

2023 Budget

Sacramento Municipal Utility District



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November 2, 2022 GM 22-155

Board of Directors

Re: 2023 Budget

Dear Board Members:

I am pleased to present SMUD's proposed 2023 Budget. The proposed 2023 Budget Authorization request is **\$2.1 billion.** It provides funding for operations and maintenance (O&M) and capital programs needed to successfully meet the Board's Strategic Directions and deliver on our 2030 Clean Energy Vision, both in the coming year and well into in the future. The Budget reflects an increase of about 20% compared to 2022, driven primarily by investments in infrastructure to maintain our high reliability, serve load growth, and decarbonize our power supply. Investments are planned well in advance and any resulting budget increases are reviewed to ensure that SMUD's rates remain among the lowest in California and significantly better than the Board's Strategic Direction 2 metrics. Staff will present detailed information at the Finance & Audit Committee meetings on November 8 and 9. The Proposed Budget supports three broad priorities: Infrastructure Investment, Zero Carbon Plan and Community Impact.

Executive Summary

Each year, we look holistically at our budget, programs, projects, and initiatives to ensure we continue to deliver value to our customers and community in a way that maximizes benefits to all communities and the 1.5 million people we serve. Being a community-owned, not-for-profit utility means we have a responsibility to be good financial stewards of the money our customers pay us for safe, reliable electric service.

In 2022, we continued to accelerate our work on implementing the 2030 Clean Energy Vision. While 2022 provided many challenges to our business – recovery from the Station A fire, low hydroelectric generation due to drought, increasing commodity costs, thermal plant outage, higher interest rates, global supply chain constraints and a record-breaking heatwave – we remained focused on our long-term goals of showcasing SMUD as the example for others to follow in decarbonizing aggressively, safely, reliably, affordably and equitably, while delivering on the goals the Board sets for us through our Strategic Directions. The budget funds priorities for 2023, in alignment with our Enterprise Strategy, which is a guide for prioritizing and aligning work to achieve our goals and set budget spending.

Staff across the organization have been thoughtful in developing the 2023 Budget to ensure we continue to fund the activities that are critically important to support our



customers and community, while also funding activities that support SMUD's long-term success and leadership position. This includes investments in accelerating our carbon reduction efforts, maintaining and improving our infrastructure, and working to ensure positive community impact through our new Community Impact Plan. We'll continue to work with our low-income customers and support our commitment to embed Diversity, Equity, Inclusion & Belonging (DEIB) in everything we do. By partnering with key community and customer partners, we'll continue to deliver maximum community impact, by ensuring every dollar we spend delivers the most value possible.

Our O&M budget (line c in the following table) is increasing by \$33 million, and our Public Good budget (line b) is increasing by \$12 million. Key initiatives in our 2023 O&M and Public Good budgets include executing our new Community Impact Plan, electric transportation incentives, building electrification programs, and other carbon reducing efforts. As the Board knows, electrification is a critical part of our zero carbon future, and an important part of our strategy to continue to be a leader in the region's transformation to a Clean PowerCity for all our customers. We're continuing to make investments for our low-income customers and in under-resourced communities, so all customers benefit from our carbon reduction efforts. The O&M budget also includes increased funding for vegetation management, wildfire mitigation, cybersecurity, and property and casualty insurance. While staff works diligently to minimize budget impacts from these items, many increases are driven by factors outside of our control, such as supply chain issues, inflation, and rising interest rates.

Our Capital budget (line d) is increasing by \$265 million, as we are making investments to achieve our zero carbon future, while also ensuring reliability. Major capital projects for 2023 include expanding the Solano Wind Farm, ongoing construction for the Country Acres Solar project, completing Station G Substation, and ramping up the new ESS Flow Battery partnership project. The 2023 Budget includes funding for new and continuing technology projects, such as the Advanced Distribution Management System (ADMS) and Outage Management Systems (OMS) and completing Phase 1, and launching Phase 2 of our Talent Technology Transformation (T3) project to manage hiring, onboarding, and talent management processes holistically through a single technology platform.

The 2023 Budget authorizes 2,242 full-time positions, an increase of 32 positions. These increases to our permanent staffing support our business investments. The budget also includes funding for our future workforce pipeline needs with limited-term, student, and part-time positions.

We expect an increase in our customer count and kWh sales of electricity in 2023. Our Commodity budget (line a) is increasing as the various components in our portfolio are changing. The Budget includes assumptions for continued low hydroelectric generation, along with higher power, natural gas and resource adequacy prices and includes funds for a new zero-carbon geothermal energy contract that begins in 2023. We recognize the potential for new growth related to building electrification, electric vehicle adoption and mixed-use commercial/residential sales growth, and have maintained conservative

planning assumptions, so we can act nimbly as business conditions change. To manage potential impacts on our budget and operations, we'll monitor these and other factors throughout the year, including the local economy, construction costs and any supply chain and labor shortages.

The proposed 2023 Budget will allow SMUD to:

- Increase support for our community and engage with the Sacramento region to invest in a clean energy future.
- Maintain a reliable grid today and in the future through strong investments in our infrastructure.
- Focus on alignment of key priorities during economic uncertainty with prudent financial management.
- Execute on SMUD's vision to provide reliable, affordable, and sustainable energy while maximizing community benefits for all.

Budget Breakdown

Here is a brief overview of the proposed 2023 Budget compared to the 2022 Budget:

	2022 (\$M)	2023 (\$M)	Change (\$M)
Commodity (a)	\$440.7	\$485.0	\$44.3
Public Goods excluding subsidies (b)	63.6	75.5	11.9
Other O&M (c)	659.6	692.8	33.2
Subtotal	\$1,163.8	\$1,253.2	\$89.4
Debt Service	212.2	225.5	13.3
Capital (d)	359.9	624.9	265.0
Total Budget Authorization	\$1,735.9	\$2,103.6	\$367.7

Totals may reflect minor rounding differences.

The total Public Good budget includes an additional \$34 million for rate subsidies that are not included in the Budget Authorization because the Board previously approved these as a component of the rate tariff.

Additional Budget Details

The following sections provide details on the major initiatives and programs funded in the 2023 Budget, grouped by the Board's Strategic Directions (SD).

Competitive Rates (SD-2)

While the 2023 Budget reflects the second year of rate increases that the Board adopted in September 2021, our rates continue to be among the very lowest in California. Commodity costs make up a significant portion of our total O&M budget. Staff has locked in prices for much of our expected energy requirements for 2023 to ensure cost and rate stability for customers. A small portion of budgeted energy purchases are exposed to short-term market price fluctuations, which is a prudent and beneficial practice, especially during the price volatility currently seen in California energy markets.

We'll enter 2023 with approximately \$31 million in the Hydro Rate Stabilization Fund (HRSF) and \$3.5 million in the Rate Stabilization Fund (RSF), (this excludes funds in RSF for Low Carbon Fuel Standard (LCFS), Cap and Trade (AB32) and Deferred Revenue). These reserve funds help us absorb higher energy costs when hydroelectric production is lower and serve as a buffer against unexpected financial challenges.

SMUD typically conducts a public rate action every other year. We expect to release our Chief Executive Officer and General Manager's Report and Recommendations on Rates and Services in early 2023, which would begin our next rate action. The rate action will include proposed rate increases for 2024 and 2025. As of June 1, 2022, our system rates are on average 45% lower than Pacific Gas & Electric's average rates, which translates to about \$1.3 billion in annual bill savings for our customers.

We know our customers expect us to keep our rates low while continuing to deliver safe, reliable, and environmentally responsible power and the products and services they value. Across SMUD, we've continued to focus on Operational Excellence to deliver efficiencies and savings across our business, which frees up funds to support our carbon reduction goals and other strategic initiatives. We'll continue this focus in 2023 and beyond.

Access to Credit Markets (SD-3)

We proactively manage our financial position to maintain high credit ratings. High credit ratings improve access to credit markets and result in a lower cost of borrowing. This is especially important as we look to fund our ambitious zero carbon future and capital spending plan.

We target strong financial metrics in cash flow coverage (fixed charge) and liquidity (days cash). For SMUD's annual budget, the Board sets a minimum fixed charge of 1.50 times operating cash flow, however, we plan for a minimum of 1.70 as a standard. This higher performance standard has proven valuable during the last 3 years of economic uncertainty as investors seek high quality investments.

We manage a strong liquidity position by setting a minimum number of days cash on hand and maintain an additional \$300 million commercial paper program and a \$100

million line of credit. This strong liquidity position is important in demonstrating to our customers, investors, and rating agencies that SMUD can withstand various financial stresses. Our current days cash threshold is 150 days — the minimum amount of cash on hand before triggering a new debt or commercial paper issuance to replenish cash balances. The commercial paper and line of credit programs allow for short-term borrowing when needed, similar to a credit card, in lieu of issuing long-term debt. Any unused commercial paper or line of credit further enhances our liquidity position, which is viewed positively by investors and ratings agencies.

Reliability (SD-4)

Delivering reliable electric service to our customers is always a top priority. The 2023 Budget includes funding to ensure our transmission and distribution (T&D) systems have sufficient capacity and load serving capability to safely, reliably, and cost-effectively serve the needs of our customers, while meeting regulatory compliance requirements.

Key reliability investments in the 2023 Budget include:

- **Power Control Center (PCC)** We will launch the design and planning phase of the new PCC to ensure SMUD meets industry compliance standards in availability, readiness, and operating capabilities.
- Substation investments Building a substation is a multi-year effort, and the important work to build Station G substation will be completed in 2023. Station A's load is moving to Station G in late 2022 and final construction at Station G will be complete in early 2023. Additionally, we'll continue our multi-year replacement plan for T&D substation assets, which includes circuit breakers, transformers, and switchgear. Construction for new distribution substations will continue for sites such as the Cordova Hills substation, Meister Lonetree substation, Frienza-Albatross substation, and others to support reliability and load growth. We'll also work on major retrofit projects include completing the Hurley Bus-Tie, which adds redundancy to the Hurley Substation, and replacing the emergency transformer at Requa-Fawn substation.
- Transmission substation work We will start design work for Station H and continue our work on the Sacramento Valley Energy Center/Coyote Creek (SVEC) project. d. The SVEC project is a 250 MW solar and battery storage plant that will be interconnected to SMUD's 230 kV transmission system, including a new 230 kV substation. Additionally, the Elverta substation expansion project will enable over 800 MW of renewable energy to be connected in the northern portion of our service territory and will support achieving our 2030 Zero Carbon Plan. This 4-year project will also improve reliability and redundancy at the Elverta substation.

- Vegetation management & wildfire mitigation In 2023, we plan to trim
 approximately 110,000 trees as part of our routine distribution tree trimming
 efforts. We'll continue to remove vegetation that could grow or fall within unsafe
 distances to the transmission lines and reduce fuels to prevent or minimize the
 potential effects of a wildfire. Our budget includes \$5 million for targeted
 vegetation management risk reduction work in the Upper American River Project.
- Pole and cable replacements In 2023, we plan to replace 1,200 poles and are targeting to replace 240,000 circuit feet of underground cable. The pole replacement program includes replacing poles that have failed a pole inspection and are not candidates for pole reinforcement. For cable replacements, we prioritize addressing the worst performing cable first, which will decrease future outages, repair costs, customer complaints and reduce the number of the worst performing circuits. Customer-driven work (new business) for 2023 is budgeted at 2022 levels. If customer-driven work falls below the 2023 budget, we will increase the number of pole and underground cable replacements accordingly, as this is ongoing work.
- Existing Power Generation facilities As we shift our focus to zero carbon resources, we're committed to protecting the reliable operations of SMUD's existing generation fleet. In 2023, we'll continue several capital improvement projects, compliance activities driven by increased Dam Safety and Gas Pipeline regulations, and important major maintenance tasks, including inspections and overhauls to maintain reliable operations of our existing assets.

Customer Relations (SD-5), Outreach & Communication (SD-15)

2023 will be a year of change for our customers and community, many of whom are still recovering from the impacts of the COVID-19 pandemic, while continuing to feel the effects of inflation and nationwide supply chain shortages. We'll continue to deliver on the needs of our customers, focusing on outreach, education, and awareness to achieve an equitable carbon free future by 2030 that our customers can participate in.

We're working to engage members of our diverse communities to deliver wide-reaching benefits, including expanded workforce development program offerings. Our new Community Impact Plan provides ways to diversify our portfolio of offerings, creating more inclusive economic development opportunities, supporting capacity building for local non-profits, and expanding our community education and outreach efforts to ensure no community is left behind.

Key customer relations, outreach, and communication investments in the 2023 Budget include:

Our **Community Impact Plan** is a multi-year, \$41 million program to meet SMUD's commitment to making meaningful investments in under-resourced communities to ensure their participation in a clean energy future. Through it, we'll focus on:

- Leveraging partnerships to micro-target under-resourced communities.
- Increasing income eligible energy efficiency, electrification, weatherization, solar and electric vehicle (EV) readiness, including small businesses and non-profit organizations.
- Launching our highly targeted Community Ambassador program to meet with customers on a personal level to drive participation in our Clean Energy Vision, with a focus on engaging the hard-to-reach.
- Launching new regional workforce development programs to give participants the skills and tools to find gainful employment in new energy economy careers such as construction, the electrical trades and EV and battery storage maintenance.
- Increasing community education and communication regarding the 2030 Zero Carbon Plan including neighborhood walks, when feasible.

Providing customers **channels and tools** to engage in ways that are intuitive and make sense to them by:

- Upgrading Contact Center technology to enhance future customer interactions by expanding chat features and social media.
- Increasing outbound communications to include billing and payment-related messaging, such as credit card expiration alerts.
- Continuing to enhance outage experiences and communications.
- Continuing education and outreach regarding rate changes for small- and medium-size commercial customers.

Positioning SMUD as the authority on how to decarbonize aggressively, safely, reliably, affordably, and equitably through:

- Launching our next, all-new integrated and multi-language Clean PowerCity campaign to continue building awareness, acceptance, and customer participation - We will focus on demonstrating SMUD's progress toward zero carbon and what customers can do to "Join the Charge" – from free and simple tips to all-in steps such as electric vehicle adoption.
- Providing opportunities through events, conferences and speaking opportunities for customers to "Join the Charge."
- Implementing our youth strategy through direct outreach and digital channels
 including social media to create advocates, brand ambassadors and influencers
 among our region's youth to amplify SMUD's story, and boost engagement and
 participation with tomorrow's customers.

Enhancing our customers' digital experiences by:

- Deepening our marketing efforts in streaming media, including Over-The-Top (OTT) like Hulu and Pandora, and through social media like Instagram and TikTok to reach a wide range of audiences.
- Launching pilots to support customer participation in our Clean Energy Vision, including behavioral load shaping to reduce peak usage and an EV adoption pilot.

Leveraging our existing partnerships and pursuing new opportunities to connect with customers across our service area, including the hard-to-reach to build engagement and participation in our Clean Energy Vision across our community through:

- Continuing to leverage flagship partnerships such as our support for the SMUD Museum of Science & Curiosity, the Sacramento Kings, Sacramento River Cats and Sacramento Republic.
- Deepening outreach to community groups to understand individual community priorities through our Speakers Bureau and Homeowners Association strategy.
- Expanding opportunities for outreach, including increased use of our Speaker's Bureau at external meetings and events.

