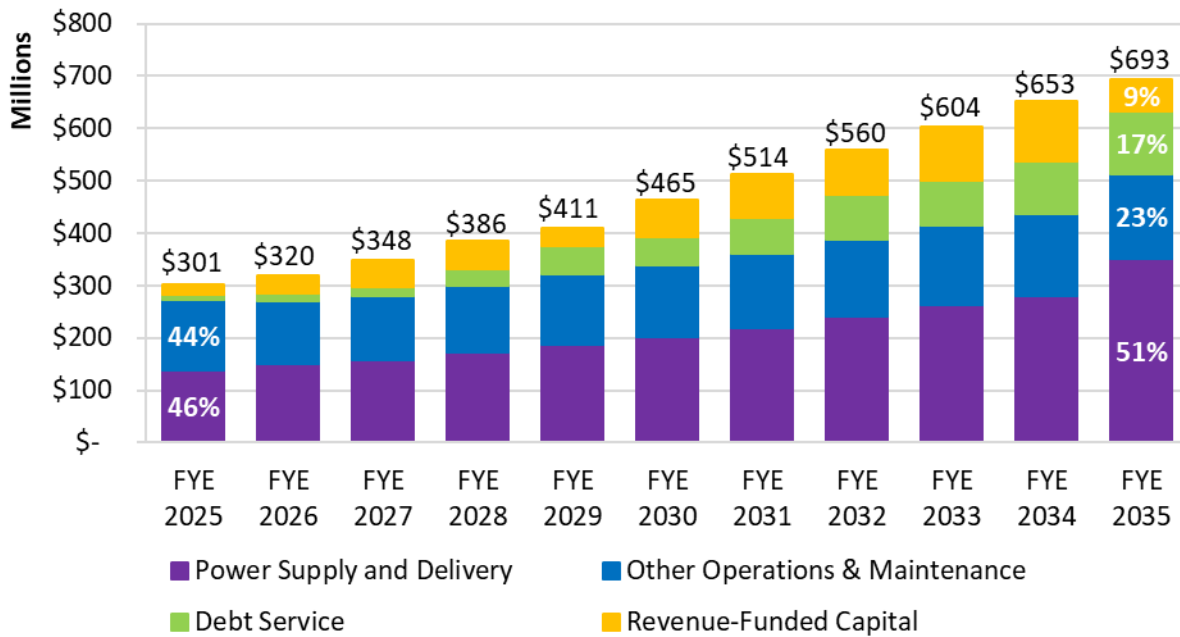
Figure 8: Projected Wastewater Enterprise Annual Expenditures (Million Dollars)



Hetch Hetchy Power

As shown in Figure 9, Power’s share of Hetch Hetchy Water & Power expenditures is forecasted to grow from \$301.2 million to \$693.3 million over the ten years, an average of 8.7 percent annually.

Figure 9: Projected Hetch Hetchy Power Annual Expenditures (Million Dollars)⁷



Most of this growth is in purchased power supply and delivery charges (Transmission Access Charges and Wholesale Distribution Tariffs), which currently represent 46% of the overall budget, and which are forecasted to grow by \$201.6 million over this ten-year planning period. This line item includes the budgeted annual contingency above forecasts.

In addition, capital costs are forecast to continue rising in Hetch Hetchy Power. In 2018, Proposition A gave Hetch Hetchy Power authority to issue revenue bonds to construct facilities to serve new customers. These bond issuances, as well as those for existing power’s share of assets under the Hetch Hetchy Water Division, mean that debt service grows from just \$13.6 million annually in FY 2025-26 to \$119.7 million by the last year of the plan.

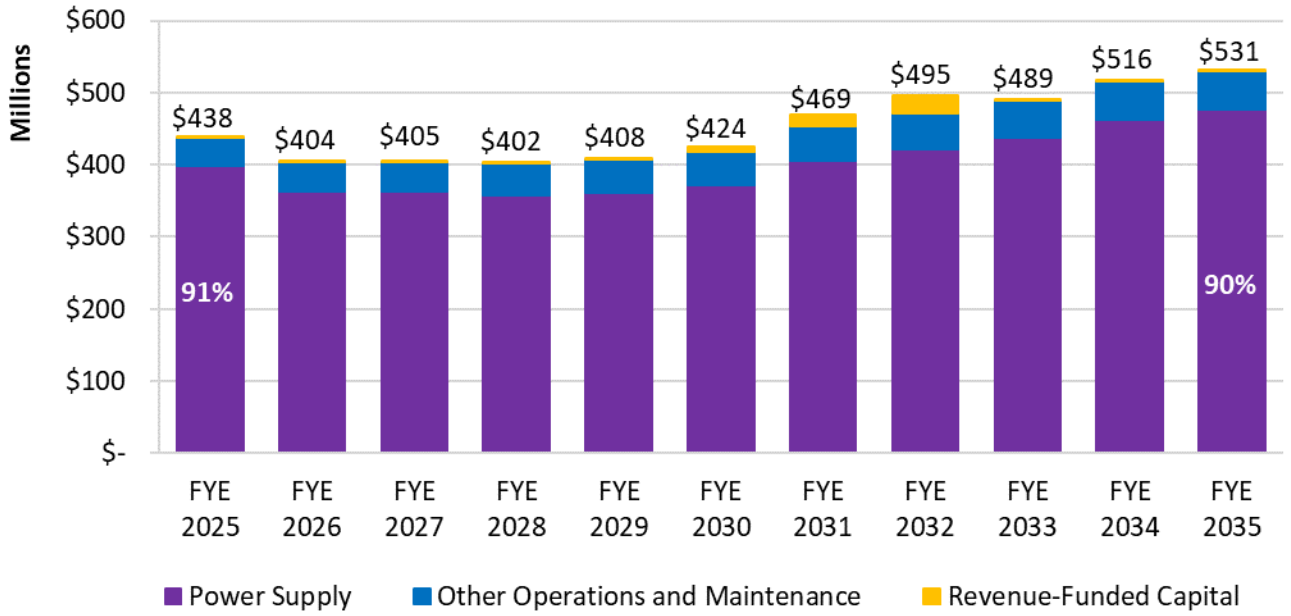
Both power supply and delivery costs and capital expenditures are driven by the program’s planned expansion of its customer base; Hetch Hetchy Power’s cost structure is more variable based on sales volumes than the other Enterprises, where costs are largely fixed and independent of utility usage. As a result, some of the risk of increasing costs comes with the upside of increased revenues, spreading the cost of a larger customer base and therefore helping to reduce rate increases.

CleanPowerSF

Figure 10 shows the total annual expenditures for CleanPowerSF for the current and next ten fiscal years. Unlike the other Enterprises, the growth rate is relatively flat, and purchased power supply costs represent roughly 90% of the expenditures in every year.

⁷ Figure does not include the Water share of Hetch Hetchy Water Division expenses. These are shown in the Water Enterprise expenditures graph since they are funded via a transfer in from Water and paid for by water rates.

Figure 10: Projected CleanPowerSF Annual Expenditures (Million Dollars)



10-Year Financial Plan

The 10-Year Financial Plan provides a roadmap for how each enterprise will plan to fund its updated projections of operating and capital expenditures over a 10-year planning period. The financial plan summarizes the sources and uses of funds, presents a cash flow projection, and defines any adjustments that may be needed for utility rates. Sources are projected operating revenue streams such as water sales, wastewater billing, and power sales, as well as non-operating and capital revenues such as state and federal grants or general obligation bonds from the City. Uses are projected expenses such as operations and maintenance, debt service, and revenue-funded projects. These cash flow projections help each enterprise evaluate its performance on various financial sustainability metrics established in SFPUC's Financial Management Policies, including fund balance reserve levels, debt service coverage, and revenue-funded capital.

Water Enterprise

The Water Enterprise's financial forecast indicates the need for a 5.0 to 8.0 percent retail rate increase for the first five years of the plan, gradually tapering off in the outer years to levels more in line with inflationary rates (Table 9). Wholesale rate changes are more variable than retail rates across the 10-year plan, with annual rate adjustments ranging from 0.0 percent to 7.0 percent. *Appendix A* contains a table summarizing the cash flow and demonstrates the need for the proposed rate adjustments.

Compared to the prior FY 2024-25 to FY 2033-34 10 Year Financial Plan, retail's average annual rate change of 6.1 percent is 2.0 percent higher than previously forecasted, whereas wholesale's rate changes have decreased from its previously forecasted 3.5 average annual percent increase. Retail rate increases from the prior plan are primarily driven by lower water sales projections and SFPUC management's commitment to targeting stronger financial metrics, including higher debt service coverage levels. While bond credit ratings are not fully in management's control, these higher rate increases and projected financial metrics aim to maintain high credit ratings as directed by in the San Francisco Charter and keep debt service costs down for ratepayers in the long term. Wholesale rate decreases are due to cuts to several large capital projects in Water's 10 Year Capital Plan and the 10-year period no longer including the 8.8% increase in FYE 2025.

