SFPUC 10-Year Financial Plan
FYE 2020 - FYE 2029

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

March 12, 2019

SFPUC Finance

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Introduction

The San Francisco Public Utilities Commission ("SFPUC") prepares an annual 10-Year Financial Plan Update ("Plan") as required by the City and County of San Francisco Charter Section 8B.123. The Plan provides a long-range view of the resulting utility rates required of each enterprise. Additionally, the Plan is a summary of projected revenues, expenditures, fund balances, and financial ratios for each SFPUC enterprise over a rolling 10-year period. These long-term projections are updated annually, subject to change and provide an important snapshot of each enterprise's financial health. The Plan projections are based on key assumptions reflecting current Board of Supervisors and Commission policies, goals, and objectives.

A key objective of the Plan is to promote SFPUC's Strategic Plan goal of Financial Sustainability by estimating future revenue requirements and financial ratios while providing a view of resulting rates. These key financial indicators inform long-term planning decisions, such as the biennial operating and capital budgets, the 10-Year Capital Plan, and capital financing strategies.

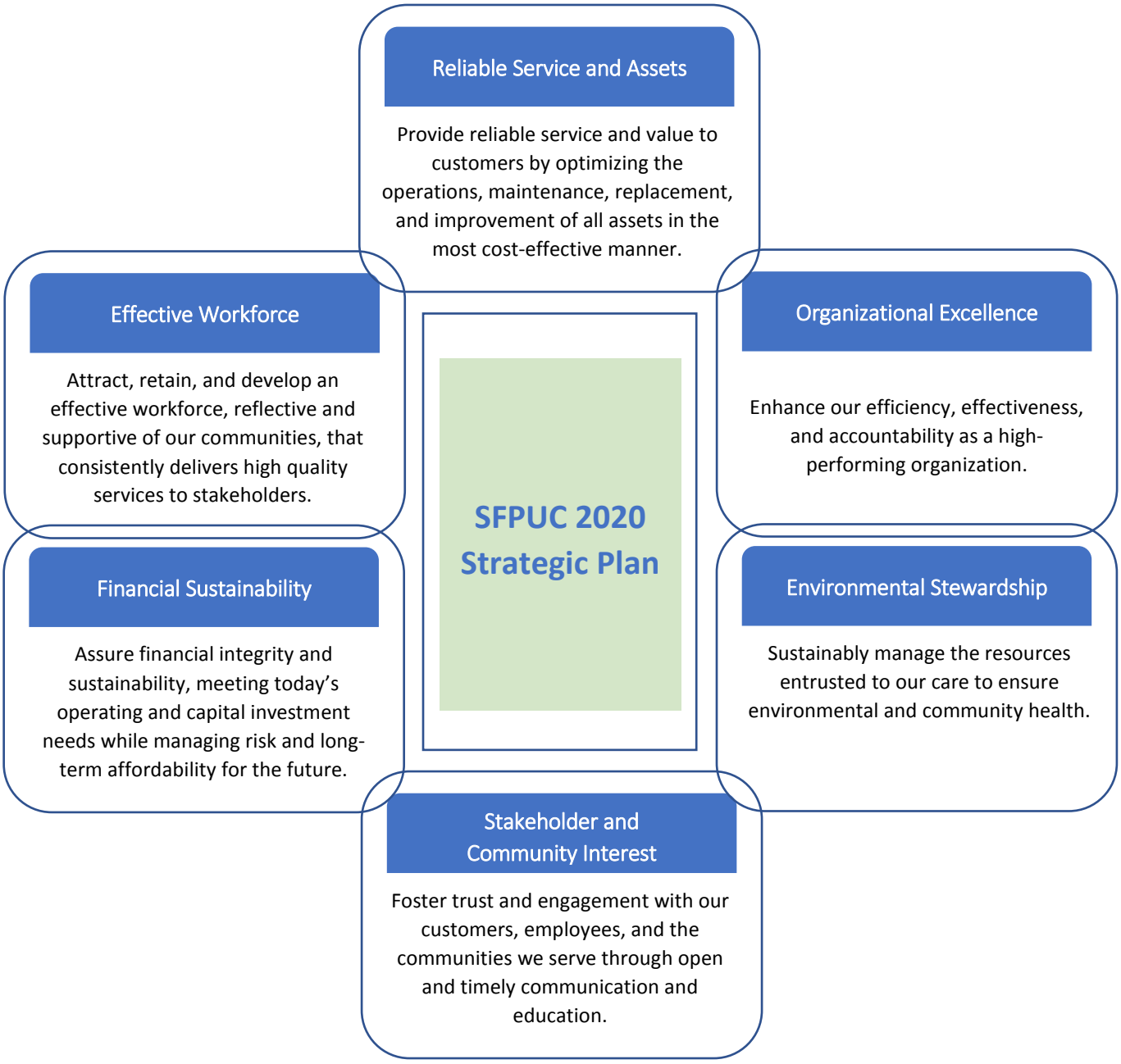
Key Terms

Revenue requirements: *an estimated amount of net additional revenue required to cover operating, capital, and reserve expenses in a given year, after assuming existing revenues*

Financial ratios*: metrics that assess whether an enterprise has sufficient resources to meet debt service coverage and fund balance reserve requirements*

Mission and Strategic Goals

SFPUC's mission is to provide customers with high-quality, efficient, and reliable water, power, and, wastewater services in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care. To ensure the agency has adequate resources to achieve this mission, each enterprise's operating and capital budget is developed with long-term strategic goals and objectives detailed in SFPUC's 2020 Strategic Plan:


Reliable Service and Assets
Provide reliable service and value to customers by optimizing the operations, maintenance, replacement, and improvement of all assets in the most cost-effective manner.
Effective Workforce
Attract, retain, and develop an effective workforce, reflective and supportive of our communities, that consistently delivers high quality services to stakeholders.
Organizational Excellence
Enhance our efficiency, effectiveness, and accountability as a high-performing organization.
SFPUC 2020 Strategic Plan
Financial Sustainability
Assure financial integrity and sustainability, meeting today's operating and capital investment needs while managing risk and long-term affordability for the future.
Environmental Stewardship
Sustainably manage the resources entrusted to our care to ensure environmental and community health.
Stakeholder and Community Interest
Foster trust and engagement with our customers, employees, and the communities we serve through open and timely communication and education.

Financial Management Policies

Background

The 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 Water and Power and CleanPowerSF. Each enterprise is operated and managed as a separate financial entity and sets rates sufficient to cover the costs of services provided.

The Commission has adopted various policies that set requirements and parameters guiding SFPUC financial activities. 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 rate changes.