Our **Sustainable Communities Programs** will continue to support our community in a variety of ways, including:

- Providing Shine Awards totaling \$600,000 to support zero carbon-related projects.
- Visiting classrooms and community events with hands-on, engaging activities that teach students about clean energy and the environment and inspire them to pursue careers in the energy industry.
- Hosting marquee regional Science, Technology, Engineering & Math (STEM) competitions, including SMUD's annual Electricity Fair, Solar Regatta, Youth Energy Summit, and Solar Car races to give thousands of students in-depth experience with energy and science education.
- Implementing a new program to rotate free visits to SMUD's MOSAC to benefit communities equitably.
- Hosting commercial, residential and educator workshops to provide technical education to professionals and businesses across the region and introduce our customers to practices and technologies that lower energy usage and expenses while making their homes more comfortable and convenient.

Safety Leadership (SD-6)

SMUD continues to execute on our plan to be a recognized leader in safety. In 2023 we'll continue to progress with our Safety Road Map and Safety Management System (SMS) to foster our safety culture and leadership and further our journey toward our zero-incident goal.

Key safety investments in the 2023 Budget include:

- Continuing to support COVID-19 outbreak prevention methods.
- Continuing training and use of the new SMS software for our contractor safety, risk assessment and incident management modules.
- Expanding our pilot field ergonomics injury prevention program to UARP, Substation, Meter Shop, Warehouse and Facilities departments is part of our plan. This program provides biomechanical instruction to improve an employee's

- core body strength and posture, corrective exercises to support joint mobility, muscle flexibility and balance, recovery techniques for muscle inflammation and injury prevention for field activities.
- Continuing to promote SMUD's Public Safety program by updating outward facing billboard campaigns, expanding Emergency Responder (Fire Dept.) and Public Safety Electrical training for battery storage areas, updates to public contractor safety outreach, Electromagnetic Fields, and Radio Frequency (EMF/RF) educational publications, and modifications to public facing webpages with new and easy to find information.

Environmental Leadership (SD-7)

SMUD is recognized as an environmental leader within our industry and beyond. Our commitment to the environment is evident in the power we deliver to our customers, our community involvement, the materials we buy and the decisions we make each day. We're always looking to reduce our impact on the environment, conserve resources and improve the environment for current and future generations. These efforts benefit our employees, customers and most of all, our community.

Key environmental leadership investments in the 2023 Budget include:

- Expanding our Sustainability Program to include:
 - Greenhouse gas emissions beyond those associated with power generation.
 - Green operations to adequately manage air quality, water, and waste by improving operational efficiency, minimizing our operational impacts, and ensuring the quality and quantity of resources.
 - Greater focus on recovery programs to recycle/exchange wood reels and pallets along with surplus metal recovery.
- Increasing our zero emission vehicles by at least 20 replacements of internal combustion engine vehicles.
- Completing our Headquarters main campus drought tolerant landscaping project.
- Ongoing support for recreational facility improvements such as the construction
 of the Union Valley Bike Trail. We are also improving and expanding campsites
 and day use areas at Sunset and Fashoda campgrounds. This work is required
 under the Federal Operating License for the UARP.

Employee Relations (SD-8)

Investments in talent and technology will be critical to developing and enabling a culture that will sustain SMUD's clean energy efforts in a fast-changing industry and world. Equally important is the strong collaborations we're forging across the company to collectively respond to the imperative to build a diverse workforce, foster an inclusive culture, and create a lasting community impact.

Key employee relations investments in the 2023 Budget include:

- Completing Phase 1 and launching Phase 2 of our Talent Technology
 Transformation technology project. This multi-year project will manage hiring,
 onboarding, and talent management processes holistically through a single
 technology platform.
- Opening a child development center in partnership with Sac State and UC Davis Health to help attract and retain the region's top talent, as well as address the need for quality childcare in Sacramento.
- Continuing to execute on SMUD's Diversity, Equity, Inclusion & Belonging (DEIB)
 Strategy, which includes implementing a refreshed outreach strategy to increase
 the diversity of talent pools, conducting a DEIB audit of people processes to learn
 how we can enhance our approaches and ensure our people processes help
 power an inclusive culture.
- Reviewing and enhancing job descriptions with a focus on modernization, brand voice and application of a DEIB lens.
- Continuing execution of Workforce Optimization for our field crews by implementing additional work groups on the Click Soft mobile scheduling platform. This will include a review and updates to work processes, as well as an improved customer experience.
- Recruit our second cohort into the Powering Careers program to support SMUD's
 workforce needs with an entry-level feeder source for our apprentice programs.
 Collaboration between the Sacramento Power Academy and our Sustainable
 Communities teams will ensure we have a robust pipeline to the program, as well
 as providing career opportunities within the community.

Resource Planning (SD-9)

In implementing our 2030 Zero Carbon Plan, we're focused on reimagining our generation portfolio through replacing our natural gas assets, expanding our local investments in proven clean technologies, and launching pilot projects and programs for new and emerging technologies, all while continuing our work to improve equity for our under-resourced communities and minimizing cost to our customers.

Key resource planning investments in the 2023 Budget include:

- Expanding renewables and increasing reliability:
 - Beginning construction of the Solano 4 Wind Project (91 MW) and Country Acres Project (344 MW of solar + 172 MW of storage).
 - Continuing evaluation and development of several local and regional utility-scale solar and battery storage projects and other renewable technologies, with targeted online dates in 2025-27.
 - Expecting delivery on Purchase Power Agreements from the new 50 MW Sloughhouse solar project and the Geyser's 100 MW Geothermal Project.

- Deploying long-duration energy storage through a new partnership with ESS, Inc. beginning with 4MW/24MWh at several locations in Phase 1 of the partnership.
- Continuing to expand our efforts to support and promote energy efficiency and building electrification through our programs and services. Some new initiatives include:
 - Launching an online shopping experience for heat pump water heaters and a hotline for emergency replacements accessible through our SMUD Energy Store.
 - Expanding our Home Electricity Reports to reach EV and solar customers to encourage customers to reduce electricity use during peak periods and shift use to low or off-peak periods.
 - Evaluating and updating the design of our SmartHomes program in alignment with new codes and standards, as well as building and design practices.
 - Implementing a low- or no-interest financing option to provide an equitable solution for customers transitioning from gas heating and water heating to heat pump systems.
 - Expanding our trade ally network to include contractors that serve commercial customers. The commercial contractor network will provide customers with direct access to a vetted list of participating contractors with experience in energy efficiency and building electrification retrofits.
- Supporting the proliferation of EVs and charging infrastructure through our programs and services, including:
 - Positioning SMUD as our customers' first point of contact when purchasing an EV or charging equipment and providing high quality expert advice.
 - Continuing to advance the adoption of EVs through our auto dealer engagement and education, ride & drive events, and EV support program.
 - Expanding our residential Charge@Home program that provides incentives for home charger and electrical circuit installation by providing a contractor referral and installation solution as well as instant rebates on chargers and circuit installation services through the SMUD Energy Store.
 - Launching a new EV online estimation tool that provides information on total cost of ownership including upfront purchase costs, available incentives, average monthly expenses, lifetime savings, carbon reduction and breakeven timeline.
 - Launching the eFuelSM turnkey commercial installation service that removes key barriers to vehicle electrification with no or low up-front cost installation in exchange for a monthly fee on a SMUD bill.
- Expanding and growing our load flexibility, demand response and customer storage options. Examples include:

- Implementing new battery storage incentive programs, which includes Critical Peak Pricing Rate and the new Virtual Power Plant (VPP) programs under the My Energy Optimizer suite of program offerings.
- Launching and implementing customer enrollment and device installations for our NextGen Air Conditioning and Load Management (ACLM) program, which will offer 2-way communicating load control devices for customers with qualifying air conditioners to manage and reduce load during summer peak events.
- Expanding the scope of our commercial PowerDirect load management program to include additional customer segments and end uses, as well as aggregators to support load management and reduction, primarily during the summer.
- Expanding the Managed EV Charging pilot with General Motors, Ford, and BMW, which allows charging to be optimized in a way that benefits both the customer and SMUD's grid, with a target of reaching 1,000 customers during the year and opportunities for additional auto manufacturers to participate.
- Continuing to build and evolve our Green Pricing and Solar program offerings, including:
 - Promoting and growing our residential Greenergy program offerings, which includes the redesigned options and the new Neighbor and Climate Advocate options introduced in 2022.
 - Redesigning and deploying our commercial Greenergy program offerings in alignment with the 2030 Zero Carbon Plan, and to meet customer needs for new product options to support corporate, policy or mandates.
 - Develop options for a residential solar Share program for low, moderate income and multi-family customers.
 - Expand our community solar programs for schools and non-profit organizations.

Innovation (SD-10)

Delivering innovative solutions, products, and services to our customers through research and development and implementing new business models continues to be a core value for SMUD. In 2023, we'll work to further align our research and innovation portfolio to meet the needs of the 2030 Zero Carbon Plan, with a particular focus and emphasis on researching technologies, implementing projects, or deploying pilots/programs that have the potential to address gaps or uncertainties and/or accelerate the implementation of initiatives already in flight.

Key innovation investments in the 2023 Budget include:

 Accelerating research in customer load flexibility to allow for the growth of our Virtual Power Plant (VPP) and transition of SMUD's thermal fleet, increasing the integration of intermittent renewable resources and mitigating grid and customer infrastructure impacts of electrification, including:

- Partnering with customers, installers, and aggregators to measure the ability of customer-sited batteries to provide load reduction through the My Energy Optimizer Partner+ pilot.
- Furthering Vehicle-To-Grid (V2G) readiness for school bus electrification by expanding participation opportunities to additional school districts and developing and testing the ability of charging infrastructure to manage 2-way power flow, as well as begin the planning of future V2G pilots for the light-duty EV segment.
- Researching and addressing key barriers to building and transportation electrification, including:
 - Quantifying load impacts from home electrification retrofits to support the development of tools and systems that distribution planners and customers can use to facilitate decisions about utility service upgrades or solutions to mitigate those upgrades.
 - Deploying a pilot model that transitions EV charging in under-resourced communities from an inaccessible amenity to standard critical infrastructure. More than 100 Level 2 chargers will be installed across 6 multifamily housing sites, in partnership with Sacramento Metropolitan Air Quality Management District and Mutual Housing California with grant support from the California Energy Commission.
 - Providing analysis and evaluation supporting the California Mobility
 Center with delivery and testing of 5 medium-duty electric trucks built and customized by Zeus Electric Chassis into SMUD's fleet.
- Investigating generation technologies for increased decarbonization:
 - Implementing a Long Duration Energy Storage flow battery project in partnership with ESS, Inc. following the successful deployment of SMUD's first lithium-ion utility-scale battery storage project at SMUD's Hedge location.
 - Testing advanced functionality of smart inverters to increase customer hosting capacity and reliability of solar and storage resources.
 - Pursuing partnerships to further technology and access to the Renewable Natural Gas and renewable hydrogen value chains, such as the Alliance for Renewable Clean Hydrogen Energy Systems that provides statewide coordination on a hydrogen hub and unified engagement with the U.S. Department of Energy.
- Researching the potential to create natural habitats through pollinators and planting native species to reduce operational costs of vegetation management, erosion control and fire protection.

Public Power Business Model (SD-11)

We'll continue to promote the public power business model and advocate for policy that provides us with the flexibility to pursue innovative solutions that meet the needs of our customers and community, while ensuring reliability, affordability, and sustainability.

Key public power business model investments in the 2023 Budget include:

- Grant acquisition pursuits to support SMUD's 2030 Zero Carbon Plan.
- Advocacy at the California Energy Commission for funds from the Demand Side Grid Support (DSGS) and Distributed Energy Backup Assets Program (DEBA) Programs to support grid investment.
- Advancing our priorities with federal, state, and local policymakers.
- Providing input to key legislative and regulatory proceedings to ensure that any
 proposed legislation or regulations align with our business objectives and provide
 necessary flexibility.
- Ensuring that our Wildfire Mitigation Plan meets all legislative requirements and continues to evolve as technology changes.
- Enhancing our relationship with the Balancing Authority of Northern California and participating in regulatory proceedings involving the creation of the Extended Day Ahead Market (EDAM).

Economic Development (SD-13)

SMUD promotes the economic vitality of our region and the growth of our customer base through strategic leadership and active contributions to regional economic development. We're also helping build a strong innovation ecosystem through support for start-ups, entrepreneurs, and business incubators, with a key focus on encouraging economic growth in under-resourced business communities. We also provide enhanced resources to key Chambers of Commerce, Property & Business Improvement Districts (PBIDS) and industry organizations to support their work with our commercial customers. SMUD helps make our region an attractive destination for businesses of all sizes through affordable rates and customized energy solutions.

System Enhancement (SD-14)

In 2023, staff will continue to work on 2 projects with the appropriate local jurisdictions:

- Auburn Blvd. (from Rusch Park to I-80) with a planned construction start date in 2024.
- Elk Grove Blvd. (between Waterman & School Streets) with a planned construction start date in 2024.

Information Management and Security (SD-16)

Technology plays a critical role for SMUD to institutionalize robust information management and physical security practices, and to ensure regulatory compliance, business resiliency and customer satisfaction. The 2023 budget funds solutions and strategies to implement cybersecurity policies and measures to manage cyber risk effectively and efficiently to SMUD's people, processes, and technology.

Key information management and security investments in the 2023 budget include:

- Growing and implementing technology programs and solutions to enforce cybersecurity policies, procedures and standards aligned to the National Institute of Standards and Technology (NIST) Cybersecurity Framework Security and Privacy Control families.
- Building on momentum and experience from achieving 100% pass rate for consecutive North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) compliance audits conducted by the Western Energy Coordinating Council (WECC), the CIP Program will continue to implement best practices, internal controls, and mature technology compliance implementations.
- Developing and maintaining an updated Disaster Recovery strategy to reduce the risk of IT service disruptions while providing highly available technology solutions that are fast to recover and effectively work toward aligning with SMUD's business continuity needs.

Enterprise Risk Management (SD-17)

The 2023 Budget fully funds key risk mitigation activities. SMUD's enterprise-level risks span the spectrum of operational and strategic business risks and include energy procurement, strategy, operations, natural hazards, political and regulatory issues, economics, and the environment. Risk assessments and mitigation plans continue to be refined and improved by considering SMUD's changing internal and external risk environment and enhancing how SMUD addresses its risks.

Key enterprise risk management initiatives in the 2023 Budget include: Continuing to mitigate wildfire risk and potential impacts to SMUD's operations, customers, and the community.

Enhancing and improving SMUD's emergency preparedness and response capabilities leveraging lessons learned and tabletop exercises. Increasing risk education and communications to further enhance SMUD's risk culture.