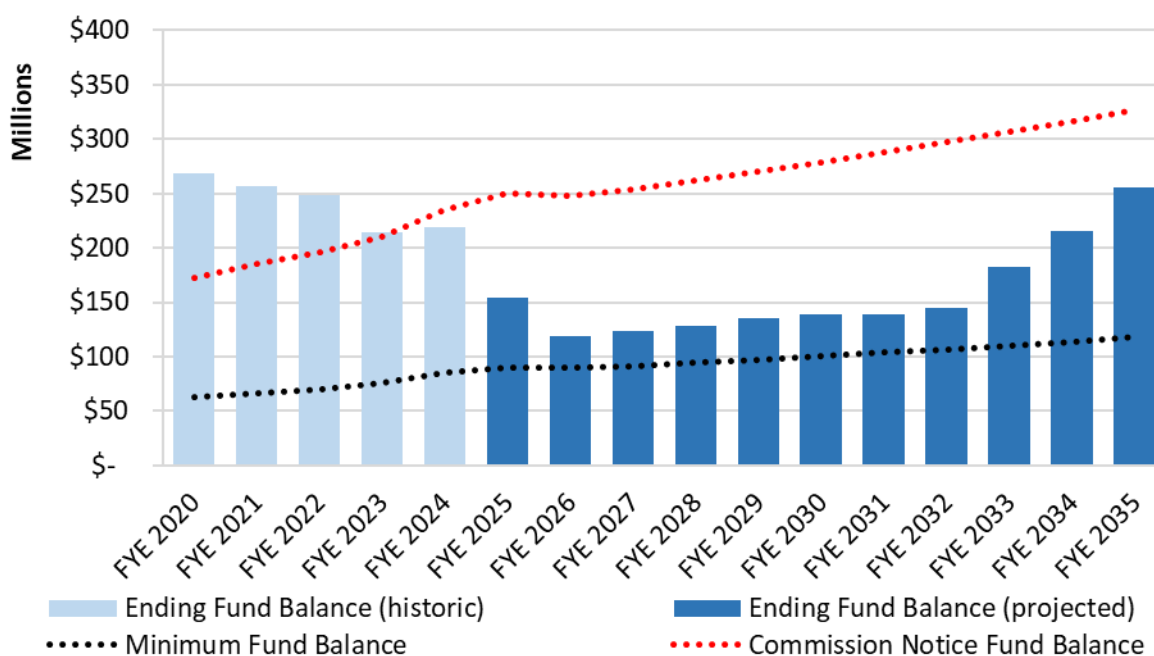
Table 9: Adopted () and Projected Water Enterprise Rate Change*

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual
Retail Rate Change	5.0%*	7.0%	7.0%	8.0%	8.0%	7.0%	6.5%	6.5%	3.5%	3.0%	6.1%
Wholesale Rate Change	1.9%	1.7%	3.2%	3.8%	7.0%	2.7%	1.6%	0.0%	0.0%	0.0%	2.2%

Based on the proposed plan, the Water Enterprise's fund balance reserve is projected to remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Figure 11 shows that over the next 10 years, the Water Enterprise

fund balance is projected to remain in the 30-35% range for the first seven years of the plan, before gradually increasing to a high of 53.6 percent in FY 2034-35. As noted above, this metric measures “budgetary basis fund balance”, which excludes funds appropriated but not yet spent. “Days cash on hand” at any given time is substantially higher than this measure, and is reported in our financial statements.

Figure 11: Historic and Projected Water Enterprise Ending Fund Balance (Million Dollars)



The Water Enterprise’s debt service coverage is projected to remain higher than the minimum levels required by SFPUC’s Debt Service Coverage Policy of 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. As discussed above, this Plan includes higher rate increases beginning with the first year of unadopted rates (FY 2026-27) provide additional financial buffer to strengthen the Enterprise’s financial position. For all years with unadopted, planned rates, the Water Enterprise forecasts current debt service coverage of 1.25x or above.

Table 10: Water Enterprise Indenture and Current Debt Service Coverage Ratios

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Indenture Debt Service Coverage	1.55	1.62	1.68	1.62	1.55	1.64	1.62	1.61	1.68	1.71
Current Debt Service Coverage – without Appropriated Fund Balance Revenue	1.21	1.28	1.32	1.28	1.25	1.34	1.32	1.26	1.28	1.25

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Current Debt Service Coverage – with Appropriated Fund Balance Revenue	1.32	1.28	1.32	1.28	1.25	1.34	1.32	1.26	1.28	1.25

Wastewater Enterprise

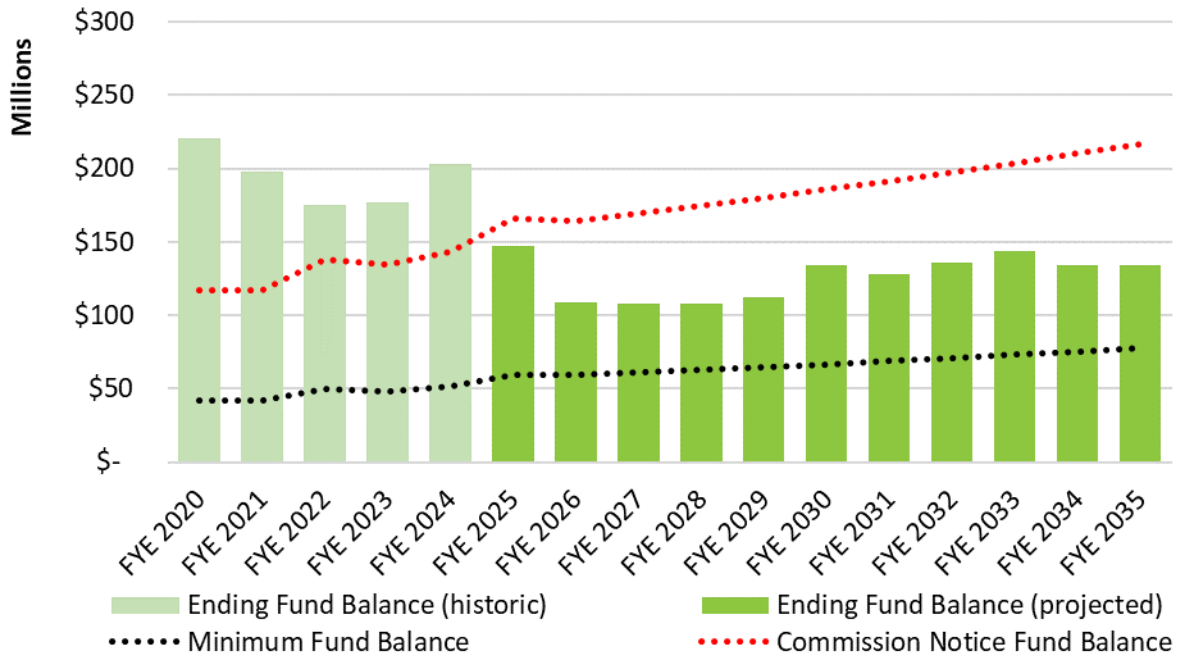
The Wastewater Enterprise’s financial forecast indicates the need for multiple years of double-digit rate adjustments from FY 2026-27 through FY 2030-31 (Table 11), dropping down to 5.0% increases in the outer years of the ten-year plan. Similar to the Water Enterprise, these rates are driven by large capital investments, growing debt service from recently completed capital projects, and the need to preserve higher financial performance metrics. *Appendix B* contains a table summarizing the cash flow and demonstrates the need for the proposed rate adjustments.

Table 11: Adopted () Projected Wastewater Enterprise Rate Change*

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 3030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual
Retail Rate Change	9.0% *	15.0 %	15.0 %	14.0 %	12.5 %	10.5 %	6.5 %	5.0 %	5.0 %	5.0 %	9.7%

Over the next 10 years, the Wastewater Enterprise’s fund balance reserve is projected to remain higher than the minimum level required by SFPUC’s Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. At the end of FYE 2024, the fund balance was higher than the level requiring Commission notice in the Fund Balance Reserve Policy. This build-up of reserves was done in anticipation of the major capital expenditures on the horizon, and the current plan relies on use of these reserves to prevent even higher rate increases than those already forecasted. Throughout the 10-year planning period, the Wastewater Enterprise fund balance is projected to range from a high of 61 percent of operating expenses in FY 2024-25 to a low of 42 percent in FY 2027-28. As noted above, this metric measures “budgetary basis fund balance”, which excludes funds appropriated but not yet spent. “Days cash on hand” at any given time is substantially higher than this measure, and is reported in our financial statements.