In 2017, a comprehensive study was undertaken to evaluate, strengthen, and clarify SFPUC's Financial Policies. Financial Policies are particularly important for long-term planning related to capital financing and risk management.

SFPUC Key Financial Policies

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

Capital Financing Policies

Debt Service Coverage Policy

Adopted by the Commission in March 2017, the Debt Service Coverage Policy requires the SFPUC to maintain higher debt service coverage ratios than those required to meet a bond's minimum indenture requirements. Debt service coverage ratios measure annual net revenues 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 over. 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 1.25 x annual debt service and; 2) Current Coverage, which includes only current year annual revenues, must equal a minimum of 1.00 x annual debt service.

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 1.35 x annual debt service** and **Current Coverage shall equal a minimum of 1.10 x annual debt service**.

Capital Financing Policy

Adopted by the Commission in March 2017, the Capital Financing Policy requires that a minimum ranging between **15% to 30% of each enterprise's capital budget be revenue-funded** (or "pay-as-you-

go" funded) over the 10-year planning period. Unlike debt financing, use of revenue minimizes financial costs and does not impose significant debt burdens on future ratepayers. Therefore, using revenue funding for recurring infrastructure repair and replacement projects is a prudent and sustainable approach to funding ongoing capital investments. The appropriate mix of revenue versus debt financing varies based on the capital investment lifecycle of each enterprise.

Risk Management Policies

Fund Balance Reserve Policy

Adopted by the Commission in February 2017, the Fund Balance Reserve Policy requires that each enterprise Fund Balance Reserve maintain a **minimum amount of 90 days or 25% of annual Operations and Maintenance Expenses** (including programmatic projects, excluding debt service and revenue-funded capital) over the 10-year planning period.

The SFPUC faces several risks to revenue stability, including multi-year rate packages, weather variability, drought, and highly 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.

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 reinforces 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.

Capital Improvement Plan

Each enterprise has a 10-Year Capital Improvement Plan (CIP) that forecasts multi-billion-dollar capital investments over the next 10 years. Capital investments are essential to providing safe and reliable drinking water, protecting public health and the environment, and delivering clean energy for municipal services. These investments make the overall utility system more reliable and resilient in the face of earthquakes, sea-level rise, droughts, and other unexpected changes.

Capital expenditures are a significant portion the SFPUC budget. For the FY 2018-19 and FY 2019-20 biennial budget, annual debt service on average accounts for 27% of the total budget, while revenue-funded capital on average accounts for 15% of the budget.

Every year, the CIPs are updated to reflect the capital priorities of each enterprise over the next 10-year horizon. Every other year, a biennial budget is adopted, which includes the adoption and appropriation of two years of funding for the CIP. Capital programs are intended to support capital investments for defined Level of Service goals in each enterprise. For example, an essential outcome of capital

investment is the implementation of local hire, job training, and job creation programs to benefit local communities. The following is a description of the SFPUC's major capital improvement programs.

Water Enterprise Capital Improvement Program

The largest component of the Water Enterprise's long-term CIP is the Water System Improvement Program (WSIP), a 20-year, $4.8 billion capital investment to upgrade local and regional water systems. These upgrades will enhance the SFPUC's ability to provide reliable, affordable, high-quality drinking water to its customers. One of the largest infrastructure programs in the nation, WSIP consists of 87 projects - 35 local projects in San Francisco and 52 regional projects. The program is funded by a bond measure approved by San Francisco voters in November 2002 and will be paid for by both retail customers and wholesale customers. WSIP is scheduled to be completed in December 2021.

Included in the current version of the Water Enterprise 10-Year Capital Improvement Plan is $1.6 billion in total spending. Of this total capital spending, 42% (or $662 million) is revenue-funded, while 54% (or $865 million) is debt-financed.

Wastewater Enterprise Capital Improvement Program

The largest component of the Wastewater Enterprise's long-term CIP is the Sewer System Improvement Program (SSIP), a 20-year, $7.3 billion capital investment to upgrade SFPUC's aging sewer system to ensure continued protection of public health and the environment. SSIP will improve operational efficiency and reliability, enhance seismic resilience, and prepare SFPUC for challenges related to climate change. Much of the wastewater infrastructure has surpassed its useful life and needs to be improved. Making these improvements now will save us more money in the long-run and ensure our sewer system continues to operate without interruption. Phase 1 of SSIP is investing $2.9 billion across 70 projects to improve our collection system, treatment facilities, and stormwater management.

Included in the current version of the Wastewater Enterprise 10-Year Capital Improvement Plan is $5.3 billion in total spending. Of this total capital spending, 24% (or $1.3 billion) is revenue-funded, while 75% (or $3.96 billion) is debt-financed.

Hetch Hetchy Water and Power Capital Improvement Program

The Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") is responsible for providing reliable, high quality water and electric energy to the City and other customers. Hetchy Water operates, maintains, and improves water and power facilities, smaller dams and reservoirs, water transmission systems, power generation facilities, and power transmission assets. Hetchy Power consists of hydroelectric generation, onsite solar at SFPUC and other City facilities, generation using bio-methane produced at SFPUC wastewater treatment facilities, and third-party purchases.

The $1.2 billion Hetchy Enterprise CIP represents a growing investment over ten years with greater amount of funds allocated to the Power infrastructure. The plan includes increased funding for in-city power projects such as the Bay Corridor Transmission Project, as well as projects providing for the design and construction of transmission and distribution facilities to serve new retail power customers. The Hetchy Water plan funds additional enhancements to the Water System including the new San Joaquin Pipeline Valve and Safety Improvement and Priest-Moccasin Water Transmission Line Projects.

The Hetchy Enterprise's CIP is divided into two sections based on operations:

1. The Power Enterprise Capital Program undertakes projects both within the City of San Francisco as well as upcountry and is financed by Power revenues, Cap and Trade Carbon auction revenues, and Power revenue bonds. The Power program includes the renewable generation and energy efficiency projects critical to attain greenhouse gas reductions and begin climate change mitigation. Also, there are transmission and distribution projects consistent with the City's goal of establishing the SFPUC role as the electric service provider to City facilities and development projects.

2. The Hetchy Water Capital Program is financed by Water revenue bonds, Power revenue bonds and Power revenues. The Hetchy Water Renewal and Replacement budget includes Water Infrastructure, Power Infrastructure, and joint Water (45%) and Power (55%) projects that are located upcountry and managed by Hetchy Water.

Included in the current version of the Hetchy Enterprise CIP is $867.5 million in total spending for the Hetchy Water Capital Program and $360 million for the Power Enterprise Capital Program. Of the Hetchy Enterprise's overall capital spending in both sections, $156 million is funded by Power revenues, $526 million in financed by Water revenue bonds, and $536 million is financed by Power revenue bonds.