Diversified Business (SD-19)

Broadening and diversifying our products and services is a key value for SMUD. In 2023, we'll pursue opportunities that benefit our customers and community, create economic

value, achieve a balanced and diversified portfolio and leverage, and optimize our strengths, assets, and expertise, all while maintaining our financial health and reputation.

Key diversified business investments in the 2023 Budget include:

- Operationalizing our partnership with ESS, Inc. where SMUD now holds nonstock equity in the company as part of SMUD's Nonstock Security Pilot Project program, created under new authorities granted to SMUD through AB 689. This statute allows for new deals to be piloted prior to sunsetting the provision in December 2025.
- Continuing to collaborate and support the California Mobility Center (CMC), a
 private/public consortium focused on innovation and commercialization, standards
 and policy, workforce development and new business models in electric mobility. In
 2023, we'll work with the CMC and its growing list of electric mobility start-ups to
 reduce barriers to EV adoption, support our vehicle electrification goals and reduce
 local carbon emissions.
- Expanding our client portfolio for Community Energy Services in support of public power.

Since the approval of our 2030 Zero Carbon Plan last year, we've continued to build a strong foundation for achieving our 2030 Clean Energy goals and will continue the momentum in 2023. Our newly established Enterprise Strategy, Prioritization and Budgeting processes have helped us focus on identifying the work that matters most to our customers, while keeping the Board's Strategic Directions as our guiding anchors.

I am excited to deliver on our Community Impact Plan in 2023, which is key to our strategy to ensure all communities benefit from a clean energy future. The incredible amount of work we've done to implement our 2030 Zero Carbon Plan so far is why others are looking to SMUD as a model to follow. They're taking notice of our holistic approach that's focused on our core business of keeping the lights and our rates affordable, while ensuring we're decarbonizing our power supply in a way that benefits everyone.

Our executive team members will share an overview of SMUD's key 2023 initiatives during the November 8 and 9 Finance & Audit Committee meetings, and I look forward to providing the Board with regular updates on progress throughout the upcoming year.

Respectfully submitted,

Paul Lau

Chief Executive Officer and General Manager

cc: Executive Team

Special Assistant to the Board

Corporate Files

About SMUD

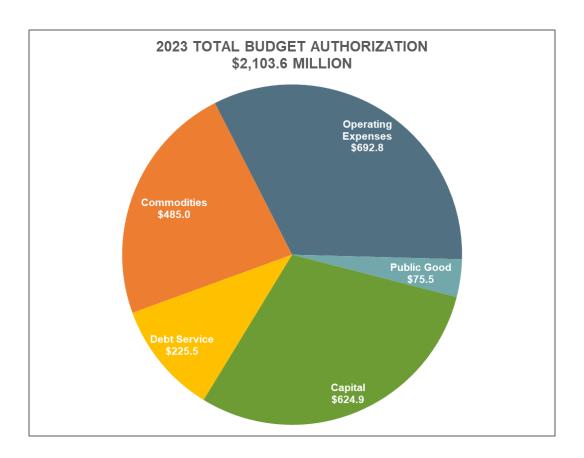
As the nation's sixth-largest, community-owned, not-for-profit electric service, SMUD has been providing low-cost, reliable electricity to Sacramento County for over 75 years. SMUD is a recognized industry leader and award winner for its innovative energy efficiency programs, renewable power technologies and its sustainable solutions for a healthier environment.

We provide electric service to most of Sacramento County and small, adjoining portions of Placer and Yolo Counties. Our service area is divided into seven wards, each represented by an elected board member who serves a 4-year term. Our Board of Directors determines policy direction and appoints our Chief Executive Officer & General Manager, who is responsible for SMUD's day-to-day operations.

SMUD became a Control Area, presently called a Balancing Authority (BA), in June 2002 and since then has operated its transmission and generation system independently. On January 1, 2006, the Western Area Power Administration's Sierra Nevada Region (WAPA-SNR) was integrated into the SMUD BA, followed on December 1, 2006, by the California-Oregon Transmission Project (COTP) - a 500kV transmission line - and the Modesto Irrigation District (MID). On May 8, 2009, together with MID and the cities of Redding and Roseville, SMUD entered into a Joint Powers Agreement to create the new Balancing Authority of Northern California (BANC). With regulatory approval on May 1, 2011, the operations of SMUD BA were transferred to BANC BA. BANC uses SMUD's existing employees and physical resources to be the BANC Operator. BANC's General Manager reports to a five-person Commission made up of SMUD, MID, City of Redding, City of Roseville, and Trinity Public Utility Districts chief executives. This BA, as an independent entity, is not subject to market disruptions that result from financially induced supply shortages within the California Independent System Operator (CAISO) or investor-owned utilities. SMUD is still subject to certain CAISO transmission, grid management and other costs for transactions that use the CAISO controlled grid. These costs have been included in SMUD's 2023 Budget.



SMUD At a Glance



Accounts Served (average)

577,973 Residential 77,028 Commercial

Size of our service area

900 square miles

Expected System Peak

2,806 MW

Public Good Budget (incl subsidy)

\$109.8 million (proposed)

Service Area Population

1.5 million people

Miles of Power Lines We Own

10,912

Expected Retail Energy Sales

10,458 GWh

Credit Rating

Standard & Poors: AA

Moodys: Aa3 Fitch: AA



SMUD Governance

Our Board of Directors

SMUD is owned by its customers, who elect a seven-member Board of Directors. Each director represents a different geographic area or "ward." During their four-year terms, they establish policies and values about how we serve you and to set the long-term direction SMUD will take as we move forward.

SMUD's Board of Directors establish our vision and guidelines. The Board reviews and approves strategies, such as Community Impact, Diversity, Equity, Inclusion & Belonging (DEI&B), Electric Vehicle (EV) and Fleet, Wildfire, and Zero Carbon. The Board is the final approval for large expenditures, such as bond issuances, contracts, land purchases, and power purchase agreements. For the annual budget process, the Board approves the budgeted expenses, or authorization to spend, and monitors performance through strategic direction reporting and monthly financial updates.



2022 SMUD Board of Directors:



Brandon Rose Board President Ward 1



Nancy Bui-Thompson Director Ward 2



Gregg Fishman Director Ward 3



Rosanna Herber
Director
Ward 4

Board Committee
Chair, Finance & Audit
Committee



Rob Kerth Director Ward 5



<u>Dave Tamayo</u> Director Ward 6



<u>Heidi Sanborn</u> Board Vice President Ward 7



Strategic Direction - Purpose, Vision & Values

Our Strategic Direction guides us in the decisions we make about SMUD's policies and operations. Our Board continually reviews and refines these guidelines to make sure we'll meet your energy needs, both now and in the future.

Purpose Statement (policy number: SD-1A)

SMUD's purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity and leading the transition to a clean energy future.

Vision Statement (policy number: SD-1B)

SMUD's vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.

Core Values

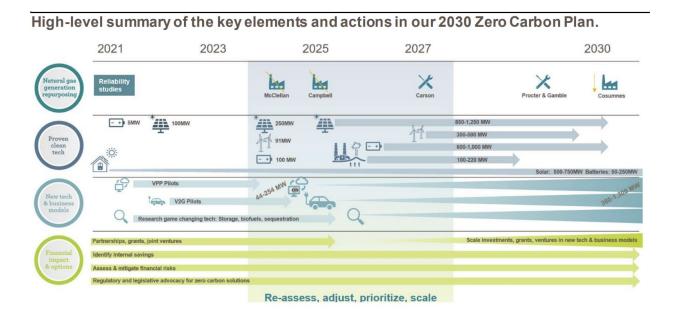
- Competitive Rates (policy number: SD-2)
- Access to Credit Markets (policy number: SD-3)
- Reliability (policy number: SD-4)
- Customer Relations (policy number: SD-5)
- Safety Leadership (policy number: SD-6)
- Environmental Leadership (policy number: SD-7)
- Employee Relations (policy number: SD-8)
- Resource Planning (policy number: SD-9)
- Innovation (policy number: SD-10)
- Public Power Business Model (policy number: SD-11)
- Ethics (policy number: SD-12)
- Information Management and Security (policy number SD-16)
- Enterprise Risk Management (policy number: SD-17)

Key Values

- Economic Development (policy number: SD-13)
- System Enhancement (policy number: SD-14)
- Outreach and Communication (policy number: SD-15)
- Diversified Business (policy number: SD-19)



2030 Zero Carbon Plan



We are committed to achieving the 2030 Zero Carbon Plan and keeping rates affordable. While the plan represents significant new investments, there are several opportunities to manage the impact to customer bills. This strategy depends on regional, national, and international partnerships to share the costs of common goals and fund the development and acceleration of new technologies. We'll continue to expand new revenue sources, such as Low Carbon Fuel Standard (LCFS) credits, U.S. EPA electric Renewable Identification Number and carbon credits. This strategy also focuses on leveraging use of our low-cost of capital, mechanisms such as green bonds and commodity prepays that may lower costs and improve efficiency in delivery of our operational services. As technologies progress, we'll regularly review the financial impact and manage our finances to keep rate increases low and stable.

If you're interested in learning more about our 2030 Zero Carbon Plan, please visit our <u>2030 Clean Energy Vision site</u>.



Budget Process and Assumptions

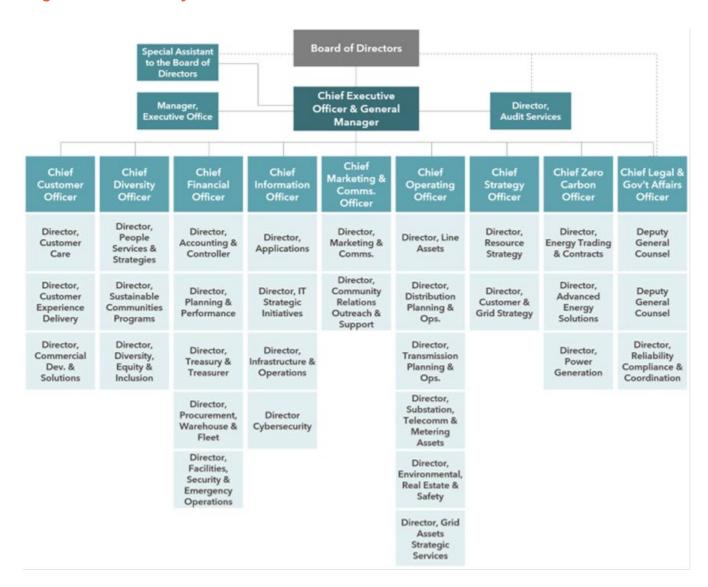
The process to complete the 2023 Budget began with setting financial limits to ensure that the budget would result in achieving our key financial metrics: Positive Net Income, Fixed Charge Ratio of 1.70 and Days Cash of 150 or more. With input from every business unit, we looked holistically at the work planned for the upcoming year and identified the most important work that must be done to support our Clean Energy Vision and our customers. In September 2022, we presented an early look of the budget to the Board and our customers before the budget was finalized. The load, revenue, and commodity forecasts were then completed which results in the final proposed 2023 Budget.

Our planning and budgeting philosophy is to plan and measure the total cost of SMUD business processes and set performance improvement targets for the processes and Business Units that will most efficiently accomplish strategic goals more accurately. This budgeting methodology also most efficiently allocates and plans resources throughout SMUD to the Business Units and work processes.



Organizational Structure

Organization Chart by Executive



Note: SMUD resources support Business Unit processes regardless of organization/functional affiliation.



Business Units & Segments

The SMUD Budget is planned by Business Unit processes which in some cases differ from the organizational/functional reporting structure. The Business Units and Segments are categorized based on work processes and operations and provides better alignment and allocation of costs to specific business functions.

Customer & Community Services	Energy Delivery & Operations	Zero Carbon Energy Solutions	Enterprise Strategy	Information Technology	Workforce, Diversity & Inclusion	Corporate / Enterprise
Customer Experience Delivery	Transmission Planning & Operations	Power Generation	Resource Strategy	Applications	People Services & Strategies	Governance
Customer Operations	Distribution Planning & Ops	Advanced Energy Solutions	Revenue Strategy	Infrastructure & Operations	Diversity, Equity & Inclusion	Finance
Community Energy Services	Line Assets	Commodity, Procurement & Sales	Customer & Grid Strategy	Strategy & Innovation	Sustainable Communities	Legal, Gov't Affairs & Reliability Compliance
Commercial Dev. & Solutions	Substation, Telecom & Network	New Business Development	Enterprise Prioritization	Strategic Initiatives & Operational Tech.		Facilities, Security & Emergency Operations
Business Performance & Optimization	Strategic Services & PMO			Cybersecurity		Procurement, Warehouse & Fleet
	Environmental, Real Estate & Safety					Comms. Marketing & Community Relations
	Operational Excellence					Enterprise Affairs



Budget Summary

Overview

The 2023 Budget Authorization totals \$2.1 billion. This represents an increase of \$367.7 million from the 2022 Budget. The 2023 Budget is a request to authorize spending.

The 2023 SMUD Budget summarized on the following pages is a blueprint of planned operating, public goods, debt service expenses and capital expenditures for the fiscal year beginning January 1, 2023. Historical comparisons to the 2022 Budget adopted by the Board on December 9, 2021, are shown to put the proposed 2023 Budget in perspective. A forecast of actual 2022 expenses is also shown.

The O&M and Capital Budgets are shown by Business Unit. SMUD Business Units correspond to business processes which deliver specific products and services to SMUD customers. The core business processes are represented by Customer & Community Services, Zero Carbon Energy Solutions and Energy Delivery & Operations Business Units. Included within Zero Carbon and Customer/Community are Public Good costs related to energy efficiency, low-income assistance, renewable generation and research and development. These costs are shown separately because they are designated as Public Goods programs as determined by statute.

The Enterprise Strategy, Information Technology, Workforce, Diversity & Inclusion and Corporate Business Units provide services which enable the other business units to perform their work. The Enterprise Business Unit contains contingency and reserve estimates for the organization.

Within each Business Unit budget, work processes are subdivided into business segments and individual business processes. Business segments and processes enable each business unit to effectively plan and measure performance of its operations at a manageable level.

The budgeted costs shown under each core Business Unit include all the costs of performing the work planned for 2023. These include labor costs from departments throughout SMUD which perform work in the core business processes. Labor costs include employee benefits. Also included in the budget is a surcharge allocation of service costs such as transportation, facilities, technology, human resources, safety and security. Expenditures budgeted by Information Technology, Workforce, Diversity & Inclusion, Energy Delivery & Operations and Corporate represent those process costs that are not allocated to the core business units, such as dedicated software implementations or enhancements that do not meet minimum SMUD criteria for capitalization. The Corporate budget includes insurance and risk management, and cash and debt management; a portion of this budget is allocated to Capital and Public Good.

For detailed descriptions of the cost categories that make up SMUD's budget please see the Supplemental Information section of this document or follow these links – <u>Cost Categories</u> and <u>Expense Type Descriptions</u>.