Figure 12: Historic and Projected Wastewater Enterprise Ending Fund Balance (Million Dollars)



As shown in Table 12, the Wastewater Enterprise’s debt service coverage is projected to remain higher than minimum levels required by SFPUC’s Debt Service Coverage Policy of 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. As discussed above, this Plan includes higher rate increases beginning with the first year of unadopted rates (FY 2026-27) provide additional financial buffer to strengthen the Enterprise’s financial position. For all years with unadopted, planned rates the Wastewater Enterprise forecasts current debt service coverage of 1.25x or above. As Wastewater Enterprise issues significant quantities of debt throughout the 10 years, meeting debt service coverage becomes the primary driver of the large rate increases shown above in Table 11. In turn, meeting and exceeding debt service coverage is crucial for finding investors willing to purchase the debt needed to fund the projects at reasonable interest rates.

Table 12: Wastewater Enterprise Indenture and Current Debt Service Coverage Ratios

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Indenture Debt Service Coverage	2.48	1.73	1.60	1.57	1.62	1.51	1.60	1.72	1.61	1.49
Current Debt Service Coverage – without Appropriated Fund Balance Revenue	1.71	1.28	1.25	1.26	1.30	1.25	1.33	1.43	1.37	1.27

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Current Debt Service Coverage – with Appropriated Fund Balance Revenue	1.98	1.29	1.25	1.26	1.30	1.26	1.33	1.43	1.39	1.27

Hetch Hetchy Water and Power

The 2022 Power Rates Study informed rate changes in FY 2022-23 through FY 2025-26 for Hetch Hetchy Power. This included a consolidation of the existing Retail and Enterprise municipal rate schedules into the same retail rates beginning FY 2023-24 for the same customer class. General Use Municipal (GUSE) rates are increasing from their subsidized levels toward cost of service at an effective rate increase of \$0.03/kWh annually. When GUSE rates for a given rate schedule reach cost of service, they switch over to retail rates. A few of the larger customer rate schedules are projected to reach cost of service by FY 2025-26; however, due to increased costs for Hetch Hetchy Power, the majority of customer classes are currently projected to reach cost of service between FY 2030-31 and FY 2032-33. The exact timing of this changeover is subject to change based on changes to the rate plan and the results of the next power cost of service and rate study, which currently beginning. Table 13 shows both retail and General Use (GUSE) municipal rates increases. Rates for FY 2025-26 have not yet been adopted; a separate agenda item will be presented to the Commission later in Spring 2025.

Table 13: Projected Hetch Hetchy Power Rate Change

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual
Retail Rate Change	10.0%	9.5%	9.5%	8.0%	5.0%	5.0%	4.5%	4.0%	4.0%	5.0%	6.4%
General Use Municipal Rate Change	15.9%	13.7%	12.1%	10.8%	9.7%	8.9%	8.1%	7.5%	7.0%	6.5%	10.0%

Hetch Hetchy Power’s financial forecast (*Appendix C*) results in an average annual retail rate increase of 6.4 percent annually over the Plan, with the highest increases in the earlier years of the Plan, leveling out to increases closer to inflation. Near-term rate increases are a response to growing costs and a goal of maintaining the Power Enterprise’s current strong financial position.

Hetch Hetchy Power’s fund balance is projected to remain above the minimum level required by SFPUC’s Fund Balance Reserve Policy of 90 days or 25 percent of operating and maintenance expenses. Throughout the 10-year planning period, fund balance is projected to range from a high of 59 percent of operating expenses in FY 2024-25 to a low of 35 percent in FY 2033-34. As noted above, this metric measures “budgetary basis fund balance”, which excludes funds appropriated but not yet spent. “Days cash on hand” at any given time is substantially higher than this measure, and is reported in our financial statements.

Figure 13: Historic and Projected Hetch Hetchy Power Ending Fund Balance (Million Dollars)

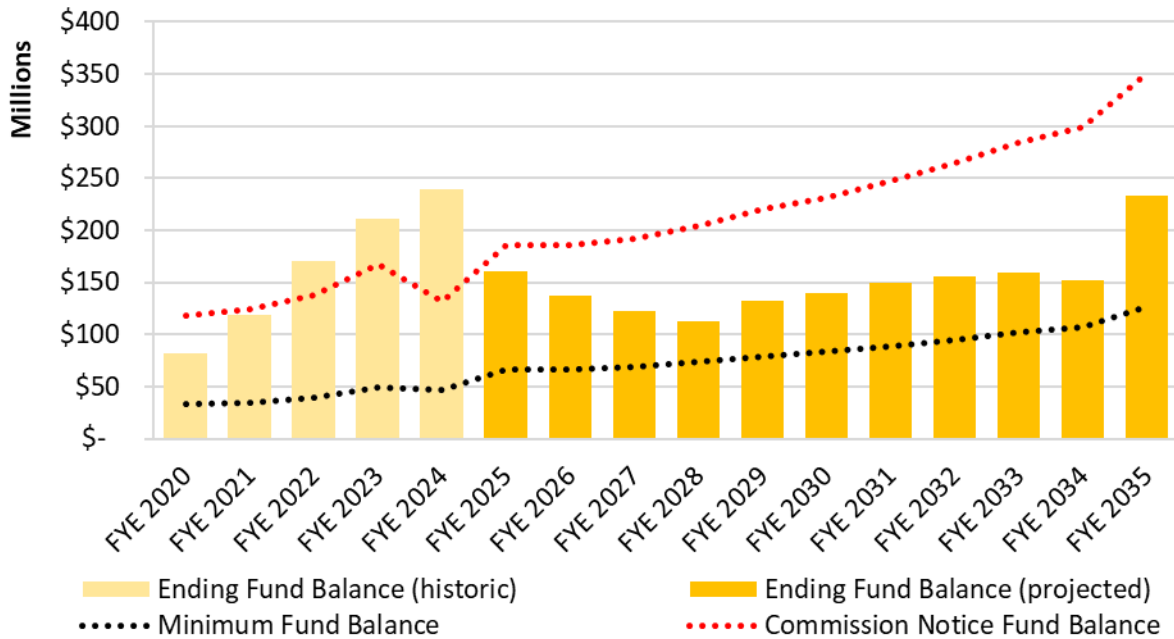


Table 14 shows that Hetch Hetchy Power’s debt service coverage in the Financial Plan is much higher than minimum levels required by SFPUC’s Debt Service Coverage Policy of 1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. For all years, planned rates for Hetch Hetchy Power result in forecasted current debt service coverage of 2.0x in all but one year.

Table 14: Hetch Hetchy Power Indenture and Current Debt Service Coverage Ratios

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Indenture Debt Service Coverage	12.89	10.45	5.91	4.48	5.10	4.59	3.85	4.07	3.57	4.15
Current Debt Service Coverage – without Appropriated Fund Balance Revenue	1.90	3.00	2.36	2.01	2.48	2.37	2.05	2.22	2.06	2.20
Current Debt Service Coverage – with Appropriated Fund Balance Revenue	3.67	3.83	2.67	2.01	2.48	2.37	2.05	2.22	2.14	2.20

CleanPowerSF

CleanPowerSF’s financial forecast (*Appendix D*) requires a 3.0% rate increase in FY 2025-26 to ensure compliance with the Fund Balance Reserve Policy of meeting 180 days cash on hand. After this initial increase, rates are mostly flat in the ten-year planning period, with small 1.5% increases in FY 2029-30 and FY 2030-31 to maintain the target of 180 days cash on hand in the last years of the plan.