Forecasting Assumptions

The 10-Year Financial Plan projections are based on key assumptions that reflect current Board of Supervisors and Commission policies, goals, and objectives. In general, SFPUC ensures that the Plan conforms with Commission-approved policies and that it incorporates current Operating Budgets, Capital Budgets, and CIP updates. Other critical forecasting assumptions can be divided into the Sources side of the Plans which are primarily revenues from utility sales, and the Uses side of the Plans which are expenditures. The Uses side of the Plans are primarily comprised of operations and maintenance expenditures and capital related expenditures which are further subdivided debt service and revenue funded capital expenses.

Sources of Funds

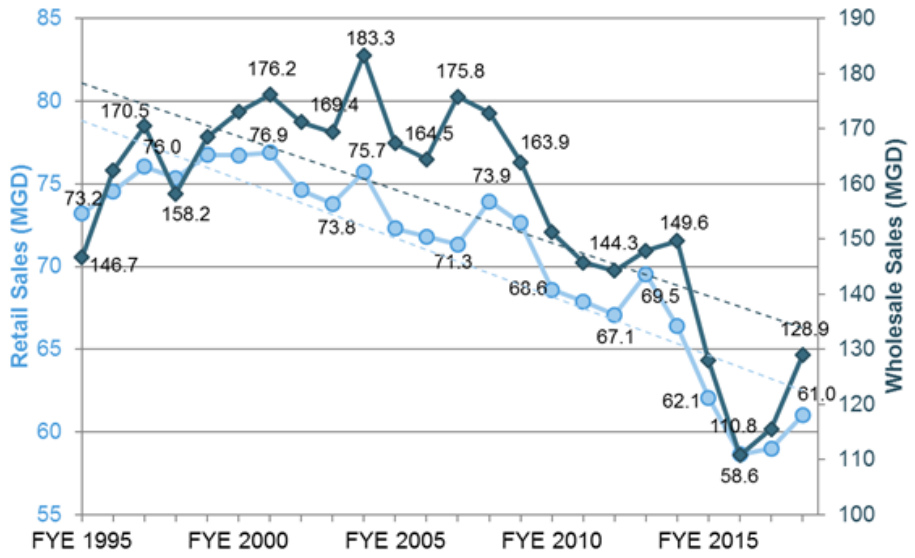
Water and Wastewater Sales Projections

The Water Enterprise and Wastewater Enterprise revenue projections are primarily driven by water and wastewater sales projections. These sales projections are dependent upon forecasted volumes of water and wastewater delivered to SFPUC customers over the 10-year planning period and the adopted and projected rates applied to those volumes. The SFPUC projects water and wastewater volumes by making informed assumptions based on historic consumption data and independent research. Water and wastewater retail rates have been approved by the Commission in four-year intervals since 2014.

Slight Decrease in Volumetric Projections

The 10-Year Financial Plan assumes a 0.5% average annual decrease in water and wastewater volumes. This slight decrease in projected volumes reflects a change in approach to water and wastewater demand projections from prior Plans. Previously, the SFPUC has forecasted flat water and wastewater volumes for planning purposes. The new, slight downward trend forecast is based on historic water sales data that reflects a downward trend in actual water volumes over the past 23 years (see Graph A). Various external events have materially contributed to declining water volumes including the Great Recession and subsequent slow economic recovery, changing plumbing codes, and water conservation patterns continuing from the recent drought.

Graph A: Historic Sales Data Reflects Downward Trend in Water Volumes



Graph A. Historic water sales data reveals that actual SFPUC total water volumes have declined on average 0.5% annually from FYE 1995 to FYE 2018. Over that same period, retail volumes have decreased on average 0.7% annually, while wholesale volumes have decreased on average 0.4%.

Since SFPUC assumes wastewater volumes to be a fixed percentage of water volumes (i.e. "flow factor"), a downward trend in water volumes suggests a comparable downward trend in wastewater volumes. The Plan's base case model incorporates these considerations in an updated 0.5% average annual decrease in water and wastewater sales volumes throughout the 10-year planning period. This 0.5% decrease is also consistent with the recommendations made by independent rate consultants in the 2018 Water and Wastewater Rate Study.

Historical cyclicality of recession and the passage of 10 years since the Great Recession suggest that another economic downturn may be on the horizon. This Plan update will help SFPUC prepare for the possibility of another recession. Included in the sensitivities section of this report is a discussion of downside water and wastewater volumes scenarios under certain conditions.

Annual Rate Increases

Adopted rates for retail customers are applied to volumetric assumptions through FYE 2022. Per City Charter, the SFPUC conducts a retail cost of service study for the Water and Wastewater Enterprise at least every five years. The last cost of service study was completed in 2018 and was the basis for four years of retail water and wastewater rates that were adopted by the Commission for FYE 2019 through FYE 2022. Projected retail water and wastewater rates increases after FYE 2022 are based on the average revenue requirement increases needed, incorporating the 0.5% annual sales volume decreases in the base case Plan, to balance the need to meet future enterprise revenue requirements and slightly exceed minimum financial ratios that support financial sustainability.

Hetch Hetchy Power Sales Projections

The Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") revenue projections are primarily driven by power sales. These sales projections are dependent on forecasted volumetric electric loads and the projected electric rates applied to those loads. Fundamentally, the 10-Year Financial Plan takes a conservative approach to power sales projections by including new loads in the Plan once they are confirmed or contracted.

Power Load Growth Projections

Municipal power load projections are based on biennial budgets and are updated annually. Municipal customers except SFO Airport, representing half of the municipal power load, assumes no electric load growth over the 10-year planning period. Airport load growth is, on average, projected to grow 3% annually over the next 10 years. The Airport's projected load growth is related to construction of a new terminal and associated facilities.

The Plan assumes some new retail power customer loads associated with former PG&E customers that transfer and become Hetch Hetchy Power Customers. These transfer loads are only included in the Plan once the customer enters a control contract with SFPUC. Other than the addition of committed customers over the next few years, future loads associated with these transfer customers are projected flat over the 10-year planning period.

Retail electric load growth is also associated with redevelopment area customer growth in the southeastern portion of San Francisco. This growth includes City-controlled entities and areas managed by the City's former redevelopment agency which are SFPUC power customers. Load forecasts are based on construction schedules of the various projects. Current redevelopment area customers include Hunters Point, Transbay Transit Center, Alice Griffith, Candlestick, Treasure Island/Yerba Buena Island, and Pier 70. Included in the Hetch Hetchy Power retail projected growth for new redevelopment customers are Pier 70: Forest City, Mission Rock, Potrero (HOPE SF), and Sunnydale (HOPE SF).