O&M Budget Summary

The O&M Proposed Budget for 2023 totals \$1,253.2 million, which is \$89.4 million or 8 percent higher than the 2022 Budget. The O&M budget consists of commodity costs, business unit operating costs, public good and other employee benefit costs. The following sections present detail for these O&M components.

Cost Type \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Labor & Benefit Costs	\$232,836	\$258,081	\$265,261	\$7,180	3%
Materials & Equipment	8,974	8,453	9,458	1,005	12%
Other Expenses	54,418	33,381	46,619	13,238	40%
Outside Sevices	171,475	184,216	205,323	21,107	11%
Insurance	27,302	27,200	32,795	5,595	21%
Rebates & Incentives	25,987	34,018	34,837	820	2%
Commodites (excl reimbursements)	762,328	491,950	505,399	13,449	3%
Total Operating Expenses	1,283,320	1,037,298	1,099,692	62,394	6%
Reimbursements	(24,804)	(63,922)	(37,960)	25,962	41%
Allocations/Surcharges	150,839	145,334	151,448	6,114	4%
Expenditures Subtotal	1,409,356	1,118,710	1,213,180	94,470	8%
JPA Interest	4,773	4,773	4,441	(332)	-7%
Other Employee Benefits	(757)	40,359	35,584	(4,775)	-12%
Total O&M Budget	\$1,413,371	\$1,163,842	\$1,253,204	\$89,362	8%
Miscellaneous Revenues	233	(25)	(25)	-	0%
Net O&M	\$1,413,604	\$1,163,817	\$1,253,179	89,362	8%

Business Unit O&M Budget

The following report highlights the O&M Proposed Budget for 2023 categorized by Business Unit. This gives a different perspective of the O&M expenditures (including Public Good) by where the work is performed.

Total Business Unit O&M and Public Good, excluding Commodity, is 732.6 million, which is \$49.8 million higher than the 2022 Budget. The 2023 Proposed Budget includes increased mandatory spending for Vegetation Management and Wildfire Mitigation. The 2023 Budget also funds ongoing efforts for Community Initiatives, including our new Community Impact Plan, maintaining operations, and Transportation Electrification. Transportation Electrification is a critical part of our 2030 Zero Carbon Plan and an important part of our strategy to continue to provide a leadership role in the region's transformation to a zero-carbon future.



Business Unit \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Customer & Community Services	\$95,694	\$102,491	\$102,005	(\$486)	0%
Energy Delivery & Operations	205,767	204,655	212,598	7,943	4%
Zero Carbon Energy Solutions	189,997	215,684	226,066	10,381	5%
Enterprise Strategy	13,877	17,470	16,824	(646)	-4%
Information Technology	29,195	36,476	39,316	2,840	8%
Workforce, Diversity & Inclusion	11,228	9,181	17,547	8,366	91%
Corporate	105,908	106,029	116,762	10,733	10%
Enterprise	12,463	(9,184)	1,519	10,704	117%
Total O&M Business Unit Budget	\$664,129	\$682,802	\$732,637	\$49,835	7%
Commodity (incl reimbursements)	750,000	440,681	484,984	44,303	10%
Other Employee Benefits	(757)	40,359	35,584	(4,775)	-12%
Total O&M Budget	1,413,371	1,163,842	1,253,204	89,362	8%
Miscellaneous Revenue	233	(25)	(25)	-	0%
Net O&M	\$1,413,604	\$1,163,817	\$1,253,179	\$89,362	8%

More detailed and specific information is provided within each Business Unit's documentation of their proposed budget. Please refer to this section for the Business Unit detailed budgets - Business Unit Budgets.

Public Good Budget

Public Good is included in the total O&M budget and is captured within the costs of the Business Unit responsible for the work. Therefore, these costs are not shown on a separate line of the O&M budget and are provided here for <u>information only</u> and to present details as to the programs covered. Total Public Good is \$110 million, an increase of \$11.2 million, after inclusion of rate subsidies. The Public Good Budget is \$75.5 million and is the cash disbursement portion of the program that requires Board authorization.

By December 2023, the number of subsidized customers is expected to be approximately 98,571. The total cost of the Energy Assistance Program Rate (EAPR) subsidy is budgeted at \$32.4 million in 2023, a decrease of \$0.6 million from 2022, and the subsidy for customers using medical equipment decreased by \$40 thousand to remain virtually flat at \$2.0 million. Total subsidies are \$34.4 million.

Energy efficiency spending increased \$10.5 million over prior year. Incorporation of savings from codes and standards is included as a component of the energy efficiency portfolio to match standard industry practice going forward. Building electrification is included in Energy Efficiency public good. The Energy Efficiency budget remains in line with the goal of achieving savings of 1.5% of average annual retail energy sales and reflects our goals of reaching zero carbon by 2030. Residential Assistance increased \$0.6 million due to the launch of our Community Impact Plan as we diversify our product and service portfolio to access a broader customer. Research &



Development increased \$0.9 million to \$13.2 million to reflect the ongoing need to investigate new and emerging technologies.

Description \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Energy Efficiency	\$42,378	\$42,975	\$53,437	\$10,462	24%
Residential Assistance	7,051	8,296	8,855	558	7%
Revewables	15	· -	-	-	-
Research & Development	8,233	12,314	13,168	853	7%
Total Public Good Budget	\$57,678	\$63,585	\$75,459	\$11,874	19%
Rate Subsidy	33,743	35,024	34,356	(668)	-2%
Net Public Good	\$91,421	\$98,609	\$109,815	\$11,206	11%

Commodity Budget

Commodity costs are part of the total O&M budget. The Commodity budget for 2023 of \$485 million is \$44.3 million higher than the 2022 Budget. Commodities are net of surplus power sales. The budget for commodities assumes a typical water year. Purchased power is increasing primarily due to the new Geothermal Purchased Power Agreement (PPA), lower carbon power purchased, higher Renewable Energy Credit (REC) purchases and an increase in expected customer sales. Fuel for Generation is decreasing due to lower thermal generation. There is an increase in transmission costs for Transmission Agency of Northern California (TANC).

Further details on power supply information can be found in the Supplemental Information of this document on these pages - <u>SMUD Generation Sources</u> and <u>Purchased Power</u>.

Description	2022	2022	2023	\$ Change vs	% Change
(\$000s)	Forecast	Budget	Proposed	Budget	vs Budget
Purchased Power (net)	\$701,815	\$215,005	\$264,907	\$49,902	23%
Fuel for Generation	10,483	196,925	184,973	(11,952)	-6%
Transmission	37,702	28,751	35,104	6,353	22%
O&M Commodities	\$750,000	\$440,681	\$484,984	\$44,303	10%

Other Employee Benefits Budget

Other Employee benefits are part of the total O&M budget. These benefit costs are not allocated or included as a labor expense in the Business Unit expenditures. SMUD's Other Employee Benefits are \$35.6 million, a decrease of \$4.8 million. This budget consists of the O&M portion (unfunded liability) of Other Post-Employment Benefits (OPEB) expense of \$31.8 million which is an increase of \$8.2 million from the prior year due to a shift from allocated benefits expense, and \$3.8 million of workers compensation which is nearly flat to the prior year's budget.



Capital Budget Summary

The Capital Proposed Budget for 2023 totals \$624.9 million, which is \$265.0 million or 74 percent higher than the 2022 Budget. This increase is due to two key projects for the Zero Carbon Plan – the Solano 4 Wind Project and the Country Acres Solar + Storage Project. Both projects are key to us meeting the Renewable Portfolio Standard (RPS) requirement.

Cost Type \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Labor & Benefit Costs	\$63,585	\$80,620	\$77,310	(\$3,310)	-4%
Materials & Equipment	62,379	78,796	75,427	(3,369)	-4%
Other Expenses	8,842	(5,484)	93,291	98,775	>999%
Outside Sevices	206,063	176,129	346,141	170,011	97%
Insurance	931	733	765	33	4%
Total Expenses	341,800	330,795	592,934	262,140	79%
Reimbursements	(44,809)	(28,020)	(29,301)	(1,282)	5%
Allocations/Surcharges	56,356	57,136	61,291	4,155	7%
Total Capital Budget	\$353,347	\$359,911	\$624,924	\$265,013	74%
Miscellaneous Revenues	(546)	(1,106)	(839)	267	24%
Net Capital	352,801	358,805	624,085	265,280	74%

The proposed 2023 capital investment budget is for planned investment in generation, transmission, distribution, buildings, vehicles, technology, and other assets critical to meeting the energy needs of our customers. Proposed ongoing capital expenditures go through a rigorous evaluation and prioritization process, based on value and risk, to ensure we fund those that have the highest contribution to the Board's strategic directives.

Major capital expenditures planned in 2023 include completing work for Station G, starting development work for additions to our wind farm with Solano Phase IV and the Country Acres solar project, and ongoing improvements in our Upper American River Project (UARP) area as part of our hydro relicensing. Programmatic capital planned in 2023 includes cable and pole replacement programs, installing new meters, and new fleet purchases. Technology investments included in the 2023 Proposed Budget are to complete the Advanced Distribution Management System & Outage Management System (ADMS-OMS) and improvements to HR systems and network communications systems with our Talent Technology Transformation (T3) project.



The following report shows the Capital Proposed Budget for 2023 categorized by Business Unit. This gives a different perspective of the capital expenditures by where the work is performed.

Business Unit \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Customer & Community Services	\$9,197	\$6,619	\$7,570	\$951	14%
Energy Delivery & Operations	159,739	192,866	184,921	(7,945)	-4%
Zero Carbon Energy Solutions	129,192	108,405	340,223	231,818	214%
Information Technology	28,015	37,245	45,261	8,016	22%
Corporate	27,203	29,777	23,798	(5,979)	-20%
Enterprise	-	(15,000)	23,152	38,152	254%
Total Capital Business Unit Budget	\$353,347	\$359,911	\$624,924	\$265,013	74%
Miscellaneous Revenue	(546)	(1,106)	(839)	267	24%
Net Capital	\$352.801 [°]	\$358.805	\$624.085	\$265.280	74%

More specific and detailed information is provided within each of the previously mentioned Business Unit's sections of this documentation. Please refer to this section for the Business Unit detailed budgets - <u>Business Unit Budgets</u>.



The following is additional detail of 2023 capital project costs for each Business Unit organized by major project grouping.

Business Unit / Project Group	Major Projects (\$000s)	2023 Proposed

Customer & Community	Services	\$7,570
Meters	Purchase and installation of meters	7,570

rgy Delivery & Operations Capital F	Projects	\$184,921
Line Distribution Projects	Equipment replacement and upgrades including Natomas 69kV Line 1 extension, Natomas 69kV Line 5 & 6, Del Paso E Commerce Bank 69kV, Station H feeder exit, Rule 16 projects, Rio Del Oro 69kV line, Delta Shores 69kV extension, Elverta/W. Elkhorn feeder, and Elkhorn-Natomas 12kV	33,10
Grid Modernization	69kV motorized switches and line sensor upgrades	76
Distribution Replacements (Non-network)	Work to repair, replace or install transformers, switchgear, reclosers, capacitor banks, down line wires, air switches, etc.	9,49
Pole Replacement & Reinforcement	Includes replacing poles that have failed an inspection and must be replaced as well as pole reinforcements.	21,77
Cable Replacement & Rehabilitation	Program to reduce the yearly number of primary underground cable failures which decreases future outages, repair costs, customer issues and the quantity of poorly performing circuits.	18,382
New Services Connections	Projects associated with the connection of Commercial/Industrial & Residential customers. Includes: Subdivisions, Local Agency projects, Regional Transit and System Enhancements.	23,722
Transmission Line Projects	Transmission line structure replacement program.	833
Distribution Substation Improvements	Large substation improvements and new capacity projects, including Station H substation, Elverta substation, Delta Shores substation, Cordova Hills substation, Station G, Requa-Fawn #2 transformer, Meister Lonetree, Frienza-Albatross Substation, Rio Del Oro Site #1 Substation, Reactive network cable replacement, and Whiterock-Sunrise Bank 2.	39,44
Transmission Substation Improvements	Major transmission substation projects including Station H, Elverta substation rebuild, SVEC Whiterock Solar Substation Switchgear, Hurley Substation 230kV, Station D relay replacement, Hedge transformer #3 & #4 relay, and Pocket CB 5606 replacement.	26,834
Transmission Interconnection Projects	Customer interconnection project planning efforts.	2,398
Substation Easement & Land	Various land acquisitions such as Folsom SOI Site #2, Station J substation & transmission line CEQA, and Arco Arena.	1,60
Environmental Projects	Developing and implementing soil/groundwater investigation and remediation projects under agency oversight within Sacramento County, with the majority of the spending for the 59th Street and Thornton locations.	5,28
Other Projects		1,286



Business Unit / Project Group	Major Projects (\$000s)	2023 Proposed
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o Carbon Energy Solutions		\$340,223
Hydro Generation	Annual Regulatory Fees associated with the UARP License (USFS, BLM, EDCo, etc.), Camino Discharge Tube & Rehab, Camino road repair, JB penstock valve house controls, Gerle Canal Relining Project, Loon Lake Fire Protection, Union Valley T2 Replacement & 69kV Switchyard Rehabilitation, UARP Unit Breakers & Switchers Upgrade, UARP crane controls upgrade, Union Valley & IH spillway improvements, and fire protection in generators.	20,770
Hydro License & Other	Multi-year project to implement the renewal of the Federal Energy Regulatory Commission (FERC) license; includes Recreation Plan projects such as Union Valley Bike Trails and UARP culvert mitigation work.	15,601
Thermal Projects	Central Valley Financing Authority (CVFA) SCR Nox/catalyst and Turbine CTG1-Engine 185 and SMUD Financing Authority (SFA) Access Platform Improvements.	20,758
Storage Projects	ESS Flow battery demonstration.	9,960
Renewable Projects	Country Acres and other 2030 Energy Plan solar projects such as McClellan and Trick-Meiss.	86,479
Gas Pipeline	Improvements and testing of the local gas pipeline.	993
Decommissioning	Used fuel management of the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI) in accordance with Nuclear Regulatory Commission (NRC) regulation and SMUD specific license requirements.	7,549
Solano Wind	Solano Wind Phase and on-going work related to Phase 1 of the project.	174,579
Fuel Supply Improvements	Capital improvements and modifications to SMUD's portion of PG&E lines (300/401).	3,400
Other Projects		133

ormation Technology		\$45,261
Lifecycle Projects	Upgrades of hardware, storage, and network equipment that has reached the end of useful life. Other efforts included are Itron IEE updgrade (MDMS), telecom fiber optics, AT&T analog service replacement, substation security PIDS, DC battery, ETRM sofware upgrade and Secure Web Gateway refresh projects.	11,721
Enhancement Projects	Improvements to existing technology including lease management accounting software, Extended Day Ahead Market (EDAM) software, real time pole top LIDAR weather station.	1,937
New Technology Projects	Development and implemenation of new technologies including Contact Center technology replacement, customer technology platform, Distribution Planning load allocation software, ED&O long-term project planning tool, Workforce Optimization mobility & scheduling, vegetation work management solution, Talent Technology Transformation (T3), Riva Meter pilot, ADMS - OMS implementation, DO - Distributed Energy Resource Management System (DERMS), fiber-optic DWDM deployment, Synchronous Optical Network (SONET) transformation phase 2.	31,603



Business Unit / Project Group Major Projects (\$000s)		2023 Proposed
Corporate		\$23,798
Facilities Projects	Projects including PACS System replacement, building and site infrastructure development, electrical system development, and CSC elevator equipment replacement.	14,474
Vehicle Replacement	Work Efficiency Replacements, Legal and Regulatory Compliance Replacements and Life Cycle Replacements.	9,320
Enterprise		\$23,152
Contingency		15,000
Interconnections & Other	Coyote Creek project	8,152
Total Capital Expenditures		\$624,924



Allocated Budget Summary

The Allocated Proposed Budget for 2023 totals \$137.0 million, which is \$3.9 million higher than the 2022 Budget. This is shown as *information only* as 100% of these allocated expenditures are included in the budgeted dollars of all SMUD O&M and Capital described in this documentation.