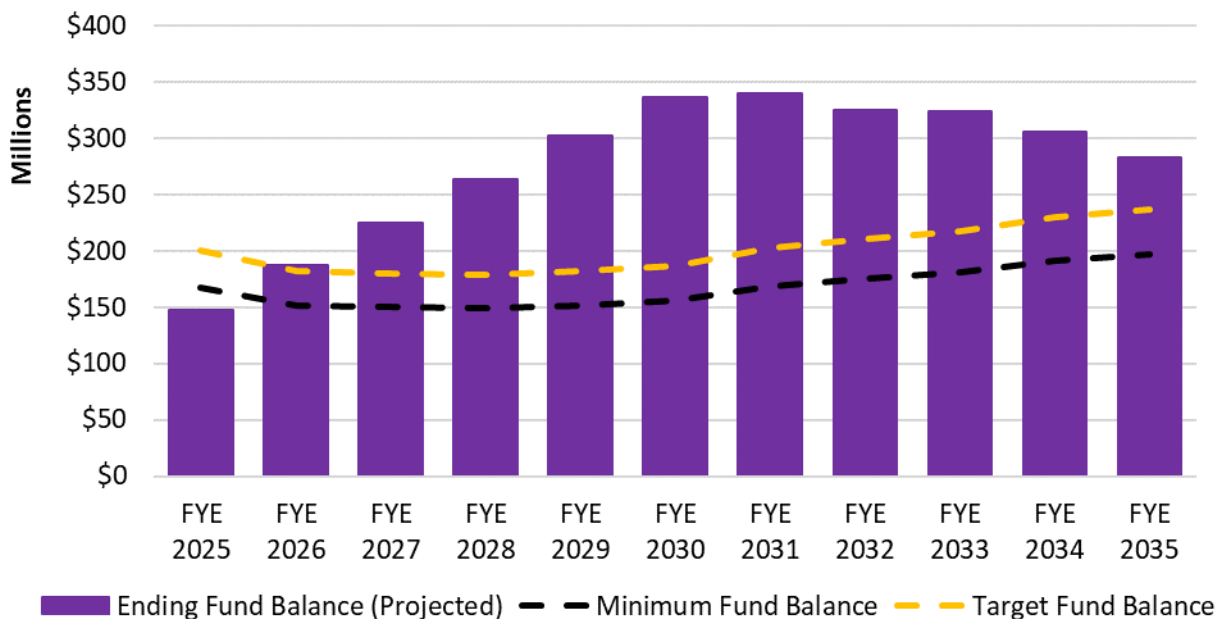
It's important to note that CleanPowerSF generation rates only reflect a portion of the bill, as CleanPowerSF customers also pay delivery charges and fees to PG&E. As such, a 3.0% increase of the generation portion of the bill represents an approximate 1% increase on the overall bill.⁸

Table 15: Projected CleanPowerSF Generation Rate Changes

	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035	Avg. Annual
Generation Rate Change	3.0%	0.0%	0.0%	0.0%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.6%

The financial forecast for CleanPowerSF (*Appendix D*) projects fund balance to remain higher than the minimum level required by CleanPowerSF’s Fund Balance Reserve Policy of 150 days of operating and maintenance expenses throughout the 10 years.

Figure 14: Projected CleanPowerSF Ending Fund Balance (Million Dollars)



⁸ Estimated using 2024 average usage patterns for a residential customer on the default E-TOU-C rate schedule.

The fund balance reserve is projected to end FY 2024-25 below the 150 days cash on hand policy minimum. As discussed in last year's plan, CleanPowerSF is in the process of building up to its target after several years of massive, unforeseen increases in power supply costs. Covering these expenses while building fund balance at the same time required significant rate increases over the last few years, which are almost complete. The Plan projects that the 180 days cash on hand target can be achieved with a 3% rate increase in FY 2025-26. After this point, rates are held mostly flat and reserves are projected to grow throughout the plan until power supply costs increases begin to draw down on the excess.

Affordability

As described above, the Affordability Policy requires a forecast of average residential utility bills over a 20-year planning period. This information is used to inform the agency's capital planning process; bills exceeding adopted policy targets require a justification and indicate that the agency should consider alternative strategies to reduce rates.

Water and Sewer Bills

As shown in Figure 15 and

Figure 16, the Water and Sewer combined average bill is projected to exceed the low-income household affordability target by FYE 2037 and the typical household affordability target by FYE 2040. Low-income customers enrolled in the SFPUC's bill discount program will remain under the applicable bill target throughout the 20-year period. In the 20-year period, the combined bill is forecasted to grow to a maximum of 3.1% of the typical household income (vs. the 3.0% target) and 7.3% of the low-income household income (vs. the 7.0% target). For a low-income household enrolled in applicable discount programs, the combined water and sewer bill during the 20-year timeframe reaches a maximum of 4.4% of income (vs. the 5.0% target). While it is still an estimated twelve years until these targets are unmet, this early warning represents the Affordability Policy working exactly as intended, providing the agency over a decade to develop a strategic approach to address affordability challenges.

Figure 15. Projected Average Monthly Water and Sewer Bills and Affordability Targets

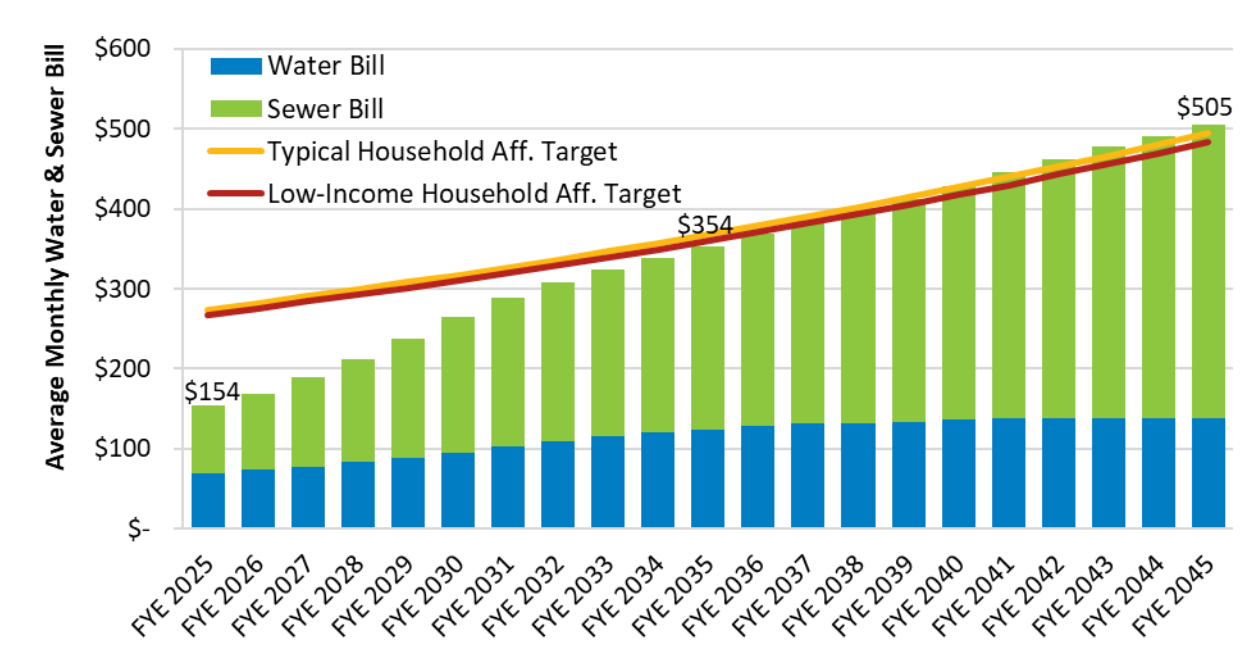
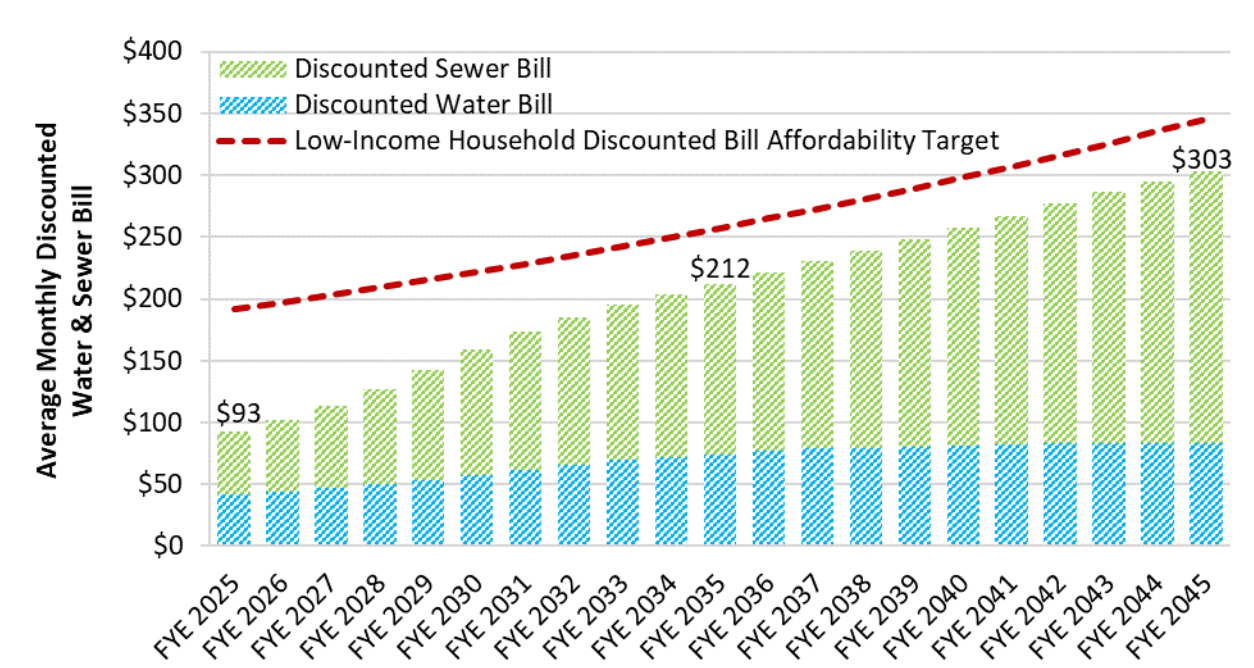