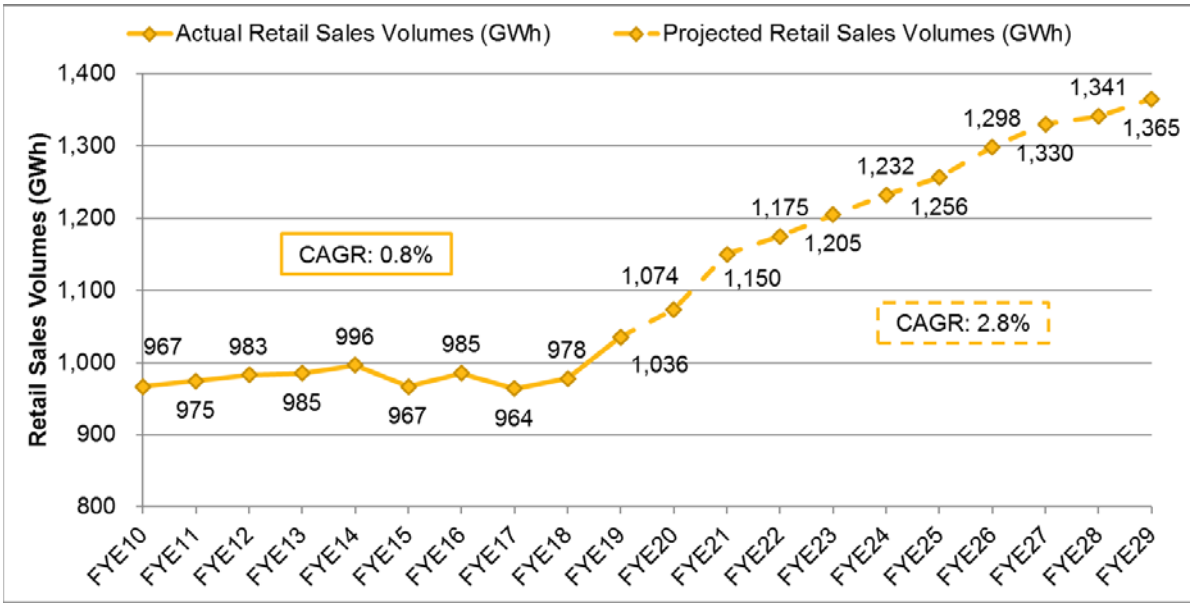
Annual Power Rate Increases

Adopted rates for distinct customer classes are applied to electric load assumptions through FYE 2020. The approved power rates as segmented by customer class include: General Use Municipal Electric (GUSE), enterprise municipal, and retail residential and commercial rates. Per City Charter, the SFPUC conducts a cost of service study for the Power Enterprise at least every five years. The last power cost of service study was completed in 2016 and provided an underlying rationale for Power Enterprise rates. GUSE rates are currently set below the cost of service but are projected to gradually increase and eventually reach the cost of service over time. GUSE rates are adopted for two years in the biennial

budget cycle and have been adopted through FYE 2020. These GUSE rates are assumed to increase by 0.5 cent per kWh each year over the planning period.

Enterprise Rates, which are paid by certain municipal customers, are consistent with comparable PG&E rates. Retail residential and commercial rates are currently set to be 10% below equivalent PG&E rates. Both Enterprise rates and retail rates are assumed to increase 3% annually over the 10-year projection period (see Graph B) because PG&E rates increase, on average, about 3% each year. The assumed rate increase is consistent with the historical actual rate increases observed over a five-year history.

Graph B: Historic and Projected Power Sales Volumes



CleanPowerSF Sales Projections

CleanPowerSF sales projections are a function of projected electric loads and projected rates applied to those loads. The driving factors of CleanPowerSF sales projections are plans for customer growth and the projection for PG&E rates over the planning period.

Projected Sales Growth from Customer Expansion

By July 2019, CleanPowerSF aims to enroll all 360,000 eligible customers citywide. Therefore, the 10-Year Financial Plan assumes 385% compound annual growth rate on CleanPowerSF sales volumes FYE 2020-28 as the program expands. The Plan assumes an 8% opt-out rate in the remaining CleanPowerSF customer enrollment.

Rate Changes

Revenue projections include projected Power Charge Indifference Adjustment (PCIA) increases; however, future PCIA charges are unknown and could increase at a greater rate than modeled. Electric generation rates are projected to remain flat through FYE 2021, and then increase at an annual rate of 3% starting in FYE 2022 through the end of the planning period.

Uses of Funds

Operating and Maintenance Expenditure Assumptions

The 10-Year Financial Plan for all enterprises assumes an annual 3% increase in operating and maintenance expenditures. This assumed annual increase represents a long-term average equal to the average annual rate of inflation, as well as an assumption for increased operation and program spending. Actual consumer price index has averaged a 2.5% change annually since FYE 2010.

Operating and maintenance expenditures are primarily spent on salaries and fringe benefits for operating, administrative, and support personnel at the SFPUC and other City departments. Generally, these labor and fringe benefits make up between 30% and 40% of budgeted expenses. In FYE 2020, labor and fringe benefits were 33.8% of Water Enterprise, 40% of Wastewater Enterprise, 38.1% of Hetchy Enterprise, and 5.5% of CleanPowerSF budgeted expenses respectively. A significant portion of operating and maintenance expenditures for the Hetchy Enterprise and CleanPowerSF are non-personnel services that include funding for purchase of power and related costs. These non-personnel services make up 40.9% of FYE 2020 budgeted expenses for the Hetch Hetchy Enterprise and 83.2% for CleanPowerSF.

Capital Financing Expenditure Assumptions

A variety of capital financing decisions are made each time the SFPUC issues debt to finance capital projects and a number of similar assumptions are incorporated in the planning process to project future debt service. The key assumptions governing new capital financing projections are discussed below.

Debt service expenses in FYE 2020 make up 51.2% of Water Enterprise expenses, 19.6% of Wastewater Enterprise expenses and 2.1% of Hetchy Enterprise expenses. These expenses are projected to grow over the planning period given the increasing cost of capital programs and the increased funding of these programs with long term debt.

Fixed- Interest Rates

Fixed-rate debt is a form of debt wherein the interest rate is fixed throughout the life of the debt. SFPUC assumes its fixed-rate debt to have a 5% interest rate. This assumption is based on the ten-year historical average of a municipal interest rate index, adjusted for a rising interest rate environment.