Cost Type \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Labor & Benefit Costs	\$58,797	\$64,275	\$63,053	(\$1,222)	-2%
Materials & Equipment	34,942	34,032	37,383	3,351	10%
Other Expenses	2,972	2,597	2,640	43	2%
Outside Sevices	12,490	11,915	15,702	3,787	32%
Insurance	107	410	450	41	10%
Total Operating Expenses	109,307	113,228	119,228	6,000	5%
Reimbursements	(276)	(107)	(65)	42	39%
Allocations/Surcharges	19,716	19,981	17,828	(2,153)	-11%
Total Allocated Budget	\$128,747	\$133,102	\$136,991	\$3,890	3%

Portions of Energy Delivery & Operations, Information Technology, Workforce, Diversity & Inclusion and Corporate costs are allocated to business units based on the quantity of labor hours.

The following report shows the Allocated Proposed Budget for 2023 categorized by Business Unit. This gives a different perspective of the allocated expenditures by where the work is performed.

Business Unit \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Energy Delivery & Operations	\$4,938	\$4,082	\$5,422	\$1,339	33%
Information Technology	62,310	65,432	63,765	(1,667)	-3%
Workforce, Diversity & Inclusion	11,792	13,224	15,252	2,028	15%
Corporate	49,707	50,363	52,552	2,189	4%
Total Allocated Business Unit Budget	128,747	133,102	136,991	\$3,890	3%
Revenue	-	-	-	-	-
Net Allocated	128,747	133,102	136,991	3,890	3%

More specific and detailed information is provided within each of the previously mentioned Business Unit's sections of this documentation. Please refer to this section for the Business Unit detailed budgets - <u>Business Unit Budgets</u>.



Position Count Summary

The full-time count of 2,242 is identified in the Board Resolution for approval. Position growth for the 2023 budget year is an increase of 1.8% over the prior year.

Executive Group	2022 Full-time	2022 Limited Term	2022 Part-time	2022 Positions Planned	2023 Full-time	2023 Limited Term	2023 Part-time	2023 Positions Planned	Increase/ Decrease
CEO & General Manager	33	0	1	34	34	0	0	34	0
Chief Communications & Mktg Officer	72	1	3	76	73	0	3	76	0
Chief Legal & Govt Affairs Officer	38	0	4	42	38	0	4	42	0
Chief Financial Officer	304	2	5	311	304	1	12	317	6
Chief Operating Officer	807	14	16	837	824	20	13	857	20
Chief Zero Carbon Officer	257	3	8	268	265	2	9	276	8
Chief Strategy Officer	49	0	2	51	48	0	2	50	(1)
Chief Customer Officer	295	6	103	404	298	6	101	405	1
Chief Diversity Officer	82	7	25	114	90	14	24	128	14
Chief Information Officer	264	6	36	306	268	5	38	311	5
Enterprise Resource Pool	9	0	0	9	0	0	0	0	(9)
Full-time				2,210				2,242	32
Limited Term				39				48	9
Part-time				203				206	3
Total Positions	2,210	39	203	2,452	2,242	48	206	2,496	44



Labor Cost Summary

The labor summary reflects the cost of wages for SMUD employees. The budget for labor and associated benefit costs is shown as <u>information only</u> as 100% of these expenditures are included in the budgeted dollars of all SMUD O&M and Capital described in this documentation.

The cost-of-living (COLA) increase for SMUD salaries and wages during 2023 is based on formulas contained in negotiated bargaining agreements and estimates established for unrepresented employees.

Executive Group (\$000)	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
CEO & General Manager	\$7,425	\$8,424	\$7,481	(\$943)	-11%
Chief Marketing & Communications Officer	7,946	8,727	8,907	180	2%
Chief Legal & Govt Affairs Officer	5,766	5,892	6,203	310	5%
Chief Financial Officer	35,332	35,069	37,084	2,015	6%
Chief Operating Officer	127,362	127,756	138,858	11,102	9%
Chief Zero Carbon Officer	35,514	37,033	40,343	3,310	9%
Chief Strategy Officer	6,328	7,066	7,442	376	5%
Chief Customer Officer	32,006	34,187	35,787	1,599	5%
Chief Diversity Officer	11,218	11,402	14,617	3,215	28%
Chief Information Officer	37,348	39,835	41,739	1,904	5%
Total Salaries & Wages	278,323	295,685	315,578	19,342	7%
Total Overtime	27,923	19,706	22,880	3,169	16%
Total Salary Costs	\$306,246	\$315,391	\$338,459	\$23,067	7%



Benefits Summary

The benefits summary reflects costs for active and retired employee benefits, the costs to administer those benefits, and Social Security and retirement contributions for current staff. The 2023 Proposed Budget is decreasing due to our Other Post Employee Benefits (OPEB) being fully funded and no longer requiring an annual contribution, lower estimates for Retirement Contributions and slightly lower costs to administer the benefits.

The budget for benefit costs is shown as <u>information only</u> as 100% of these expenditures are included in the budgeted dollars of all SMUD O&M and Capital described in this documentation.

Benefit Type \$000s	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Retirement Contribution	\$93,800	\$68,155	\$63,638	(\$4,517)	-7%
Social Security Contribution	22,244	23,654	24,795	1,141	5%
Total Retirement & Social Security	116,044	91,809	88,433	(3,376)	-4%
Health & Welfare	45,696	56,854	51,658	(5,196)	-9%
Administer Benefits	1,784	2,380	2,086	(294)	-12%
Total Health & Welfare	47,480	59,234	53,745	(5,489)	-9%
Total Benefits Budget	\$163,525	\$151,043	\$142,177	(\$8,865)	-6%



Debt Service

The following schedules show the summary and details of the 2023 Proposed Budget for Debt Service. SMUD issues Electric Revenue Bonds and Commercial Paper Notes to finance long-lived capital assets. The Debt Service Budget includes accrued interest expense on outstanding Electric Revenue Bonds and Commercial Paper Notes, net of any swap revenues tied to debt issues, scheduled principal repayments of Bonds and Commercial Paper, trustee fees associated with administration of debt service payments, and interest expense and issuance costs associated with planned new debt issues.

Debt Service (\$000s)	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Interest Expense	\$110,839	\$113,294	\$106,688	(\$6,605)	-6%
Interest on New Debt Issuance	-	-	8,500	8,500	100%
Principal Repayments	100,150	100,150	111,165	11,015	11%
Fees/Bond Issuance Cost	823	2,310	2,772	462	20%
Total Debt Service	211,812	215,754	229,125	13,371	6%
Allocated to JPAs	(3,596)	(3,596)	(3,633)	(37)	1%
Net Debt Service	\$208,216	\$212,158	\$225,492	\$13,334	6%

Interest Expense totals \$106.7 million in the 2023 Budget, a decrease of \$6.6 million from 2022. Revenue Bond Interest is decreasing \$6.2 million to \$102.9 million. Commercial Paper interest totals \$3.8 million in the 2023 Proposed Budget, a decrease of \$0.3 million

Included in Interest Expense are Build America Bonds which are gross of the rebate of \$6.3 million expected in 2023. The debt service budget includes net debt related swap payments and interest on long-term, variable rate, and subordinated debt. The budget assumes an interest rate of 4.34% (incl. all related fees & swaps) on an average commercial paper balance of \$100 million.

Interest on New Debt Issuance totals \$8.5 million in the 2023 Budget. This is an estimate of interest expense for new debt expected to be issued within 2023.

Scheduled Principal Repayments of revenue bonds and commercial paper notes total \$111.2 million in 2023, an \$11.0 million increase from 2022.

Fees/Bond Issuance Cost of \$2.8 million are included for new 2023 bond issuances and related fees.



Summary of Debt Service on Existing SMUD Bond Issues

Date Issued	Issue (\$000s)	1/1/2023 Principal Balance	Issued Interest Rate	Final Maturity Date	2023 Scheduled Principal Payment	2023 Interest Expense
-	Electric Revenue Bonds		•		-	•
Jun-97	Series K ¹	38,165	5.25% to 5.90%	2024	18,595	651
May-09	Series V ²	200,000	6.322% (4.11% net)	2036	-	12,644
Jul-10	Series W ³	250,000	6.156% (4.00% net)	2036	-	15,390
Sep-11	Series X (Refunding)	-	1.50% to 5.00%	2028	-	-
Jan-12	Series Y (Refunding)	-	3.00% to 5.00%	2033	-	-
May-13	Series A	132,020	3.75% and 5.00%	2041	-	4,102
May-13	Series B (Refunding)	81,820	3.00% to 5.00%	2033	6,140	2,485
Jul-16	Series D (Refunding)	104,060	5.00%	2028	19,380	4,731
Dec-17	Series E (Refunding)	111,585	3.00% to 5.00%	2028	22,170	5,160
Aug-18	Series F (Refunding)	103,245	5.00%	2028	26,665	4,659
Apr-19	Series G	191,875	5.00%	2041	-	9,352
May-20	Series H	400,000	4.00% to 5.00%	2050	-	18,699
Jul-21	Series I (Refunding)	96,220	5.00%	2028	4,695	4,722
Jun-22	Series J (Refunding)	132,725	2.06%	2032	13,520	6,381
Jun-22	Series L ⁴ (Refunding)	98,389	5.00%	2041	-	2,569
Jun-22	Series M ⁵ (Refunding)	56,401	5.00%	2033	-	1,473
	Subtotal	1,708,990	•		111,165	93,018
	Subordinated Electric Rever	nue Bonds				
Jul-19	Series A	100,000	5%	2049	_	4,888
Jul-19	Series B	100,000	5%	2049	-	5,000
	Subtotal	200,000	•		-	9,888
	Total Outstanding Bonds	1,908,990	Principal & Interest F	Payments	111,165	102,906
	Total Debt Service				111,165	102,906

Debt Service Footnotes:

- 1) Swapped to a variable rate for the life of the debt, interest expense net of swap payment. Interest expense without swap would be \$1,515,544.
- 2) Interest expense gross of federal government Build America Bond rebate of \$3,003,740.
- 3) Interest expense gross of federal government Build America Bond rebate of \$3,656,087.
- 4) Forecasted debt service based on 2013A refunding
- 5) Forecasted debt service based on 2013B refunding



Budget Financial Statements

The SMUD financial statements depict the expected results of operations (Income Statement) and cash position (Statement of Cash Flow) at the end of the 2023 budget year. The Income Statement also include "non-cash" expenses such as depreciation and amortization of capital and regulatory assets, which are not included in the 2023 Budget because funds were expended in prior budget years. SMUD's budget presents costs on a business unit basis, which is similar to Federal Energy Regulatory Commission (FERC) groupings.

The pro forma financial statements include the consolidated accounts and operations of SMUD. the Sacramento Financing Authority (SFA), the Northern California Gas Agency No. 1 (NCGA No. 1) and the Northern California Energy Authority (NCEA). SFA is a joint powers agency between SMUD and other entities which have issued debt to construct the Carson Cogeneration plant, Procter & Gamble Cogeneration plant, Campbell Soup Cogeneration plant and the Cosumnes Power Plant, respectively, and own and operate the plants. SMUD has entered into a Power Purchase Agreement with SFA to purchase all the plants' output and pay for JPA and plant costs. NCGA No.1 is a joint powers agency that has issued bonds and used the proceeds to prepay long-term natural gas supply contracts. SMUD has entered into an agreement to buy all the gas procured by NCGA No.1 but is not liable for repayment of the bonds in the event of a default. NCEA is a joint powers agency that has issued bonds and used the proceeds to prepay long-term commodity supply contracts. SMUD has entered into an agreement to buy all the commodities procured by NCEA but is not liable for repayment of the bonds in the event of a default. The relationship between SMUD, SFA, NCGA No.1 and NCEA meets the criteria established by the Governmental Accounting Standards Board (GASB) for consolidation in the controlling entity's financial statements.



Pro Forma Consolidated Income Statement

\$ Millions	2022 Forecast	2022 Budget	2023 Proposed
Operating Revenues:			
Sales to Customers	\$1,617.9	\$1,549.4	\$1,669.2
RSF & Other Deferrals	97.9	19.3	28.7
Other Electric Revenue	37.3	32.6	31.5
Total Operating Revenues	1,753.1	1,601.3	1,729.4
Operating Expenses:	.,	1,20110	-,
Commodities	750.0	440.7	485.0
Customer & Community Services	89.3	94.8	93.8
Energy Delivery & Operations	207.0	204.7	212.6
Zero Carbon Energy Solutions	143.2	163.9	163.6
Enterprise Strategy	12.9	16.9	15.6
Workforce, Diversity & Inclusion	9.5	7.6	15.9
Information Technology	29.2	36.5	39.3
Corporate Services	104.8	104.1	114.8
Enterprise	35.0	31.2	37.1
Public Good (including EAPR & MED Discount)	91.4	98.6	109.8
Total Operations	1,472.4	1,198.8	1,287.5
Depreciation, Depletion, and Amortization	223.7	222.6	246.1
Total Operating Expenses	1,696.1	1,421.4	1,533.6
Net Operating Income	\$57.1	\$179.9	\$195.8
Other (Income) Expenses:			
Interest Income and Other	(\$40.6)	(\$14.0)	(\$18.1)
Other Non Cash	(8.7)	(15.1)	(12.6)
Total Interest Income & Other	(49.3)	(29.1)	(30.7)
Interest Expense:			
Interest expense	95.0	92.6	95.5
Net Interest Charges	95.0	92.6	95.5
Change in Net Position - Net Income (Loss)	\$11.4	\$116.4	\$131.0
Interest Payments	\$109.3	\$110.1	\$107.7
Principal Payments	115.6	115.6	117.1
Total Fixed Costs	224.9	225.8	224.7
Cash Available to Pay Fixed Costs	\$338.3	\$435.7	\$466.8
Fixed Charge Coverage Ratio	1.50	1.93	2.08
Rate Stabilization Fund	\$3.5	\$34.0	\$3.5



The 2023 Budget will produce \$131 million of net income for SMUD; this is an increase of \$14.6 million from the 2022 Budget. The fixed charge coverage is planned at 2.08 times operating cash flow. Revenue from electric sales has increased compared to the 2022 Budget due to the impact of the 2023 rate increase and higher load growth.