Figure 16. Projected Average Monthly Discounted Water and Sewer Bills and Affordability Target



As shown in Figure 15, the largest growth in customer bills is coming from the sewer portion of the bill. As mentioned earlier in this document, these increases are being driven by major capital investments needed to replace aging infrastructure, meet regulatory obligations and respond to climate change. In the near term, this includes the completion of large projects such as the Southeast Treatment Plant Biosolids Digesters, Ocean Beach Climate Adaption, and several flood resilience projects. The CIP also includes the

Nutrients Reduction project which aims to significantly reduce the quantity of nutrients entering the San Francisco Bay from the Southeast Plant, which have been linked to toxic algae blooms, and which is required to comply with state permit requirements. In addition, the plan includes the replacement of the Southeast Outfall, a single pipe that carries 80% of the City's sewage and which is already over far beyond its useful life.

In addition, this year's Plan increased water and wastewater rates to improve the agency's financial metrics, especially current debt service coverage, to demonstrate a stronger financial position to credit rating agencies in the context of challenges facing the utility industry. Because the SFPUC finances a significant portion of its capital plan with revenue bonds, with interest rates set based on the bond credit ratings and investor demand for the bonds, a lower credit rating and the associated higher interest rates on billions of dollars in debt would require major rate increases; very likely significantly more than what is shown here. While credit ratings are ultimately based on factors that are beyond management's control, and the City and County of San Francisco has already seen multiple downgrades to its credit ratings, the SFPUC enterprises are directed by the San Francisco Charter to set rates to maintain high credit ratings and must take actions to prioritize this legal obligation. Proactively raising rates to ensure sufficient revenues above our policy metric minimums will ultimately lead to better long-term affordability as it helps to safeguard our credit ratings.

Lastly, we have lowered our account growth assumptions for retail water and wastewater sales in order to make our forecasts more conservative, and this demand reduction is also causing upward pressure on rates.

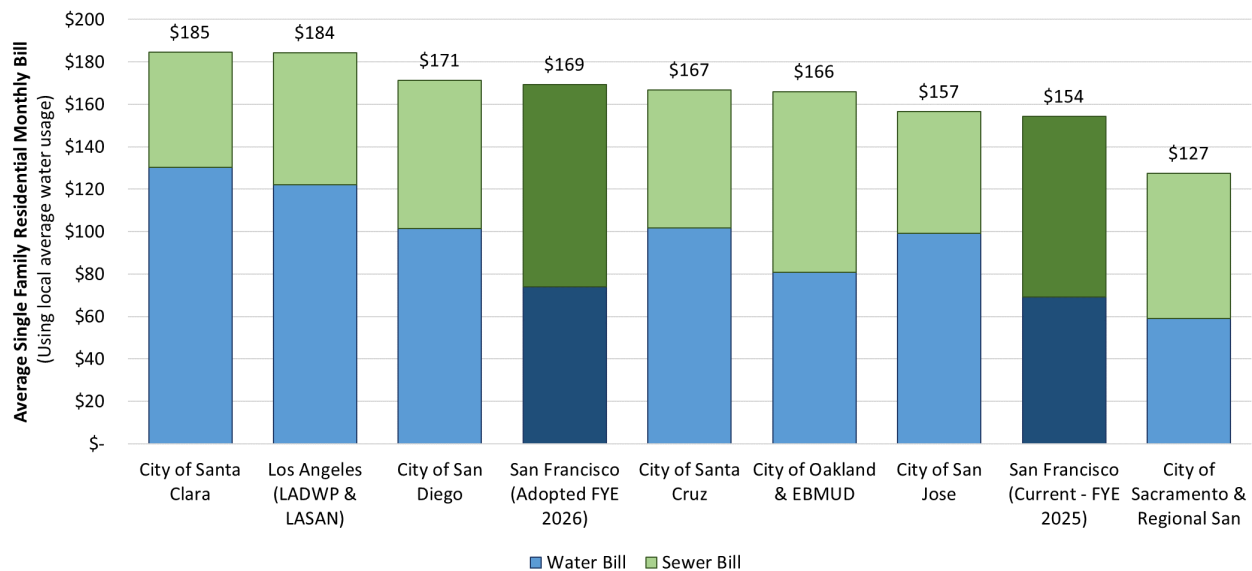
While we believe that exceeding the affordability thresholds is justifiable, both to cover the cost of unavoidable capital investments and to preserve the SFPUC's ability to access low-cost debt, the agency also acknowledges the challenge of these rate increases on San Franciscans. Over the next year, we aim to take actions to evaluate potential solutions that could bring rates down from what is shown here. The FY 2026-27 through FY 2035-36 10-Year Financial and Capital Improvement Plans will include additional detail on these efforts.

Fundamentally, decreasing capital investments is the most direct way to decrease the need for rate increases. The SFPUC plans to use the upcoming budget process to evaluate all potential opportunities for reducing capital costs while still meeting regulatory requirements and not deferring investment in the system. In the case of the Nutrients project in particular, the issue is shared by all municipalities who discharge into the San Francisco Bay. We're actively engaging with other Bay Area municipalities, BACWA (Bay Area Clean Water Agencies), and state and federal associations to educate policy makers about the issue and potential solutions. Initial estimates suggest a regional cost exceeding \$10 billion, necessitating a multi-county/agency effort. To that end, we are exploring various existing funding sources or developing new ones at the local, regional, state, and federal level. As the project is not scheduled to begin construction until FY 2029-30, the agency will use the available time to try to secure funding partnerships and implement the most cost-effective solution. Other potential strategies include deferring any projects that don't meet criticality criteria or which exceed the agency's ability to deliver, phasing water and wastewater investments strategically to offset the impact on the combined bill, and pursuing innovative contracting mechanisms to ensure projects stay under budget.

Second, the Financial Strategy team is actively engaged in developing creative approaches to financing the capital plan. There is not any singular action that will address projected affordability challenges, as the required investments are significant, and the agency already takes advantage of many of the best existing low-cost financing such as State Revolving Fund and federal WIFIA loans. However, this year’s more conservative Plan provides potential buffer for future reductions if conditions are better than projected. For example, setting higher rate increases to improve current debt service coverage would allow the agency to build reserves that could then be used to cash-fund a greater portion of the CIP, reducing future debt issuance and taking pressure off of current debt service coverage. The agency is also evaluating its debt management policies to look for any potential opportunities for savings and to take advantage of any market opportunities.

Finally, SFPUC conducted a survey to contextualize our current bills. Figure 17 shows the typical residential customer’s combined water and sewer bill for SFPUC and seven other peer agencies in California. SFPUC’s current average bills are on the lower end; in fact, projected bills for next year are still in the middle of the distribution when compared to our peer’s bills with their current rates.

Figure 17. Comparison of Average Single Family Residential Monthly Water and Sewer Bills for SFPUC and Peer Agencies in California⁹



Long-term rate forecasts are not available for many other utilities; however, the regulatory and infrastructure challenges facing the SFPUC are not unique, and it is likely that many other utilities will require major rate increases of their own to keep pace. For peer agencies with published forecasts, near-

⁹ Bills calculated using the current published rates and the typical residential water usage reported by each agency. Because not all agencies provide the same services, bills shown are for a customer within a specific city to make the comparison as close to parity with the SFPUC’s comprehensive services as possible. For example, the East Bay Municipal Utility District (EBMUD) only provides wastewater treatment; sewer collection and stormwater management costs for EBMUD customers are generally the responsibility of Cities and collected on utility bills or property taxes. Bills shown above identified as many relevant water and wastewater utility costs as possible, regardless of collection method.

term increases are roughly in line with the SFPUC's estimates. The water and wastewater utility sectors generally are confronting growing challenges from climate change, political and regulatory pressure, and aging infrastructure. By transparently and proactively acknowledging the long-term pressures we face, the SFPUC aims to lead the discussion around industry-wide solutions now, while there is still time to adjust. We are committed to responsible management of our system and to safeguarding ratepayers, and affordability is a central priority.