The SFPUC's fixed-rate debt includes fixed-rate revenue bonds, fixed-rate direct loans, and short-term Bond Anticipation Notes (BANs). Fixed-rate revenue bonds typically have long repayment periods and market-rate interest levels. Fixed-rate direct loans, such as WIFIA and State Revolving Fund loans, provide financing at below-market interest rates and, in some cases, over longer terms. The current plan assumes one lump sum WIFIA loan disbursement in FYE 2025. BANs are small short-term bonds that have fixed market interest rates and are often issued in advance of larger long-term bonds. The current Plan assumes two BANs issuances: one in FYE 2019 with a 2.75% interest rate and another other in FYE 2020 with a 3.09% interest rate. The SFPUC assumes all long-term fixed-rate debt, including WIFIA loans, to be amortized over a 30-year term. While 40-year debt will be considered, 30 years represents a more conservative assumption.

Variable Interest Rates

Variable-rate debt is a form of debt wherein the interest rate changes depending on market conditions throughout the life of the debt.

The SFPUC's variable-rate debt includes variable-rate revenue bonds and Commercial Paper. Variable rate bonds typically have long repayment periods and generally provide financing at lower costs than fixed-rate bonds. 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% of any enterprise's long-term debt be in variable-rate mode. The Wastewater Enterprise is the only Enterprise that has variable rate debt outstanding and it makes up 11.7% of the Enterprise's debt portfolio.

Commercial Paper ("CP") is a form of short-term variable-rate debt that is refunded by revenue bonds. While CP has a maturity of 270 days or less, principal payments on maturing CP are usually funded by issuing a subsequent CP—a process referred to as "rolling" or "remarketing" the CP. Bank credit, typically in the form of a letter of credit or liquidity facility, is 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. There is no limit on how much short-term debt each enterprise can have at any given time. Short-term debt interest rate is currently assumed to be 2.1% and is projected to reflect a 4% historical trend over the next three years.

Issuance Costs and Capitalized Interest

The Issuance costs is projected at 2% of the par amount and annual fees are based upon current fees escalated over the plan period. Issuance costs includes underwriting fees, legal fees, financial advisory fees, credit enhancement fees, and other miscellaneous fees typically associated with a bond financing. This assumption also includes the costs of short-term funding for projects by the Commercial Paper program. The projections assume that interest during project construction is funded out of debt proceeds for a period of 30 months (called "capitalized interest"). The fundamental principal behind capitalized interest is to not pass on capital financing costs to rate payers until the project is completed and placed into service.

Debt Service Reserve

New debt issuances do not include funds for a debt service reserve fund because the strong AA credit quality of the SFPUC provides sufficient market assurances on debt service repayment. The Water, Wastewater, and Power indentures do not require a debt service reserve be funded.

Timing of Debt Issuance

The timing and cadence of debt issuance is typically reflective of the known financing needs of each enterprise over the first two-year period in 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. The balance of authorized and unissued debt that is identified in the 10-Year Capital Plan is modeled in the Plan to be issued in the second and third years after appropriation and in equal 50% tranches.

10-Year Financial Plan

The 10-Year Financial Plan provides a view of resulting enterprise rates and forecasts annual sources and uses of funds over the 10-year planning period. Sources are projected operating revenue streams such

as water, wastewater, 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 (Appendix A) results in an average annual retail rate increase of 6.2% annually over the Plan (Chart A). Adopted retail rate increases through FYE 2022 are on average 8%, while projected annual rate increases decline to 5.4% for subsequent years of the Plan, reflecting slower expenditure growth. Wholesale rates will not increase in FYE 2020 and are not projected to increase until FYE 2023 as we plan to use the wholesale balancing account to keep wholesale rates stable.

Chart A: Adopted and Projected Water Enterprise Rate Increases

	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	Average Annual
Rate Increase - Retail	8.3%	7.8%	7.9%	5.0%	5.0%	5.0%	6.0%	6.0%	5.0%	6.0%	6.2%
Rate Increase - Wholesale	0.0%	0.0%	0.0%	15.1%	8.3%	3.7%	5.8%	6.4%	4.0%	4.8%	4.8%

Based on the 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— 90 days or 25% of operating and maintenance expenses. Over the next 10 years, the Water Enterprise fund balance is projected to range from a high of 71% of operating expenses in FYE 2020 to a low of 28% in FYE 2029. Maintaining higher levels of fund balance reserves provides the Water Enterprise flexibility to fund expenses using reserves instead of annual revenues and explains the negative annual net revenues projected over the next 10 years.

The Water Enterprise's debt service coverage is projected to remain higher than minimum levels required by SFPUC's Debt Service Coverage Policy—1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next 10 years, Indenture Coverage is projected to range from a high of 1.79x in FYE 2020 to a low of 1.41x in FYE 2028. Current Coverage is projected to range from a low of 1.10x in FYE 2021 to a high of 1.24x in FYE 2029. These debt service coverage levels provide additional assurance of financial flexibility and are markers of credit strength.

These higher levels of debt service coverage reflect that even as the need for capital financing increases, the Water Enterprise ensures financial sustainability by maintaining a large share of revenue-funded capital projects. The SFPUC aims to fund annual repair and replacement projects with revenues. The Water Enterprise's revenue-funding is currently higher than minimum levels required by SFPUC's Capital Financing Policies— 15% to 30% of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 38% of the capital budget for the Water Enterprise.

Wastewater Enterprise

The Wastewater Enterprise's financial forecast (Appendix B) results in an average annual rate increase of 9.2% annually over the Plan (Chart B). The Wastewater financial forecast follows many of the trends from the Water Enterprise, including an overall gradual increase in total wastewater charges over the

10-year period, primarily driven by annual rate increases. Adopted rate increases are 7.7% through FYE 2022, with projected annual increases growing to 10% annually and to remain at that high level through FYE 2028. Those rate increases are projected to fund critical components of the SSIP.

Chart B: Adopted and Projected Wastewater Enterprise Rate Increases

	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	Average Annual
Retail Rate Increase	7.0%	8.0%	8.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	9.0%	9.2%

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— 90 days or 25% of operating and maintenance expenses. Throughout the 10-year planning period, the Wastewater Enterprise fund balance is projected to range from a high of 110% of operating expenses in FYE 2020 to a low of 40% in FYE 2029. These fund balance reserve levels are unusually high because the Wastewater Enterprise had lower capital expenditures than projected in recent years as SSIP projects were delayed. The built-up fund balance will be used over time to fund future capital plans. Maintaining high levels of fund balance reserves gives the Wastewater Enterprise flexibility to fund expenses using reserves increasing rates further and explains the negative annual net revenues projected over the planning period.

The Wastewater Enterprise's debt service coverage is projected to remain significantly higher than minimum levels required by SFPUC's Debt Service Coverage Policy—1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next 10 years, Indenture Coverage is projected to range from a high of 4.64x in FYE 2020 to a low of 1.56x in FYE 2029. Current Coverage is projected to range from a high of 2.24x in FYE 2020 to a low of 1.28x in FYE 2029.