The budgeted and actual fixed charge ratio and net income as shown on the Pro Forma Income Statement are primary measures of SMUD's financial performance which are monitored closely by the bond rating agencies in setting SMUD's bond rating. The fixed charge ratio is a measure of the number of times net operating cash flow before interest expense covers total cash debt service payments, including both interest and principal, for SMUD, the JPAs and SMUD's share of TANC debt service. Net income is the residual after deducting all expenses from revenues for the period.

For detailed descriptions of the financial statement line items please refer to the Supplemental Information section or to this link – Financial Statement Line Item Descriptions.



Pro Forma Statement of Cash Flows

\$ Millions	2023 Proposed
Operating Sources of Funds:	
Receipts from Customers	\$1,623.0
Other Electric Revenue	47.7
Total Operating Sources of Funds	1,670.7
Net Operating Expenses	763.8
Commodity Expenses	470.1
Total Operating Uses of Funds	1,233.8
Net Source of Funds from Operations	436.9
Proceeds from Debt Issuance	340.0
Commercial Paper Issuance	0.0
Total Financing Sources of Funds	340.0
Financing Uses of Funds:	
Capital Expenditures & Other Cash Payments	624.1
Net Loans	(0.2)
Principal Payments on Debt	113.0
Interest Payments on Debt	99.9
Total Financing Uses of Funds	836.8
Net (Use) of Funds from Financing	(496.8)
Investing Sources of Funds:	
Interest Income	12.8
Net Source of Funds from Investing	12.8
Net Use of Funds from 2023 Budget	(\$47.2)
Projected Unrestricted Cash Balance @ 1/1/23	\$496.4
Net Cash Outflow from 2023 Budget	(387.2)
New Debt & Commercial Paper Issue	340.0
Net Change in Debt Service Reserve Funds	0.0
Transfer from Unrestricted to Restricted	0.0
Projected Unrestricted Cash Balance @ 12/31/23	\$449.1



The 2023 Pro Forma Cash Flow Statement shows the budgeted sources and uses of cash and the projected year-end unrestricted cash balance for 2023. SMUD's current practice is to maintain unrestricted cash and Rate Stabilization Fund balances at a minimum of 150 days cash on hand, or approximately \$452 million. At the end of 2023, SMUD's unrestricted cash balance is projected to be \$449.1 million, in addition to the Rate Stabilization Fund balance of \$3.5 million. The Hydro Rate Stabilization Fund balance, which is expected to be \$31 million, is not included in this target minimum.

SMUD generates positive net cash flow from operations because of net income and non-cash expenses such as depreciation and amortization. In 2023, cash generated from operations is estimated to total approximately \$436.9 million. The primary uses of this cash are capital investments, scheduled debt principal repayments and interest payments. The 2023 Budget for capital investment totals \$625 million. Scheduled debt principal repayments in 2023 total \$111.2 million for SMUD and \$1.8 million for SFA (detail included in SFA Budget Documentation).

We currently maintain \$300 million in commercial paper capacity and a \$100 million line of credit. Any new money needs can be handled through short-term borrowing or issuing new long-term debt.



Business Unit Budgets

The following pages show the detailed budgets and organizational information for each Business Unit of SMUD.



Customer & Community Services

The Customer & Community Services budget includes all residential and commercial customerfocused services such as the Contact Center, retail client services and customer experiences. Also included are costs for billing, revenue assurance, and commercial development. Lastly, this budget includes support of the Community Energy Services (CCAs).

Segments & Work Processes

The <u>Customer Experience Delivery</u> segment develops and executes SMUD's Customer Experience Strategy. We leverage data analytics and customer insights to deliver high-touch positive experiences for our commercial, residential, special assistance and interconnection customers. We collaborate across SMUD to provide tools, insights, expertise, and recommendations to ensure the success of SMUD's 2030 Zero Carbon Plan.

The <u>Customer Operations</u> segment is SMUD's frontline organization that provides customer care services, which include processing transactions, lobby operations, self-service digital operations, as well as technical support, training, and process improvements to support these operations. This segment also provides services which include billing and payments, revenue assurance, field services, as well as technical support, training, and process improvements to support these operations.

The <u>Community Energy Services</u> segment is SMUD's retail organization that provides strategic and operational products and services in support of public power.

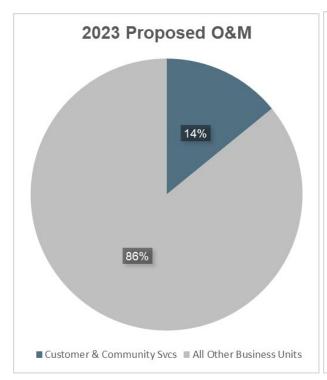
The <u>Commercial Development & Solutions</u> segment assists prospective businesses and developers, coordinating all touch points within SMUD. We act as a liaison to facilitate integration with other utility services to maximize our impact in the community.

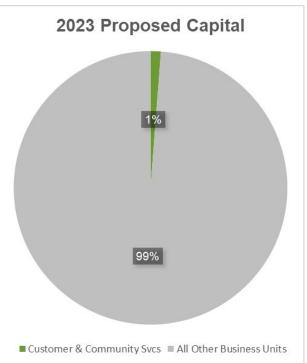
The <u>Business Performance & Optimization</u> segment supports operational excellence efforts, data analytics and reporting, and drives adoption of key performance metrics across Customer & Community Services. It also delivers high-quality, well-defined reports, dashboards and data sources that enable data-driven decisions optimizing work and operational excellence.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Customer & Community Services Business Unit represents for SMUD for each of the cost categories.







Customer & Community Services Budget Summary by Segment (\$000s)

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Segment by Funding Type	2022	2022	2023	\$ Change	% Change
	Forecast	Budget	Proposed	vs Budget	vs Budget
Customer Experience Delivery					
Customer Experience Delivery O&M Expense	\$7,249	\$6,870	\$5,958	(\$912)	-13%
Public Good Expense	6,521	7,661	8,216	(\$912) 555	7%
Total O&M Expenses	13,769	14,531	14,174	(357)	
Capital Expenditures	10,709	14,551	17,177	(557)	-270
Segment Total	13,769	14,531	14,174	(357)	-2%
Customer Operations	57.000	00 747	00.450	(0.504)	40/
O&M Expense	57,238	62,747	60,153	(2,594)	-4%
Public Good Expense				(0.504)	-
Total O&M Expenses	57,238	62,747	60,153	(2,594)	
Capital Expenditures	9,197	6,619	7,570	951	14% -2%
Segment Total	66,434	69,366	67,723	(1,643)	-2%
Community Energy Services					
O&M Expense	12,272	11,175	13,533	2,358	21%
Public Good Expense		-	-	-	-
Total O&M Expenses	12,272	11,175	13,533	2,358	21%
Capital Expenditures		-	-	-	-
Segment Total	12,272	11,175	13,533	2,358	21%
Commercial Development & Solutions					
O&M Expense	9,268	10,860	9,868	(992)	-9%
Public Good Expense	-	-	-	-	-
Total O&M Expenses	9,268	10,860	9,868	(992)	-9%
Capital Expenditures	-	-	-	-	-
Segment Total	9,268	10,860	9,868	(992)	-9%
Business Performance & Optimization					
O&M Expense	3,148	3,179	4,277	1,098	35%
Public Good Expense	-	-	-,	-,000	-
Total O&M Expenses	3,148	3,179	4,277	1,098	35%
Capital Expenditures	-	-	-,	-	-
Segment Total	3,148	3,179	4,277	1,098	35%
Customer & Community Services Busine	ss Unit				
O&M Expense	89,173	94,830	93,789	(1,042)	-1%
Public Good Expense	6,521	7,661	8,216	555	7%
O&M Revenue	108	- ,001		-	
Net O&M Expenses	95,802	102,491	102,005	(486)	0%
Capital Expenditures	9,197	6,619	7,570	951	14%
Capital Revenue	-,	-,	- ,	-	-
Net Capital Expenditures	9,197	6,619	7,570	951	14%
Total Business Unit Budget	\$104,999	\$109,110	\$109,574	\$464	0.4%
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The 2023 Proposed <u>O&M</u> Budget is lower than the 2022 Budget by (\$1.0M), or -1%. The main driver of the decrease is the shift of our billing and payment platform vendor costs to the Information Technology Business Unit. We continue to prioritize our residential and commercial customers and segments, including small and medium businesses.

The 2023 Proposed <u>Public Good</u> Budget is higher than the 2022 Budget by \$555K, or 7%. Our 2023 Proposed Budget remains focused on and in support of our low income and underserved communities with the addition of our newly implemented Community Impact Plan. This emphasizes our goal of offering a zero-carbon journey that ensures our most under-resourced customers reap the benefits of a clean energy future.

The 2023 Proposed <u>Capital</u> Budget is higher than the 2022 Budget by \$951K or 14%. The 2023 Proposed Budget reflects higher meter installation efforts due to the continued growth our region is experiencing.



Energy Delivery & Operations

The Energy Delivery & Operations budget includes the costs of generating electricity, delivering it to our customers and maintaining the ability to do so safely and reliably. Also, the cost of electrical transmission, line inspections, corrective and preventative maintenance, vegetation management, and underground cable work are included here. Lastly, this budget includes program management services for construction and other non-technology projects, transmission and distribution planning and operations, environmental, safety and real estate services.

Segments & Work Processes

The <u>Transmission Planning & Operations (TP&O)</u> segment develops short-term and long-term system plans for SMUD's transmission grid to meet load serving capability, reliability, and regulatory compliance requirements. TP&O manages and operates the assets which remotely control and monitor fuel to generation sources and SMUD's Extra High Voltage Transmission, Generation, and Gas Pipeline System to deliver electrical energy to SMUD's Distribution System. This segment also operates the Balancing Authority of Northern California (BANC) that includes transmission and generation facilities for WAPA, USBR, City of Roseville, City of Redding, Modesto Irrigation District, and the 500kV COTP, which stretches SMUD's operational control from the California-Oregon border to south of Modesto.

The <u>Distribution Planning & Operations</u> segment develops short-term and long-term plans for SMUD's distribution system to ensure safety, capacity, reliability and regulatory compliance requirements are achieved. It is also responsible for the safe and reliable operation of SMUD's distribution system to deliver energy to our customers.

The <u>Line Assets</u> segment includes all activities associated with design, modification, and installation of transmission and distribution lines, wildfire hardening and vegetation management; transmission and distribution system inspection; and prioritized system maintenance and improvement. This segment also includes design and installation of residential meters, service conductors, subdivision facilities, commercial, 3rd party attachments – industrial developments, overhead and underground line extensions, outdoor lighting, and traffic signals.

The <u>Substation</u>, <u>Telecom & Network</u> segment includes all activities associated with design, modification, and installation of transmission and distribution substations; network underground installation and maintenance; transmission and distribution substation system inspection; and prioritized system maintenance and improvement. This segment also includes design and installation of meters, the downtown network system, and telecommunication systems relaying critical substation information to the Power System Operations Team.

The <u>Strategic Services & Operations PMO</u> segment provides portfolio management, program and project execution, continuous business process and technology solutions. We deliver innovative solutions and provide business value by effectively managing the Operation PMO portfolio of projects and continuous improvement initiatives. We administer consistent results that reduce costs, increase efficiencies, and improve customer and stakeholder satisfaction.

This segment includes the Sacramento Power Academy which is a vital resource to SMUD and



the community. Building skills and growing careers by providing the best training to our employees from development to analysis and delivery. The Sacramento Power Academy manages training for all Energy Delivery & Operations and Power Generation, as well as manages all skilled trades apprenticeship programs which includes the twelve apprenticeship programs that are state and/or federally certified.

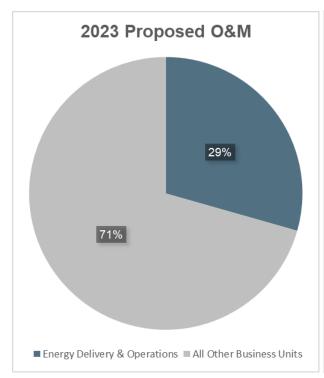
The <u>Environmental</u>, <u>Real Estate & Safety</u> segment provides environmental compliance; environmental stewardship; employee, contractor, and public safety; and real estate/land asset management services. This segment supports SMUD's business unit needs to achieve a zero-injury culture, a commitment to environmental leadership and the Clean Energy Vision, and value-added services.

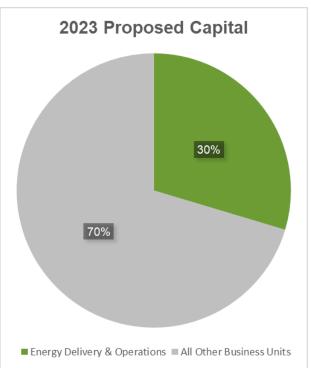
The <u>Operational Excellence</u> segment supports the Clean Energy Vision by developing and managing a framework to reduce cost, increase efficiency and drive a culture of continuous improvement across the company.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Energy Delivery & Operations Business Unit represents for SMUD for each of the cost categories.