Power Bills

Hetch Hetchy Power bills and CleanPowerSF bills are calculated for the Typical Household and the Low-Income Household metrics but are not held to any targets. These forecasts are shown in the graphs below, with the associated percentage calculation in the 10-year time frame reported in *Appendix C* and *Appendix D*. By the end of the 20-year timeframe, Hetch Hetchy Power's average and discounted bills are forecasted to reach 1.7% of the typical household income and 4.2% of the low-income household income, falling to 2.5% for a low-income household enrolled in discount programs.

For CleanPowerSF, only 10 years of forecasts are shown due to uncertainty regarding power supply expenses and PG&E rate increases. During the 10-year timeframe, CleanPowerSF average bills, including the PG&E portion of the bill, are forecasted to reach 1.1% and 2.7% of the typical and low-income household incomes, respectively.

Note that the typical usage patterns, customer demographics, and rate structure for CleanPowerSF and Hetch Hetchy customers are significantly different; direct bill comparisons between the two programs are significantly impacted by these differences.

Work is currently underway to perform the background research and internal policy development needed to set affordability performance targets for the Power Enterprise. We expect to bring a revision to this policy during 2026 to add performance targets for the Power Enterprise once this additional analysis is complete.

Figure 18. Projected Average Monthly Residential Hetch Hetchy Power Bills

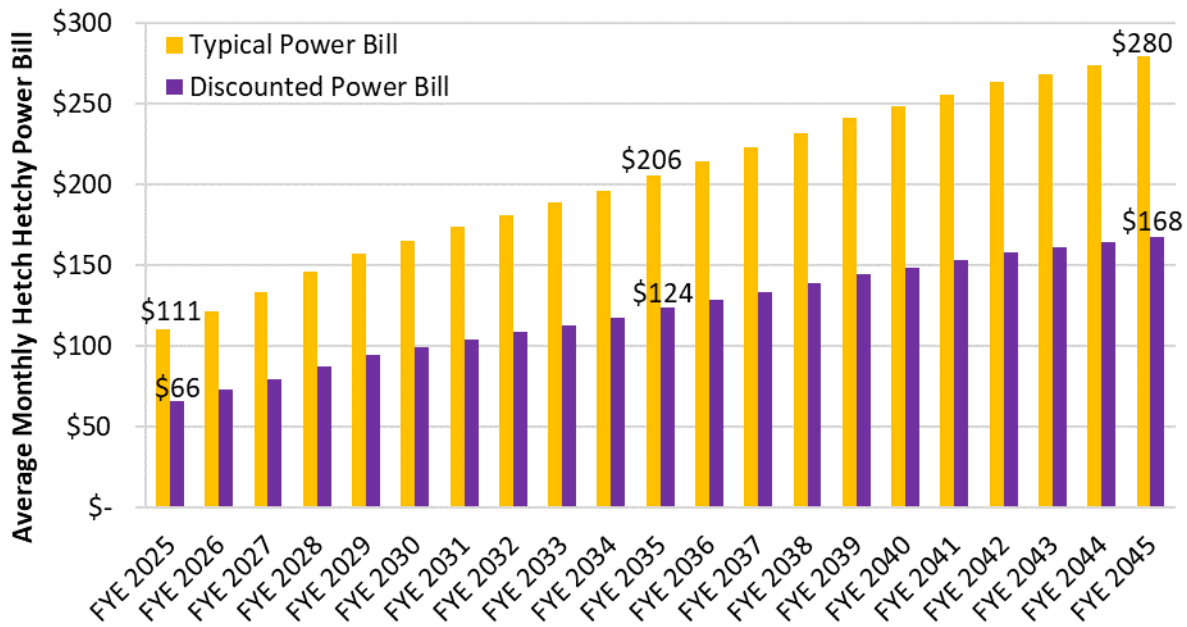
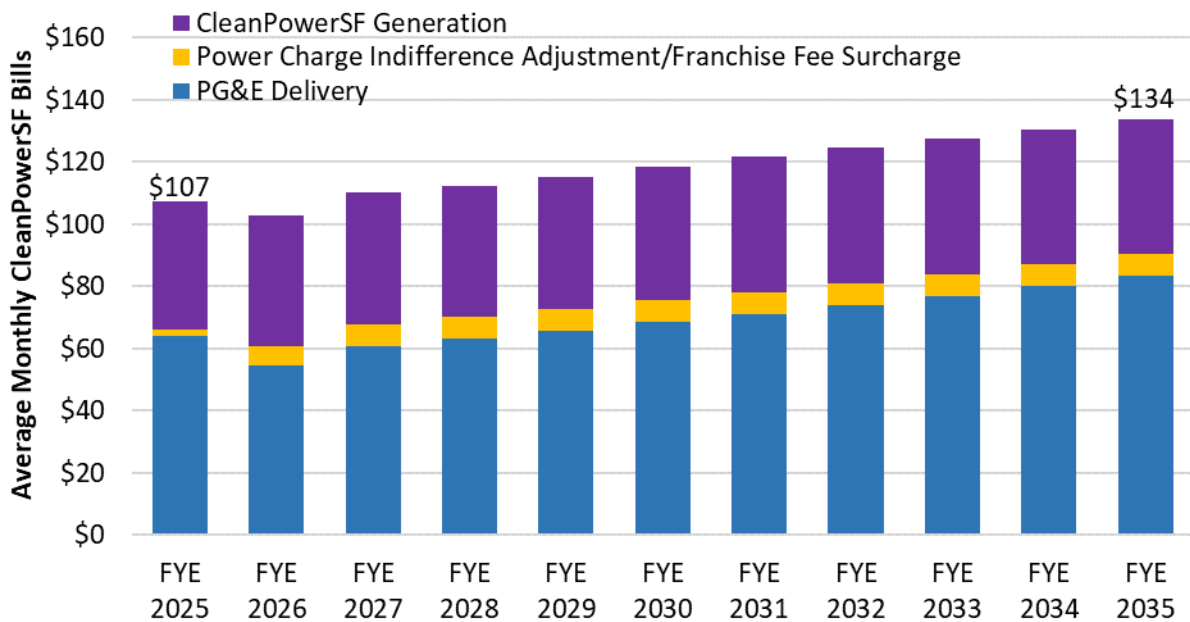


Figure 19. Projected Average Monthly Residential CleanPowerSF Bills¹⁰



¹⁰ Power Charge Indifference Adjustment (PCIA) and PG&E delivery increases forecasted through FYE 2027 based on tentative PG&E rate filings with the California Public Utilities Commission. Future PCIA rates held flat, while PG&E delivery charges assumed to increase by 4% annually.

Sensitivities

All Enterprises

Revenue Bond Borrowing Rate

Capital costs are typically the main driver of rate variability for utilities; consequently, the assumptions used to calculate borrowing costs can have a significant impact on projected rate revenue requirements. In the current plan, the SFPUC has continued the practice of assuming a 6 percent interest rate on revenue bonds for the next ten years. However, various factors could lead to higher interest rates – inflation, general movement in interest rates, exogenous events like conflict with China (a major buyer of U.S. Treasury bonds and therefore a driver of interest rates), a bond credit rating downgrade, federal elimination of the SFPUC’s ability to issue tax-exempt bonds, headline risks and other factors that cause investors to avoid buyer SFPUC bonds, and drastic changes to the national economic climate are all potential risks. While it is not possible to accurately forecast the precise effect these events would have on the agency’s access to credit markets, we performed a scenario for each Enterprise with an 8 percent interest rate on bonds issued during the 10-year planning period. Using these higher interest rate assumptions increases our total debt service payments on future debt for each enterprise over the life of the bonds as follows:

- Water Enterprise costs increased by \$1.5 billion
- Wastewater Enterprise costs increased by \$3.6 billion
- Hetch Hetchy Power costs increased by \$727.1 million

These significant potential costs speak to the importance of taking decisive action to protect the agency’s credit ratings and access to low-cost credit.

Water and Wastewater Enterprises

Potential for Drought or Recession to Reduce Water Sales and Wastewater Billing

Given the high reliance on volumetric rates, Water and Wastewater revenues are highly sensitive to shifts in volumetric sales. Conservation during droughts, the Great Recession, and the COVID-19 pandemic are all recent examples of events that reduced water sales volumes and wastewater billable charges. Economic uncertainty and climate change mean that the agency must proactively consider the possibility of large drops in utility usage.

To roughly quantify the impacts, we modelled potential 5% reduction in billed water sales (both retail and wholesale) and wastewater volumes, beginning during the current fiscal year and then continuing during the 10-year planning period. This reduction from our baseline assumption resulted in a projected revenue reduction over the 10-year planning period of \$224.6 million in Wastewater Enterprise and \$156.5 million in Water Enterprise. In Water Enterprise, wholesale water rates automatically adjust each fiscal year to account for volume changes and over- or under-collection from the prior year, leading to minimal long-term impact on total revenues. As a result, the revenue reductions are primarily from retail sales. These decreases could be mitigated by automatic measures such as drought surcharges, or through rate action to increase rates. However, short-term revenue loss might cause dips to financial metrics. This

underscores the need to set rates sufficiently high to provide buffer on financial metrics above policy minimums in case of unexpected volume drops.