These high levels of debt service coverage reflect that even as capital financing needs increase, the Wastewater Enterprise promotes financial sustainability by maintaining a significant share of its capital project financing with revenues. The Wastewater Enterprise's amount of revenue-funding is currently within the range required by SFPUC's Capital Financing Policies— 15% to 30% of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 25% of the capital budget for the Wastewater Enterprise.

Hetch Hetchy Water and Power Enterprise

The financial forecast for the Hetch Hetchy Water and Power Enterprise ("Hetchy Enterprise") (Appendix C) results in an average annual General Use Municipal Electric rate increase of 5% annually over the Plan (Chart C). The financial forecast projects an overall gradual increase in retail and wholesale water sales over the 10-year period, primarily driven by customer growth and annual rate increases.

Chart C: Adopted and Projected General Use Municipal Electric Rate Increases

	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	Average Annual
General Use Municipal Electric Rate Increase	5.6%	5.9%	5.7%	5.4%	5.1%	4.9%	4.6%	4.4%	4.2%	4.1%	5.0%

The Hetchy Enterprise's fund balance reserve is currently lower than the minimum level required by SFPUC's Fund Balance Reserve Policy— 90 days or 25% of operating and maintenance expenses. For FYE 2020, the Hetchy Enterprise's fund balance reserve is a low of 33% of power operating expenses. However, over the next five years, the Hetchy Enterprise's fund balance reserve is projected to grow

significantly, peaking at a high of 54% in FYE 2025, then plateauing at an approximate average of 52% for the remaining years in the Plan.

The Hetchy Enterprise's debt service coverage is currently higher than minimum levels required by SFPUC's Debt Service Coverage Policy—1.35x annual debt service for Indenture Coverage and 1.10x for Current Coverage. Over the next few years, Indenture Coverage is projected to grow to a peak of 31.53x in FYE 2022. Following FYE 2022, Indenture Coverage is projected to decrease significantly to a low of 4.41x in FYE 2029, still significantly higher than the minimum level required the policy. Over the next 10 years, Current Coverage is projected to drop closer to the minimum required level from a high of 7.88x in FYE 2020 to a low of 1.7x in FYE 2028.

These high levels of debt service coverage reflect that even as the need for capital financing increases, the Hetchy Enterprise encourages financial sustainability by maintaining a share of revenue-funded capital projects. The Hetchy Enterprise's amount of revenue-funding is currently within the range required by SFPUC's Capital Financing Policies— 15% to 30% of the enterprise's capital budget. Over the next 10 years, revenue-funding is projected to be on average 29% of the capital budget for the Hetchy Enterprise. Incorporated into this Plan are the following: WSA Amendments, which shift power to water financing**,** as well as Proposition A power bond financing authority.

CleanPowerSF

The financial forecast for CleanPowerSF (Appendix D) projects a significant increase in power revenues over the 10-year period, primarily driven by customer base expansion in FYE 2019 and FYE 2020. Over the next 10 years, the amount of CleanPowerSF's fund balance reserve will fluctuate significantly but, on average, will remain higher than the minimum level required by SFPUC's Fund Balance Reserve Policy—90 days or 25% of operating and maintenance expenses. The fund balance will drop below the minimum level required by the policy while CleanPowerSF rapidly increases its customer base and operating expenses through FYE 2020. As CleanPowerSF enrollment levels and sales increase, fund balance reserve is expected to rise to a high of 95% by FYE 2029.

Sensitivities

Water and Wastewater Enterprises

This new section of the Plan seeks to model downside financial sensitivities that could potentially happen. These sensitivity scenarios demonstrate the cumulative revenue impact of external factors, such as drought or a recession on enterprise financial sustainability. In order to simplify this analysis we modeled the downside sensitivity of a decline in water sales volumes and wastewater sales volumes greater than the base plan (0.5% average annual decrease), and held all other variables constant. The reality is that during downside sales volume scenarios, like those experienced during the Great Recession and the 2012-2016 Drought, the Enterprises have multiple levers to pull to mitigate the impact of decreased revenues. During recent declining sales volume trends, the SFPUC was able to cut operating costs, lower debt service costs through debt refinancing, delay and cut capital spending plans and use accumulated reserves to mitigate the financial impacts of decreased revenues. Additionally, the SFPUC could raise rates as an additional method to mitigate financial impact, however did not have to raise rates beyond already adopted rate changes during the 2012-2016 Drought.

The downside sensitivity scenario models a 1% average annual decline in sales volumes. The resulting Water Enterprise's water sales loss over the baseline Plan is $96.7 million, or 1% of the baseline Plan's total revenues. Holding all other variables constant results in the Water Enterprise falling below reserve and debt service coverage policy minimums in year 9 and 10 of the Plan. Under the downside sensitivity scenario water rate changes necessary to bring these reserve and debt service coverage minimums on par with the baseline Plan is an average annual rate increase of 6.7% over the 10-Year period. The resulting Wastewater Enterprise sewer charges loss over the baseline Plan is $160.7 million or 3% of the baseline Plan's total revenues. Holding all other variables constant results in the Wastewater Enterprise falling below reserve and debt service coverage policy minimums in years 8 through 10 of the Plan. Under the downside sensitivity scenario wastewater rate changes necessary to bring these reserve and debt service coverage minimums on par with the baseline Plan is an average annual rate increase of 9.5% average annual rate increase over the 10-Year period.

Hetch Hetchy Water and Power Enterprise

The Plan includes differing load growth assumptions for power sales by customer groupings. The sensitivities examined several likely scenarios that would impact electric load growth and power. In order to simplify this analysis, we model three different downside sensitivities and hold all other Plan variables constant. The downside scenarios 2 and 3 are modeled after delays in redevelopment load projections due to slower project completion.

Power Downside Scenario 1

The base case 10-Year Financial Plan holds municipal loads flat through the Plan period from projected FYE 2019 loads. A downside scenario of municipal loads decreasing 0.5% annually over the Plan period would result in revenue loss of $7.8 million or 0.3% of base case 10-Year Financial Plan total revenues. This downside scenario is modeled as we have seen declines in municipal loads given increased energy efficiency programs and retrofits.

Power Downside Scenario 2

The base case 10-Year Financial Plan assumes growth in loads related to redevelopment customers and approved plans for commercial and residential construction in these redevelopment project areas. Downside scenario 2 assumes the base case plan for commercial and residential load growth is delayed by 12 months and would result in revenue loss of $19.5 million or 0.71% of base case 10-Year Financial Plan total revenues.