Energy Delivery & Operations Budget Summary by Segment (\$000s)

Segment by Funding Type	2022	2022	2023	\$ Change	% Change
Segment by Funding Type	Forecast	Budget	Proposed	vs Budget	vs Budget
Transmission Planning & Operations					
O&M Expense	\$32,322	\$33,026	\$34,455	\$1,429	4%
Public Good Expense		-	-	-	
Total O&M Expenses	32,322	33,026	34,455	1,429	49
Capital Expenditures	1,737	2,700	2,398	(302)	-119
Segment Total	34,059	35,727	36,853	1,126	3%
Distribution Planning & Operations					
O&M Expense	21,620	22,916	21,584	(1,332)	-69
Public Good Expense		-	-	-	
Total O&M Expenses	21,620	22,916	21,584	(1,332)	-6°
Capital Expenditures	607	1,780	1,601	(179)	-109
Segment Total	22,227	24,696	23,184	(1,511)	-69
Line Assets					
O&M Expense	117,118	113,147	113,390	243	09
Public Good Expense		- 440 447	- 110 000	- 0.10	
Total O&M Expenses	117,118	113,147	113,390	243	09
Capital Expenditures	81,785	104,207	109,382	5,175	59
Segment Total	198,903	217,354	222,772	5,418	29
Substation, Telecom & Network	00.504	04.004	00.444	2 222	000
O&M Expense	23,524	21,281	28,111	6,830	320
Public Good Expense		- 04 004	- 20 444	- 0.000	200
Total O&M Expenses	23,524	21,281	28,111	6,830	329
Capital Expenditures Segment Total	66,399 89,924	75,403 96,683	66,256 94,366	(9,147) (2,317)	-129 -29
Strategic Services & PMO					
O&M Expense	5,299	6,921	8,828	1,907	289
Public Good Expense	-	-			20
Total O&M Expenses	5,299	6,921	8,828	1,907	280
Capital Expenditures	-	-		-,00.	
Segment Total	5,299	6,921	8,828	1,907	289
Environmental, Real Estate & Safety					
O&M Expense	4,543	6,077	4,844	(1,233)	-209
Public Good Expense	· -	, <u>-</u>	· -	-	
Total O&M Expenses	4,543	6,077	4,844	(1,233)	-20°
Capital Expenditures	9,211	8,776	5,285	(3,491)	-409
Segment Total	13,754	14,853	10,129	(4,724)	
Operational Excellence					
O&M Expense	1,340	1,287	1,386	99	89
Public Good Expense			-	-	
Total O&M Expenses Capital Expenditures	1,340	1,287	1,386	99	89
Segment Total	1,340	1,287	1,386	99	80
Energy Delivery & Operations Busines	ss Unit				
O&M Expense	205,767	204,655	212,598	7,943	49
Public Good Expense	-	-	-	-	
O&M Revenue	191	-	_	_	
Net O&M Expenses	205,958	204,655	212,598	7,943	40
Capital Expenditures	159,739	192,866	184,921	(7,945)	-40
Capital Revenue					
Net Capital Expenditures	159,739	192,866	184,921	(7,945)	-49
		\$397,520	\$397,519	(\$2)	0%



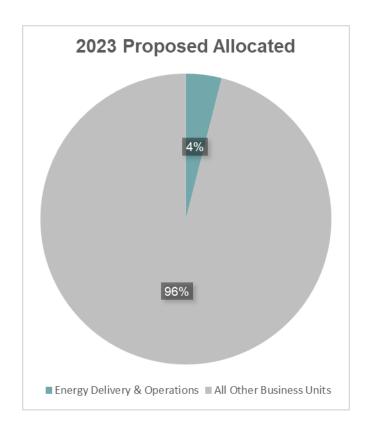
The 2023 Proposed <u>O&M</u> Budget is higher than the 2022 Budget by \$7.9M, or 4%. This is primarily driven by increases in materials, supplies and contract labor for our operations and maintenance work, along with additional labor cost associated with increased labor rates and field workforce hiring and development strategy.

The 2023 Proposed <u>Capital</u> Budget is lower than the 2022 Budget by (\$7.9M) or -4%. This is primarily due to the 2022 completion of various large projects for Substation modification and Substation Capacity such as Station G, Oselot Baroque, Del Paso E. Commerce 2nd Bank, and Franklin-Elk Grove Bank 2. Additional decreases in capital are due to the completion of the North City Substation environmental remediation. These decreases are partially offset by cost increases for materials and contract labor due to inflation.



Energy Delivery & Operations Allocated Budget Summary by Segment (\$000s)

Allocated expenditures are included in all SMUD Business Unit O&M and Capital line items. The Allocated Budget of this Business Unit is presented here for informational purposes only and is not additive to the previously presented budget amounts.



Segment and Funding Type	2022 Forecast	2022 Budget	2023 Proposed		% Change vs Budget
Environmental, Real Estate & Safety Allocated Expense	\$4,938	\$4,082	\$5,422	\$1,339	33%
Energy Delivery & Operations Business I	Init Total				

The 2023 Proposed <u>Allocated</u> Budget is higher than the 2022 Budget by \$1.3M, or 33%. This is primarily due to the expansion of the Contractor & Public Safety programs and SCORCH (Safely Conducted Observations Reduce Common Hazards).



Zero Carbon Energy Solutions

The Zero Carbon Energy Solutions budget includes the design, construction, maintenance, and transition of SMUD's power generation assets, the sale and procurement of energy resources and settlements of energy transactions, and customer program implementation. This consists of operating and maintaining SMUD's hydroelectric reservoirs and powerhouses, thermal and cogeneration power plants, gas pipeline, and renewable generation wind and solar resources. Also included is establishing and developing new business partnerships that align and support SMUD's 2030 zero carbon goal.

Segments & Work Processes

The <u>Power Generation</u> segment consists of the physical assets which provide natural gas and generate electrical power from hydro, thermal and renewable generation power sources and the employees who design, construct, operate, maintain, and manage those physical assets. Also included in the Power Generation segment is decommissioning, which is responsible for the monitoring of long-term fuel storage facilities.

The <u>Advanced Energy Solutions</u> (AES) segment is responsible for research and development, as well as planning and implementation delivery of residential and commercial programs and products in support of SMUD's 2030 Zero Carbon Plan goals. Areas of focus include building energy efficiency and electrification, green pricing, electric vehicles, load flexibility, energy storage, and thermal transition.

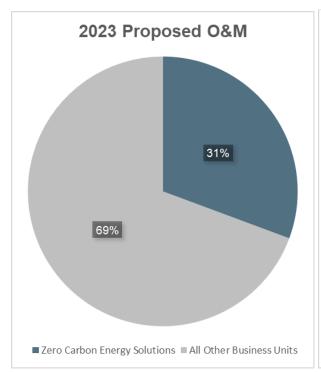
The <u>Commodity Procurement & Sales</u> segment is responsible for the development, procurement, and administration of long, medium, and short-term power, electric transmission, and natural gas contracts. This segment also conducts the associated day-to-day management of and trading activities for resources required to optimize renewable contracts and maintain adequate, cost-effective supplies of natural gas to thermal generation units as well as electrical energy to SMUD customers. Finally, this segment participates in various regulatory forums to protect SMUD's resources and interests.

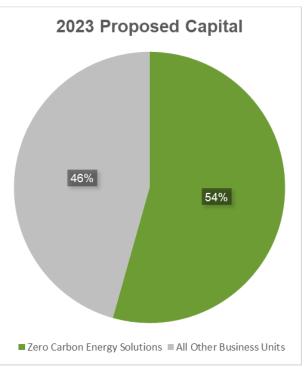
The <u>New Business Development</u> segment provides strategy, business planning and commercialization services for substantial new net revenue generation and innovation opportunities across the enterprise. We do this by providing institutional business processes and competencies necessary to guide SMUD's optimal use of its assets and expertise to generate new net revenue. The program also provides for an enterprise-wide view of all new net revenue opportunities so that the Executive Team has better visibility into where SMUD is committing its resources and can optimize potential for revenue generation.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Zero Carbon Energy Solutions Business Unit represents for SMUD for each of the cost categories.







Zero Carbon Energy Solutions Budget Summary by Segment (\$000s)

Segment by Funding Type	2022	2022 Budget	2023	\$ Change vs Budget	% Change
	Forecast	Budget	Proposed	vs budget	vs Budget
Power Generation					
O&M Expense	\$100,601	\$106,581	\$105,096	(\$1,485)	-1%
Public Good Expense	\$ 100,001	φ100,561	\$105,090	(φ1,465)	-170
Total O&M Expenses	100,601	106,581	105,096	(1,485)	-1%
Capital Expenditures	126,829	105,309	336,690	231,381	220%
Segment Total	227,430	211,890	441,786	229,896	108%
Segment rotal	221,430	211,090	441,700	229,090	100 /0
Advanced Energy Solutions					
O&M Expense	22,089	36,446	34,014	(2,432)	-7%
Public Good Expense	47,343	51,776	62,461	10,685	21%
Total O&M Expenses	69,432	88,222	96,474	8,252	9%
Capital Expenditures	246	96	133	37	39%
Segment Total	69,679	88,318	96,607	8,290	9%
Commodity, Procurement & Sales					
O&M Expense	13,162	14,139	15,087	948	7%
Public Good Expense	10, 102	14,109	10,007	940	7 70
Total O&M Expenses	13,162	14,139	15,087	948	7%
Capital Expenditures	2,117	3,000	3,400	400	13%
Segment Total	15,279	17,139	18,487	1,348	8%
Segment rotal	13,273	17,133	10,407	1,540	070
New Business Development					
O&M Expense	2,029	1,969	4,968	2,998	152%
Public Good Expense		-	-	-	_
Total O&M Expenses	2,029	1,969	4,968	2,998	152%
Capital Expenditures		-	-	-	<u> </u>
Segment Total	2,029	1,969	4,968	2,998	152%
Zero Carbon Energy Solutions Business	llnit				
O&M Expense	137,881	159,135	159,165	29	0%
Public Good Expense	47,343	51,776	62,461	10,685	21%
O&M Revenue	(25)	(25)	(25)	10,000	0%
Net O&M Expenses	185,199	210,886	221,600	10,714	5%
Capital Expenditures	129,192	108,405	340,223	231,818	214%
Capital Revenue	(546)	(1,106)	(839)	267	24%
Net Capital Expenditures	128,646	107,298	339,384	232,085	216%
JPA Interest Expense	4,773	4,773	4,441	(332)	-7%
Total Business Unit Budget	\$318,619	\$322,958	\$565,424	\$242,466	75%
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The 2023 Proposed <u>O&M</u> Budget is higher than the 2022 Budget by \$29K, or 0%. The priority is still 2030 Clean Energy goals with efforts in Electrification, Load Flexibility (NextGen ACLM) and New Business Development (Grant Strategy).



The 2023 Proposed <u>Public Good</u> Budget is higher than the 2022 Budget by \$10.7M, or 21%. Key efforts in 2023 are focused on expanding our Building Electrification programs, Research and Development projects, including ESS Battery Flow, GM Vehicle to Grid, and Light Duty V2X pilot, and our newly implemented Community Impact Plan. This emphasizes our goal of offering a zero-carbon journey that ensures our most under-resourced customers reap the benefits of a clean energy future.

The 2023 Proposed <u>Capital</u> Budget is higher than the 2022 Budget by \$231.8M or 214%. The significant increase is due to 2 key projects for the Zero Carbon Plan - the Solano 4 Wind Project and the Country Acres Solar + Storage Project within the Power Generation segment. Both projects are key to us meeting the RPS requirement.



Enterprise Strategy Business Unit

The Energy Strategy budget includes enterprise strategic planning and prioritization, resource market strategy and planning, customer, and grid strategy support of DERs, integrated distributed resources, low carbon fuel standard work, Zero Carbon and R&D strategies. Also, included are revenue strategy functions like load forecasting and rates and pricing as well as enterprise prioritization.

Segments & Work Processes

The <u>Resource Strategy</u> segment provides the organization with strategic, long-term integrated resource planning and market strategy to help SMUD achieve our long-term greenhouse gas goals, meet all state resource and environmental related mandates, expand renewable generation, and maintain a reliable electric system at reasonable rates.

The <u>Revenue Strategy</u> segment is responsible for development of customer pricing of retail energy and load forecasting. Pricing includes development of a rates roadmap, costing and marginal cost studies, rates reports, public rate proceedings, rate implementation support, interpretation of rates and rules, revenue forecasts and analysis of rate impacts. Load Forecasting includes research of customer class energy use, and development of system energy, sales energy and customer forecasts used for budgeting and planning by various departments. The team also maintains a data analytics database used across SMUD, as well as completes a variety of other studies and regulatory filing reports.

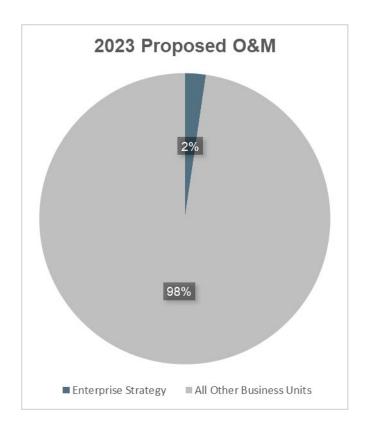
The <u>Customer & Grid Strategy</u> segment is responsible for the development of the strategic roadmap for distributed energy resources, the research and demonstration of innovative and emerging technologies, and the coordination of their execution. This includes developing and launching pilots to determine feasibility, infrastructure, and resource investments at scale; developing business cases and ROI for integration into production; and working with key stakeholders to transition to implementation.

The <u>Enterprise Prioritization</u> segment helps to identify and facilitate strategic decisions that have a material impact on our success in meeting our long-term strategic goals of Zero Carbon, World-Class Reliability, Affordable Rates, and Inclusion. The team supports enterprise-wide planning and strategy by providing a coordinated process and methodologies for prioritizing projects and programs across all business areas. The team works closely with business leaders across SMUD and the executive team.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the chart what proportion the Energy Strategy Business Unit represents for SMUD for each of the cost categories.





Enterprise Strategy Budget Summary by Segment (\$000s)

Segment by Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Resource Strategy					
O&M Expense Public Good Expense	\$3,946	\$4,889	\$4,548	(\$341)	-7% -
Total O&M Expenses Capital Expenditures	3,946	4,889	4,548	(341)	-7%
Segment Total	3,946	4,889	4,548	(341)	-7%
Revenue Strategy					
O&M Expense Public Good Expense	4,072	4,286 -	4,844 -	558 -	13%
Total O&M Expenses Capital Expenditures	4,072	4,286	4,844	558	13%
Segment Total	4,072	4,286	4,844	558	13%
Customer & Grid Strategy					
O&M Expense	3,901	5,486	4,826	(660)	-12%
Public Good Expense	928	609	1,193	584	96%
Total O&M Expenses	4,829	6,095	6,019	(76)	-1%
Capital Expenditures Segment Total	4,829	6,095	6,019	(76)	-1%
Enterprise Prioritization					
O&M Expense	1,030	2,200	1,413	(787)	-36%
Public Good Expense Total O&M Expenses	1,030	2,200	1,413	(787)	-36%
Capital Expenditures		-	-		-
Segment Total	1,030	2,200	1,413	(787)	-36%
Enterprise Strategy Business Unit					
O&M Expense	12,950	16,861	15,631	(1,230)	-7%
Public Good Expense	928	609	1,193	584	96%
O&M Revenue	- 10.077	47.470	-	- (0.10)	-
Net O&M Expenses	13,877	17,470	16,824	(646)	-4%
Capital Expenditures Capital Revenue	-	-	-	-	-
Net Capital Expenditures			<u> </u>		
Total Business Unit Budget	\$13,877	\$17,470	\$16,824	(\$646)	-4%

The 2023 Proposed O&M Budget is lower than the 2022 Budget by (\$1.2M) or -7%. This is driven mostly by a shift from O&M to Public Good to launch various customer facing programs in the new year. While the Revenue Strategy segment is increasing due to 2023 Rate Case planning and outreach, it is offset by a reduction in Enterprise Prioritization due to a reduction in budgeted positions as the new team was right sized within 2022.



The 2023 Proposed <u>Public Good</u> Budget is higher than the 2022 Budget by \$584K, or 96%. The increase is due to a shift from O&M to Public Good to launch various customer facing programs in the new year such as the deployment of Zero Carbon Programs, such as the School Solar Program.



Information Technology Business Unit

The Information Technology budget includes costs for the delivery and support of information technology systems, applications, and hardware. Also included are the costs associated with maintaining and ensuring IT system availability, providing a framework to safeguard information, planning, and setting the enterprise technology strategy, and supporting the enterprise's technology needs.

Segments & Work Processes

The <u>Applications</u> segment is responsible for the delivery and support of the portfolio of new information technology investments in addition to providing application and database administration and maintenance support for all deployed systems, along with applications/system security and operations services.