Power Enterprise

Power Supply Expenditures

The power supply market, and particularly natural gas prices, has seen significant volatility in the last few years due to various external factors, including the war in Ukraine, weather patterns, and supply chain impacts. For both Hetch Hetchy and CleanPowerSF, this uncertainty is a major challenge to financial planning. Supply shortages in the market has also driven up costs for resource adequacy capacity and renewable attributes to record heights.

As discussed above in the *Power Supply & Delivery Contingency* section, Power's Risk Management team models scenarios where power purchases occur at a higher marginal rate than projected and our sales occur at a lower marginal rate. Probabilistic analyses of forecast variance over time are conducted to evaluate dollar amount of these risks – so, for example, modelling the change in prices and forecasts from before to after the Ukraine-Russia war to develop a gauge of how future geopolitical conflict might impact market prices. This risk is then mitigated by establishing a contingency line item in our power purchase projections, which is budgeted and then assumed for planning purposes to be fully spent each year. Any unused contingency then goes to fund balance and is later used to offset future costs or proceed with lower future rates. While it is always possible for market prices to be even higher than accounted for in the contingency, this conservative methodology baked in pessimistic assumptions, with the goal of exceeding projections.

Hetch Hetchy Power

Sensitivity to Decreased Volume Growth

As City Departments and retail customers increase electrification of buildings and assets, Hetch Hetchy Power's sales are projected to increase. However, economic uncertainty and budget pressure on the General Fund mean that there is a risk that many of these projects may not be completed on schedule. This 10-Year Plan accounts for this risk by incorporating some conservatism in projected projects, as described above in the *Account Growth Assumptions* section. These adjustments reduced total project size and added delays to project schedules, both of which lower projected power sales. This additional conservatism results in a slightly higher rate projection for retail ratepayers over the 10-year plan. However, SFPUC is currently adopting power rates one year at a time. If projects exceed these conservative assumptions, this would result in higher revenues and future rates could be lower than indicated in this report.

The team ran several scenarios to quantify the financial impact of project delays. Because Hetch Hetchy Power must procure energy to serve customers during months when demands exceed Hetch Hetchy's generation, it has a much more variable cost structure than the other Enterprises. As a result, while lower sales volumes result in lower revenues, they also come with associated cost savings, since the agency does not need to purchase as much power. These complex dynamics mean that the exact timing and composition of forecast delays have substantially different bottom-line financial impacts; while each is

possible to model individually, Finance and Power Enterprise staff plan to continue working to develop more dynamic models that account for all the changes that come from reduced power demands.

Appendices

Appendix A: Water Enterprise 10-Year Financial Plan

	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Beginning Fund Balance (\$M)	\$ 203.8	\$ 154.2	\$ 119.3	\$ 123.0	\$ 128.3	\$ 135.3	\$ 138.8	\$ 138.4	\$ 144.6	\$ 182.4	\$ 215.1
Sources (\$M)											
Retail Water Sales	341.2	360.7	383.4	409.3	441.5	476.3	509.5	542.6	578.7	600.1	619.3
Wholesale Water Sales	357.9	376.9	397.6	412.7	430.6	463.2	478.1	487.7	489.3	491.5	493.5
Other Miscellaneous Income	65.7	60.9	58.8	58.8	61.1	61.3	61.7	61.9	62.0	62.6	63.1
Total Sources	\$ 764.7	\$ 798.5	\$ 839.8	\$ 880.8	\$ 933.2	\$ 1,000.8	\$ 1,049.2	\$ 1,092.1	\$ 1,129.9	\$ 1,154.2	\$ 1,175.9
Uses (\$M)											
Operations & Maintenance	315.8	308.3	316.8	326.9	337.4	348.3	359.6	371.0	382.8	395.0	407.6
Hetchy Transfer	49.2	54.1	54.1	55.6	57.4	59.2	61.1	63.0	65.1	67.3	69.7
Debt Service	340.4	366.9	373.3	382.6	424.8	478.5	475.7	503.4	545.1	545.2	564.3
Revenue-Funded Projects	108.9	104.1	91.8	110.4	106.5	111.3	153.3	148.5	99.0	114.0	93.5
Total Uses	\$ 814.3	\$ 833.5	\$ 836.0	\$ 875.5	\$ 926.2	\$ 997.4	\$ 1,049.6	\$ 1,086.0	\$ 1,092.1	\$ 1,121.6	\$ 1,135.0
Net Revenues (\$M)	\$ (49.6)	\$ (35.0)	\$ 3.8	\$ 5.3	\$ 7.0	\$ 3.5	\$ (0.4)	\$ 6.2	\$ 37.9	\$ 32.6	\$ 40.8
Ending Fund Balance (\$M)	\$ 154.2	\$ 119.3	\$ 123.0	\$ 128.3	\$ 135.3	\$ 138.8	\$ 138.4	\$ 144.6	\$ 182.4	\$ 215.1	\$ 255.9
Rate Increase - Retail	5.0%	5.0%	7.0%	7.0%	8.0%	8.0%	7.0%	6.5%	6.5%	3.5%	3.0%
Rate Increase - Wholesale	8.8%	1.9%	1.7%	3.2%	3.8%	7.0%	2.7%	1.6%	0.0%	0.0%	0.0%
Fund Balance as % of Op. Expenses	42.3%	32.9%	33.2%	33.6%	34.3%	34.1%	32.9%	33.3%	40.7%	46.5%	53.6%
Debt Service Coverage (Current)	1.19	1.21	1.28	1.32	1.28	1.25	1.34	1.32	1.26	1.28	1.25
Debt Service Coverage (Indenture)	1.67	1.55	1.62	1.68	1.62	1.55	1.64	1.62	1.61	1.68	1.71
Revenue-Funded % of Capital	37.2%										
Single-Family Monthly Water/Sewer Bill	\$ 154	\$ 169	\$ 189	\$ 212	\$ 237	\$ 265	\$ 289	\$ 308	\$ 325	\$ 339	\$ 354
Avg. Monthly Bill as % of 40th Percentile	1.7%	1.8%	1.9%	2.0%	2.1%	2.3%	2.4%	2.5%	2.6%	2.6%	2.7%
Avg. Monthly Bill as % of 20th Percentile	4.1%	4.3%	4.6%	4.9%	5.2%	5.5%	5.7%	6.0%	6.3%	6.4%	6.5%
Disc. Monthly Bill as % of 20th Percentile	2.4%	2.6%	2.7%	2.9%	3.1%	3.3%	3.4%	3.6%	3.8%	3.8%	3.9%