Power Downside Scenario 3

This third downside scenario is a longer delay in redevelopment loads materializing from the base case 10-Year Financial Plan. Downside scenario 3 assumes the base case plan for commercial and residential load growth is delayed by 24 months and would result in revenue loss of $36.5 million or 1.3% of base case 10-Year Financial Plan total revenues.

Hetch Hetchy Water and Power, Power Enterprise has multiple levers to pull to address the financial impact of these described downside revenue scenarios. The levers that could be utilized to mitigate negative financial impacts include reprioritizing capital expenditures, reducing operating costs where practical and also increasing power rates. General Use Municipal Electric (GUSE) rates are projected to change 5% on average annually over the ten year period. If the GUSE rates were to increase 10% in FYE

2020 on the assumed baseline Plan municipal electric loads (which currently projects a 5.6% GUSE rate increase) the Enterprise could generate an additional $3.1 million.

CleanPowerSF

The CleanPowerSF Plan assumes rates which were adopted by Commission in December of 2018. A potential downside scenario for CleanPowerSF would be if the Power Charge Indifference Adjustment (PCIA) increases beyond current assumptions – the range of such a downside scenario is unknown as the methodology to arrive at this charge is still being discussed at the Public Utilities Commission. Over the planning period, changes to the methodology to calculate the PCIA and the PCIA charge itself could have dramatic impact on the projected reserve position of CleanPowerSF.

Appendices

Appendix A: Water Enterprise 10-Year Financial Forecast

($M)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Fund Balance	**$ 230.2**	**$ 216.9**	**$ 195.7**	**$ 179.4**	**$ 163.7**	**$ 157.2**	**$ 151.1**	**$ 126.4**	**$ 106.5**	**$ 99.2**	**$ 100.5**
Sources											
Retail Water Sales	274.9	296.4	318.2	341.8	357.4	373.7	390.7	412.4	435.3	455.1	480.3
Wholesale Water Sales	258.6	257.4	255.4	254.2	287.5	311.6	321.3	337.6	357.3	371.4	386.2
Other Miscellaneous Income	59.7	59.9	109.8	99.9	60.0	60.2	60.3	60.1	59.9	60.1	60.5
Total Sources	**593.1**	**$ 613.6**	**$ 683.4**	**$ 695.9**	**$ 704.8**	**$ 745.5**	**$ 772.3**	**$ 810.1**	**$ 852.5**	**$ 886.5**	**$ 927.0**
Uses											
Operations & Maintenance	235.6	241.9	247.8	254.2	258.8	266.4	275.7	283.4	291.3	299.4	308.0
Hetchy Transfer	33.6	34.6	36.5	37.5	38.6	39.6	40.7	41.8	43.0	44.2	45.4
Debt Service	283.7	306.3	320.5	331.7	351.1	383.8	401.5	425.6	443.4	456.5	467.0
Revenue-Funded Projects	53.6	53.3	98.6	89.1	64.4	65.2	81.3	82.3	84.3	87.6	107.9
Total Uses	**606.4**	**$ 636.0**	**$ 703.5**	**$ 712.6**	**$ 712.8**	**$ 755.0**	**$ 799.1**	**$ 833.0**	**$ 862.0**	**$ 887.7**	**$ 928.4**
Net Revenues	**(13.3)**	**$ (22.4)**	**$ (20.1)**	**$ (16.8)**	**$ (8.0)**	**$ (9.5)**	**$ (26.8)**	**$ (23.0)**	**$ (9.5)**	**$ (1.1)**	**$ (1.3)**
Ending Fund Balance	**216.9**	**$ 194.5**	**$ 175.6**	**$ 162.6**	**$ 155.7**	**$ 147.7**	**$ 124.3**	**$ 103.4**	**$ 96.9**	**$ 98.1**	**$ 99.2**
Rate Increase - Retail	7.8%	8.3%	7.8%	7.9%	5.0%	5.0%	5.0%	6.0%	6.0%	5.0%	6.0%
Rate Increase - Wholesale	0.0%	0.0%	0.0%	0.0%	15.1%	8.3%	3.7%	5.8%	6.4%	4.0%	4.8%
Fund Balance as % of Op. Expenses	81%	71%	63%	56%	53%	49%	40%	33%	30%	29%	28%
Debt Service Coverage (Current)	1.17	1.15	1.10	1.11	1.17	1.16	1.15	1.15	1.18	1.20	1.24
Debt Service Coverage (Indenture)	2.00	1.79	1.71	1.65	1.64	1.56	1.52	1.44	1.42	1.41	1.45
Revenue-Funded % of Capital	38%										

Appendix B: Wastewater Enterprise 10-Year Financial Forecast

($M)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Fund Balance	**$ 200.1**	**$ 197.3**	**$ 193.0**	**$ 181.5**	**$ 180.2**	**$ 167.2**	**$ 162.1**	**$ 160.7**	**$ 158.5**	**$ 145.0**	**$ 117.8**
Sources											
Sewer Charges	325.1	344.9	370.7	398.3	436.0	477.1	522.2	571.5	625.6	684.8	746.4
Interest Income	1.8	2.0	4.8	4.5	4.5	4.2	4.0	4.1	4.1	3.7	3.1
Federal Bond Interest Subsidy	4.0	4.0	4.0	4.0	4.0	3.8	3.7	3.6	3.4	3.2	3.1
Other Miscellaneous Income	8.1	8.2	8.2	8.3	8.4	8.4	8.5	8.5	8.6	8.6	8.7
Total Sources	**$ 339.1**	**$ 359.2**	**$ 387.8**	**$ 415.1**	**$ 452.8**	**$ 493.6**	**$ 538.4**	**$ 587.7**	**$ 641.7**	**$ 700.4**	**$ 761.3**
Uses											
Operations & Maintenance	167.4	175.6	180.5	185.6	190.9	196.3	201.8	207.5	213.3	219.3	225.6
Debt Service	63.4	70.4	96.4	114.7	153.0	174.5	203.8	241.6	295.6	354.8	401.6
Revenue-Funded Projects	111.0	117.5	122.4	116.1	121.8	127.8	134.1	140.8	146.2	153.5	161.2
Total Uses	**$ 341.8**	**$ 363.5**	**$ 399.3**	**$ 416.5**	**$ 465.8**	**$ 498.7**	**$ 539.8**	**$ 589.9**	**$ 655.1**	**$ 727.6**	**$ 788.3**
Net Revenues	**$ (2.7)**	**$ (4.3)**	**$ (11.5)**	**$ (1.4)**	**$ (13.0)**	**$ (5.1)**	**$ (1.4)**	**$ (2.2)**	**$ (13.5)**	**$ (27.2)**	**$ (27.0)**
Ending Fund Balance	**$ 197.3**	**$ 193.0**	**$ 181.5**	**$ 180.2**	**$ 167.2**	**$ 162.1**	**$ 160.7**	**$ 158.5**	**$ 145.0**	**$ 117.8**	**$ 90.9**
Retail Rate Increase	5.9%	7.0%	8.0%	8.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	9.0%
Fund Balance as % of Op. Expenses	118%	110%	101%	97%	88%	83%	80%	76%	68%	54%	40%
Debt Service Coverage (Current)	2.80	2.24	1.92	1.82	1.53	1.53	1.51	1.46	1.37	1.29	1.28
Debt Service Coverage (Indenture)	6.05	4.64	3.71	3.25	2.58	2.40	2.23	2.08	1.88	1.68	1.56
Revenue-Funded % of Capital	25%										