Appendix B: Wastewater Enterprise 10-Year Financial Plan

	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Beginning Fund Balance (\$M)	\$ 176.9	\$ 147.4	\$ 109.1	\$ 107.9	\$ 107.8	\$ 112.4	\$ 134.1	\$ 128.1	\$ 135.7	\$ 143.7	\$ 134.3
Sources (\$M)											
Sewer Charges	416.2	460.7	533.0	613.0	699.4	787.4	870.7	927.8	975.8	1,026.7	1,079.9
Other Miscellaneous Income	26.6	23.8	23.8	24.0	24.8	25.5	26.8	27.5	28.3	29.2	29.9
Federal Bond Interest Subsidy	3.2	3.1	3.0	2.8	2.7	2.5	2.3	2.2	2.0	1.8	1.6
Total Sources	\$ 446.0	\$ 487.7	\$ 559.8	\$ 639.8	\$ 726.8	\$ 815.5	\$ 899.8	\$ 957.5	\$ 1,006.0	\$ 1,057.6	\$ 1,111.3
Uses (\$M)											
Operations & Maintenance	242.7	240.5	247.6	255.2	263.2	271.5	279.9	288.6	297.6	306.9	316.5
Debt Service	117.8	146.0	245.1	309.6	368.8	420.6	497.0	506.0	497.6	549.5	626.1
Revenue-Funded Capital Projects	115.1	139.4	68.4	75.1	90.2	101.8	128.9	155.2	202.9	210.5	168.6
Total Uses	\$ 475.5	\$ 525.9	\$ 561.1	\$ 639.9	\$ 722.2	\$ 793.9	\$ 905.8	\$ 949.8	\$ 998.1	\$ 1,067.0	\$ 1,111.3
Net Revenues (\$M)	\$ (29.5)	\$ (38.3)	\$ (1.3)	\$ (0.1)	\$ 4.6	\$ 21.6	\$ (6.0)	\$ 7.7	\$ 8.0	\$ (9.4)	\$ 0.1
Ending Fund Balance (\$M)	\$ 147.4	\$ 109.1	\$ 107.9	\$ 107.8	\$ 112.4	\$ 134.1	\$ 128.1	\$ 135.7	\$ 143.7	\$ 134.3	\$ 134.4
Retail Rate Increase	9.0%	9.0%	15.0%	15.0%	14.0%	12.5%	10.5%	6.5%	5.0%	5.0%	5.0%
Fund Balance as % of Op. Expenses	61%	45%	44%	42%	43%	49%	46%	47%	48%	44%	42%
Debt Service Coverage (Current)	1.77	1.71	1.28	1.25	1.26	1.30	1.25	1.33	1.43	1.37	1.27
Debt Service Coverage (Indenture)	3.05	2.48	1.73	1.60	1.57	1.62	1.51	1.60	1.72	1.61	1.49
Revenue-Funded % of Capital	22.8%										
Single-Family Monthly Water/Sewer Bill	\$ 154	\$ 169	\$ 189	\$ 212	\$ 237	\$ 265	\$ 289	\$ 308	\$ 325	\$ 339	\$ 354
Avg. Monthly Bill as % of 40th Percentile	1.7%	1.8%	1.9%	2.0%	2.1%	2.3%	2.4%	2.5%	2.6%	2.6%	2.7%
Avg. Monthly Bill as % of 20th Percentile	4.1%	4.3%	4.6%	4.9%	5.2%	5.5%	5.7%	6.0%	6.3%	6.4%	6.5%
Disc. Monthly Bill as % of 20th Percentile	2.4%	2.6%	2.7%	2.9%	3.1%	3.3%	3.4%	3.6%	3.8%	3.8%	3.9%

Appendix C: Hetch Hetchy Water and Power Enterprise 10-Year Financial Plan

(\$M)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Beginning Fund Balance	\$ 221.7	\$ 161.1	\$ 137.2	\$ 122.6	\$ 112.5	\$ 132.2	\$ 140.2	\$ 149.1	\$ 155.5	\$ 159.8	\$ 151.9
Sources											
Retail Power Sales	202.2	234.1	272.1	313.9	369.2	409.3	457.8	500.0	539.6	574.4	707.5
Wholesale Power Sales	24.4	28.1	27.7	26.5	23.8	24.4	24.2	24.2	25.3	25.5	24.5
Gas & Steam Sales	23.7	22.8	26.3	28.2	29.6	30.8	31.7	32.7	33.6	34.6	35.7
Water Sales	2.5	2.7	2.9	3.1	3.2	3.4	3.6	3.7	3.8	4.0	4.1
Hetchy Transfer	49.2	54.1	54.1	55.6	57.4	59.2	61.1	63.0	65.1	67.3	69.7
Other Miscellaneous Income	18.9	20.4	13.0	22.7	15.8	39.8	48.3	72.7	17.3	31.3	20.9
Total Sources	\$ 320.9	\$ 362.3	\$ 396.0	\$ 449.9	\$ 499.1	\$ 566.9	\$ 626.6	\$ 696.3	\$ 684.8	\$ 737.1	\$ 862.3
Uses											
Power Supply & Delivery Charges	138.3	149.6	156.7	171.8	188.0	200.8	220.1	240.5	263.1	279.8	351.2
Other Operations & Maintenance	210.6	179.7	182.0	186.9	195.0	201.4	208.0	214.9	222.0	229.4	237.1
Debt Service	10.5	13.6	17.7	32.5	54.0	53.9	67.4	86.7	86.7	100.4	119.7
Revenue-Funded Capital Projects	22.1	43.3	54.2	68.7	42.7	102.7	122.3	147.8	108.7	135.5	72.6
Total Uses	\$ 381.5	\$ 386.2	\$ 410.6	\$ 460.0	\$ 479.5	\$ 558.8	\$ 617.8	\$ 689.9	\$ 680.5	\$ 745.1	\$ 780.6
Net Revenues	\$ (60.6)	\$ (23.9)	\$ (14.6)	\$ (10.1)	\$ 19.6	\$ 8.1	\$ 8.8	\$ 6.4	\$ 4.3	\$ (8.0)	\$ 81.7
Ending Fund Balance	\$ 161.1	\$ 137.2	\$ 122.6	\$ 112.5	\$ 132.2	\$ 140.2	\$ 149.1	\$ 155.5	\$ 159.8	\$ 151.9	\$ 233.5
Retail Rate Change	12.0%	10.0%	9.5%	9.5%	8.0%	5.0%	5.0%	4.5%	4.0%	4.0%	5.0%
Fund Balance as % of Power Op. Expenses	59%	51%	44%	38%	41%	41%	41%	40%	39%	35%	46%
Debt Service Coverage (Current)	(0.96)	1.90	3.00	2.36	2.01	2.48	2.37	2.05	2.22	2.06	2.20
Debt Service Coverage (Indenture)	15.89	12.89	10.45	5.91	4.48	5.10	4.59	3.85	4.07	3.57	4.15
Revenue-Funded % of Capital	33.2%										
Single Family Res. Monthly Bill	\$ 111	\$ 122	\$ 133	\$ 146	\$ 158	\$ 165	\$ 174	\$ 181	\$ 189	\$ 196	\$ 206
Avg. Monthly Bill as % of 40th Percentile	1.3%	1.4%	1.4%	1.5%	1.6%	1.6%	1.7%	1.7%	1.7%	1.7%	1.8%
Avg. Monthly Bill as % of 20th Percentile	3.1%	3.3%	3.5%	3.7%	3.9%	4.0%	4.0%	4.1%	4.1%	4.2%	4.3%
Disc. Monthly Bill as % of 20th Percentile	1.8%	2.0%	2.1%	2.2%	2.3%	2.4%	2.4%	2.5%	2.5%	2.5%	2.6%

Appendix D: CleanPowerSF 10-Year Financial Plan

(\$M)	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034	FYE 2035
Beginning Fund Balance	\$ 90.1	\$ 87.3	\$ 127.5	\$ 164.3	\$ 204.0	\$ 241.8	\$ 276.1	\$ 279.9	\$ 265.4	\$ 264.1	\$ 245.8
Sources											
Power Sales	411.3	428.1	432.0	436.3	439.8	452.6	465.8	474.0	480.9	491.4	501.4
Wholesale Sales	19.2	11.9	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Miscellaneous Income	4.6	4.0	4.2	5.0	5.7	6.1	6.6	6.7	6.3	6.4	6.1
Total Sources	\$ 435.1	\$ 444.0	\$ 441.5	\$ 441.3	\$ 445.5	\$ 458.7	\$ 472.5	\$ 480.7	\$ 487.3	\$ 497.8	\$ 507.5
Uses											
Power Supply & Delivery Charges	399.3	362.2	362.2	357.6	362.1	371.9	405.5	422.5	437.8	463.3	476.5
Other Operations & Maintenance	38.1	41.0	42.2	43.5	44.8	46.2	47.7	49.2	50.7	52.3	53.9
Revenue-Funded Capital Projects	0.6	0.5	0.4	0.5	0.7	6.2	15.5	23.6	0.1	0.5	0.5
Total Uses	\$ 437.9	\$ 403.8	\$ 404.8	\$ 401.6	\$ 407.7	\$ 424.4	\$ 468.7	\$ 495.2	\$ 488.6	\$ 516.1	\$ 530.9
Net Revenues	\$ (2.8)	\$ 40.3	\$ 36.7	\$ 39.7	\$ 37.8	\$ 34.3	\$ 3.8	\$ (14.5)	\$ (1.3)	\$ (18.3)	\$ (23.4)
Ending Fund Balance	\$ 147.4	\$ 187.6	\$ 224.3	\$ 264.0	\$ 301.8	\$ 336.1	\$ 339.9	\$ 325.5	\$ 324.2	\$ 305.9	\$ 282.5
Retail Generation Rate Change	8.5%	3.0%	0.0%	0.0%	0.0%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%
Days Cash On Hand (Excludes Contingency)	132	186	224	266	299	324	303	279	268	240	215
Fund Balance as % of Operating Expenses (Excludes Contingency)	36%	51%	61%	73%	82%	89%	83%	76%	73%	66%	59%
Single Family Res. Monthly Bill	\$ 107	\$ 103	\$ 110	\$ 113	\$ 115	\$ 118	\$ 122	\$ 125	\$ 128	\$ 131	\$ 134
Avg. Monthly Bill as % of 40th Percentile	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Avg. Monthly Bill as % of 20th Percentile	2.8%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%	2.6%	2.6%	2.6%	2.6%