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

($M)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Fund Balance	**$ 47.5**	**$ 42.5**	**$ 47.9**	**$ 56.4**	**$ 66.1**	**$ 80.0**	**$ 92.6**	**$ 103.5**	**$ 102.1**	**$ 105.6**	**$ 107.4**
Sources											
Power Sales - Municipal General Fund Ra	29.7	31.4	33.9	35.8	37.8	39.7	41.6	43.5	45.5	47.4	49.3
Power Sales - Municipal Enterprise Rates	89.2	88.4	93.0	97.4	103.1	106.9	112.2	119.1	123.1	127.3	132.3
Power Sales - Retail	13.3	19.6	28.3	32.4	36.3	42.4	46.3	52.3	60.5	64.2	70.4
Power Sales - Wholesale	16.9	15.6	14.2	14.4	14.8	14.8	14.8	14.5	14.4	14.6	14.2
Gas & Steam Sales	10.2	10.9	11.2	11.6	11.9	12.3	12.6	13.0	13.4	13.8	14.2
Water Sales	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Hetchy Transfer	33.6	34.6	36.4	37.4	38.5	39.5	40.6	41.7	43.0	44.3	45.6
Other Misc Income	13.2	11.6	11.8	10.1	12.6	13.1	12.8	12.0	12.2	12.5	12.8
Total Sources	**$ 206.3**	**$ 212.4**	**$ 229.0**	**$ 239.5**	**$ 255.1**	**$ 268.9**	**$ 281.1**	**$ 296.4**	**$ 312.3**	**$ 324.3**	**$ 339.2**
Uses											
Operations & Maintenance	162.1	184.3	198.8	208.1	217.2	225.7	234.6	244.5	248.9	258.7	266.3
Debt Service	4.8	4.7	4.2	4.3	8.1	13.4	19.8	28.2	35.0	38.6	41.2
Revenue-Funded Projects	44.4	18.0	17.5	17.5	16.0	17.2	16.0	25.0	25.0	25.0	25.0
Total Uses	**$ 211.3**	**$ 207.0**	**$ 220.5**	**$ 229.8**	**$ 241.2**	**$ 256.3**	**$ 270.3**	**$ 297.8**	**$ 308.9**	**$ 322.4**	**$ 332.6**
Net Revenues	**$ (5.0)**	**$ 5.4**	**$ 8.5**	**$ 9.6**	**$ 13.9**	**$ 12.7**	**$ 10.9**	**$ (1.3)**	**$ 3.4**	**$ 1.9**	**$ 6.6**
Ending Fund Balance	**$ 42.5**	**$ 47.9**	**$ 56.4**	**$ 66.1**	**$ 80.0**	**$ 92.6**	**$ 103.5**	**$ 102.1**	**$ 105.6**	**$ 107.4**	**$ 114.0**
Fund Balance as % of Power Op. Expen	29%	33%	35%	39%	45%	51%	54%	51%	52%	51%	53%
Debt Service Coverage (Current)	16.28	7.88	6.73	7.36	4.47	3.09	2.30	1.84	1.81	1.70	1.77
Debt Service Coverage (Indenture)	37.85	27.29	29.77	31.53	15.53	9.81	7.37	5.70	4.87	4.50	4.41
Revenue-Funded % of Capital	29%										

Appendix D: CleanPowerSF 10-Year Financial Forecast

($M)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Beginning Fund Balance	**$ 19.3**	**$ 35.0**	**$ 46.4**	**$ 60.2**	**$ 77.9**	**$ 94.6**	**$ 113.7**	**$ 133.9**	**$ 155.1**	**$ 177.6**	**$ 201.8**
Sources											
Power Sales	156.5	198.6	201.0	208.1	215.4	223.0	230.8	238.9	247.2	255.8	264.7
Total Sources	**$ 156.5**	**$ 198.6**	**$ 201.0**	**$ 208.1**	**$ 215.4**	**$ 223.0**	**$ 230.8**	**$ 238.9**	**$ 247.2**	**$ 255.8**	**$ 264.7**
Uses											
Supply	122.3	163.1	163.0	165.6	173.4	178.0	184.1	190.5	196.9	203.3	210.0
Operating Costs	18.4	24.0	24.2	24.7	25.3	25.9	26.6	27.3	27.8	28.4	28.9
Debt Service	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Uses	**$ 140.7**	**$ 187.2**	**$ 187.2**	**$ 190.3**	**$ 198.7**	**$ 203.9**	**$ 210.7**	**$ 217.7**	**$ 224.7**	**$ 231.7**	**$ 238.9**
Net Revenues	**$ 15.7**	**$ 11.4**	**$ 13.8**	**$ 17.8**	**$ 16.7**	**$ 19.1**	**$ 20.2**	**$ 21.2**	**$ 22.6**	**$ 24.1**	**$ 25.8**
Ending Fund Balance	**$ 35.0**	**$ 46.4**	**$ 60.2**	**$ 77.9**	**$ 94.6**	**$ 113.7**	**$ 133.9**	**$ 155.1**	**$ 177.6**	**$ 201.8**	**$ 227.5**
Fund Balance as % of Operating Expenses	25%	25%	32%	41%	48%	56%	64%	71%	79%	87%	95%

Assumed Rates

($/kWh)	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029
Retail/Redevelopment Rates											
Residential	0.0689	0.0664	0.0670	0.0690	0.0710	0.0732	0.0754	0.0776	0.0800	0.0824	0.0848
Medium Commercial, Secondary Voltage	0.0758	0.0643	0.0646	0.0665	0.0685	0.0706	0.0727	0.0749	0.0771	0.0794	0.0818
Industrial, Primary Voltage	0.0616	0.0549	0.0551	0.0568	0.0585	0.0603	0.0620	0.0639	0.0658	0.0678	0.0698