The <u>Infrastructure and Operations</u> segment provides corporate data/voice network, server/storage infrastructure, corporate email, and system administration services, support center, endpoint computing, computer operations, data center administration, infrastructure change management, and asset management.

The <u>Strategy & Innovation</u> segment has responsibility for management of technology infrastructure from idea through delivery. The Innovation function supports SMUD-wide initiatives and a culture where innovative ideas are nurtured and developed. The segment also collaborates closely with all business units on enterprise-wide technology road maps, project management and quality assurance functions.

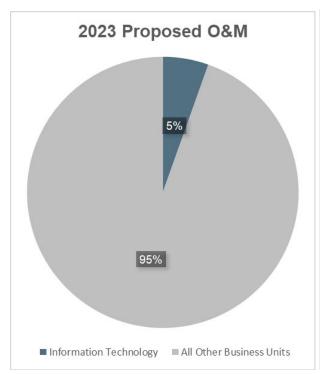
The <u>Strategic Initiatives</u> segment has responsibility for the development, oversight and implementation of technology programs and projects. Program responsibilities include data governance, license and vendor management and enterprise architecture. These support SMUD's vision for short- and long-term plans and ensure the best return on technology investments. This segment is also responsible for major enterprise initiatives like ADMS, DERMS, Network Transformation, Analytics, Data Governance, and technologies to support new business endeavors.

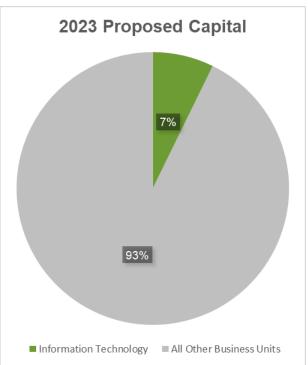
The <u>Cybersecurity</u> segment acts as cybersecurity and privacy risk advisors to continually improve SMUD's cyber risk posture and protect our people, processes, and technology through an organization-wide risk management approach.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Information Technology Business Unit represents for SMUD for each of the cost categories.







Information Technology Budget Summary by Segment (\$000s)

Segment by Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Applications					
O&M Expense	19,665	21,237	27,574	6,337	30%
Public Good Expense	- 40.005	- 04 007	- 07.574	- 0.007	- 200/
Total O&M Expenses Capital Expenditures	19,665 14,927	21,237 16,161	27,574 21,000	6,337 4,839	30% 30%
Segment Total	34,592	37,399	48,574	11,176	30%
Infrastructure & Operations					
O&M Expense	1,303	1,758	912	(846)	-48%
Public Good Expense	-	-	-	-	-
Total O&M Expenses	1,303	1,758	912	(846)	-48%
Capital Expenditures	2,597	3,219	5,339	2,121	66%
Segment Total	3,900	4,977	6,252	1,275	26%
Strategy & Innovation					
O&M Expense	\$1,711	\$4,960	\$2,204	(\$2,756)	-56%
Public Good Expense			-	<u> </u>	
Total O&M Expenses	1,711	4,960	2,204	(2,756)	-56%
Capital Expenditures		-	-	- (2 ===)	-
Segment Total	1,711	4,960	2,204	(2,756)	-56%
Strategic Initiatives				(- n)	
O&M Expense	4,433	6,126	6,062	(64)	-1%
Public Good Expense	4 400	- 0.400	- 0.000	- (0.4)	- 40/
Total O&M Expenses	4,433	6,126	6,062	(64)	-1%
Capital Expenditures	9,792	17,070	18,317	1,247	7% 5%
Segment Total	14,224	23,196	24,379	1,183	5%
Cybersecurity O&M Expense	2,083	2,394	2,564	170	7%
Public Good Expense	2,003	2,394	2,304	170	7 70
Total O&M Expenses	2,083	2,394	2,564	170	7%
Capital Expenditures	700	795	604	(191)	-24%
Segment Total	2,784	3,189	3,168	(21)	-1%
Information Technology Business Unit					
O&M Expense	29,195	36,476	39,316	2,840	8%
Public Good Expense	-	-	-	-	-
O&M Revenue		-	-	-	-
Net O&M Expenses	29,195	36,476	39,316	2,840	8%
Capital Expenditures	28,015	37,245	45,261	8,016	22%
 Capital Revenue Net Capital Expenditures 	28,015	37,245	45,261	8,016	22%
Total Business Unit Budget	\$57,210	\$73,721	\$84,577	\$10,857	15%
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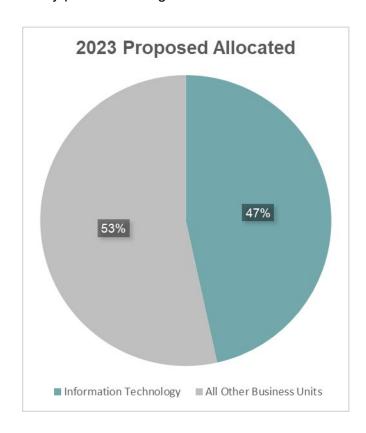
The 2023 Proposed O&M Budget is higher than the 2022 Budget by \$2.8M, or 8%. The main driver of the increase is higher project costs and the shift of billing and payment platform vendor costs from Customer & Community Services. Notable 2023 project efforts include a new records evaluation program and continued work on consolidating customer-facing self-service applications into a single customer technology platform. These increases are partially offset by the transfer of the Innovation team to the Zero Carbon Energy Solutions business unit, plus a resizing of the Information Technology Innovation budget, used for innovative technology pilots supporting all of SMUD.

The 2023 Proposed <u>Capital</u> Budget is higher than the 2022 Budget by \$8.0M or 22%. This is due to an increased volume of capital technology projects. Major projects in the 2023 Proposed Budget are a long-term planning tool for Energy Delivery and Operations, pilot work on next generation meters, Phase 2 of the Vegetation Work Management Solution, technologies for electronic visual inspection of substations, and an upgrade to the Meter Data Management System (MDMS). Other projects include the integration of the Advanced Distribution Management System (ADMS) with the Outage Management System (OMS) and with Distributed Energy Resources (DERs), along with ongoing work to increase fiber-optic network capacity. The 2023 Proposed Budget also includes increased funding for lifecycle work, such as the annual replacement for network/infrastructure hardware.



Information Technology Allocated Budget Summary by Segment (\$000s)

Allocated expenditures are included in all SMUD Business Unit O&M and Capital line items. The Allocated Budget of this Business Unit is presented here for informational purposes only and is not additive to the previously presented budget amounts.



Segment and Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Applications Allocated Expense	23,520	24,532	21,969	(2,563)	-10%
Infrastructure & Operations Allocated Expense	18,881	18,757	19,571	814	4%
Strategic Initiatives Allocated Expense	\$12,911	\$13,992	\$14,114	\$123	1%
Cybersecurity Allocated Expense Technology Business Unit Total	6,998	8,151	8,110	(40)	0%
Total Allocated Expense	\$62,310	\$65,432	\$63,765	(\$1,667)	-3%



The 2023 Proposed <u>Allocated</u> Budget is lower than the 2022 Budget by (\$1.7M), or -3%. The decrease is driven by labor costs shifting to capital projects. This is partially offset by increased software license, maintenance, and support costs. The Strategic Initiatives segment is higher due to increased labor costs to support Operating Technology Network and Advanced Distribution Management System infrastructures.



Workforce, Diversity & Inclusion

The Workforce, Diversity & Inclusion budget includes the costs of employee services such as talent management, benefits management, learning and development programs as well as work for developing and implementing strategies and initiatives to establish SMUD as a diverse and inclusive employer. Also included are sustainable communities' initiatives and programs.

Segments & Work Processes

The <u>People Services & Strategies</u> segment provides services, programs, and proactive solutions for SMUD's recruiting, benefits, performance, policies, employee relations and wellness programs to create an inclusive environment where SMUD employees thrive and do their best.

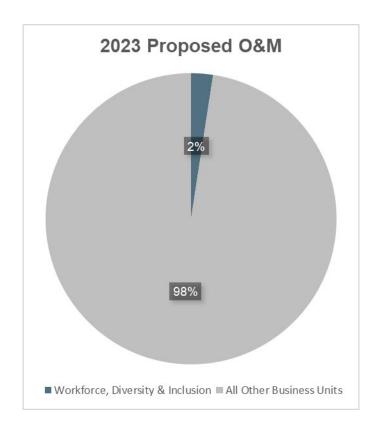
The <u>Diversity</u>, <u>Equity</u> and <u>Inclusion</u> segment serves as a catalyst for change focused on embedding diversity, equity, and inclusion into all SMUD's operations. The segment develops and implements strategies, initiatives, and programs to establish SMUD as a diverse and inclusive employer, and position SMUD as a key player in the community to achieve equity for those it serves.

<u>The Sustainable Communities</u> segment is committed to building thriving and equitable neighborhood outcomes through continued strategic partnerships, sponsorships, education, outreach, and support for small business. We see ourselves as a convener both internally and externally, focused on leveraging collective impact. By using data to target disparity gaps we work with internal and external partners to execute on SMUD's mission to deliver energy, health, housing, transportation, education, workforce, and economic development solutions to ensure that all communities can truly have the best quality of life in our region.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Workforce, Diversity and Inclusion Business Unit represents for SMUD for each of the cost categories.





Workforce, Diversity & Inclusion Budget Summary by Segment (\$000s)

Segment by Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
People Services & Strategies					
O&M Expense	\$2,976	\$1,516	\$6,233	\$4,716	311%
Public Good Expense		-	-	-	-
Total O&M Expenses	2,976	1,516	6,233	4,716	311%
Capital Expenditures		-	-	-	-
Segment Total	2,976	1,516	6,233	4,716	311%
Diversity, Equity & Inclusion					
O&M Expense	-	-	-	-	-
Public Good Expense	-	-	-	-	-
Total O&M Expenses	_	-	-	-	-
Capital Expenditures		-	-	-	-
Segment Total	-	-	-	-	-
Sustainable Communities Initiatives					
O&M Expense	6,477	6,049	9,648	3,598	59%
Public Good Expense	1,775	1,615	1,667	51	3%
Total O&M Expenses	8,252	7,665	11,315	3,650	48%
Capital Expenditures		-	-	-	-
Segment Total	8,252	7,665	11,315	3,650	48%
Workforce, Diversity & Inclusion Busines	s Unit				
O&M Expense	9,453	7,566	15,881	8,315	110%
Public Good Expense	1,775	1,615	1,667	51	3%
O&M Revenue	_	-	-	-	-
Net O&M Expenses	11,228	9,181	17,547	8,366	91%
Capital Expenditures	-	-	-	-	-
Capital Revenue		-	-	-	-
Net Capital Expenditures		_	-		_
Total Business Unit Budget	\$11,228	\$9,181	\$17,547	\$8,366	91%

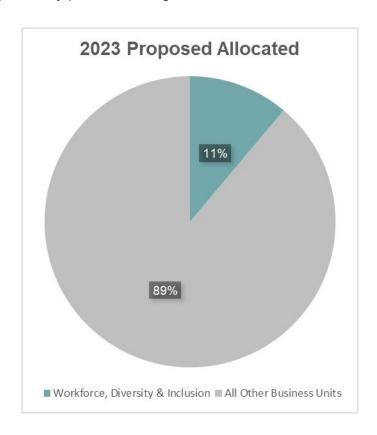
The 2023 Proposed <u>O&M</u> Budget is higher than the 2022 Budget by \$8.3M, or 110%. This is driven by increases for the Talent Technology Transformation (T3) project Phase 2 delivery, Community Impact Plan programs, a shift of labor resources to staff the Core PS&S Analytics Team, and the launch of the Sustainable Communities Regional Workforce Development program.

The 2023 Proposed <u>Public Good</u> Budget is higher than the 2022 Budget by \$51K, or 3%. There is no significant change year to year.



Workforce, Diversity & Inclusion Allocated Budget Summary by Segment (\$000s)

Allocated expenditures are included in all SMUD Business Unit O&M and Capital line items. The Allocated Budget of this Business Unit is presented here for informational purposes only and is not additive to the previously presented budget amounts.



Segment and Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget		
People Services & Strategies	\$10.502	¢11 E27	\$12.527	\$1.000	9%		
Allocated Expense Diversity, Equity & Inclusion	\$10,502	\$11,527	φ12,52 <i>1</i>	\$1,000	970		
Allocated Expense	1,291	1,697	2,725	1,028	61%		
Sustainable Communities Initiatives Allocated Expense	-	-	-	-	-		
Workforce, Diversity & Inclusion Business Unit Total							
Total Allocated Expense	\$11,792	\$13,224	\$15,252	\$2,028	15%		



The 2023 Proposed <u>Allocated</u> Budget is higher than the 2022 Budget by \$2.0M, or 15%. This is mainly driven by an increase to fund the 2023 SMUD Pay Equity Study, an increase in Inclusion Services in support of the 2023 SMUD Diversity and Evaluation survey, and an increase in Talent Management due to student intern additions. This is partially offset by a decrease in Corporate Training due to a shift in staff to support the T3 Project Phase 2 deployment.



Corporate Business Unit

The Corporate budget includes the costs associated with corporate governance such as executive management and internal audit; strategic and finance functions like accounting, treasury, financial planning, and enterprise performance; and enterprise services such as procurement, warehouse, vehicle fleet operations, facilities operations and maintenance, and communications, marketing, and community relations. Also included are legal functions including legislative, regulatory, government affairs, corporate legal and records management, as well as ensuring adherence to all industry reliability and compliance standards and requirements.

Segments & Work Processes

The <u>Governance</u> segment is responsible for the planning, organizing, staffing, leading/engaging, and controlling/monitoring of overall activities to ensure that SMUD goals are achieved.

The <u>Finance</u> segment coordinates the development and reporting of strategic and operational plans, budgets, financial statements, and performance metrics for SMUD and JPAs. This segment also manages insurance programs and funding requirements, monitors enterprise-wide risk exposures, industry and market power issues, and updates business and economic forecasts.

The <u>Legal</u>, <u>Government Affairs & Reliability Compliance</u> segment has the responsibility for all legal matters to which SMUD is a party or to which it is legally interested, and is responsible for enterprise records, management, and coordination regarding federal and state regulatory requirements, legislative initiatives and governmental policies, local and regional ordinances and policies and compliance filings to meet mandatory reliability standards. This segment is also monitoring, lobbying, and impacting state and federal legislative and regulatory proposals, coordinating internally and externally to assure the adequacy of controls, developing, and tracking compliance programs, and advancing laws and regulations that allow the greatest innovation and flexibility for SMUD.

The <u>Facilities</u>, <u>Security & Emergency Operations</u> segment provides operation and maintenance services for SMUD grounds and facilities. The segment also provides essential fire, security, emergency preparedness and business continuity services for SMUD.

The <u>Procurement, Warehouse & Fleet</u> segment provides fleet equipment and services, warehousing and logistics support, and contracting solutions that support all other areas of SMUD. The segment is primarily focused on providing safe and reliable resources with environmental sustainability, community focused, and cost-effective outcomes.

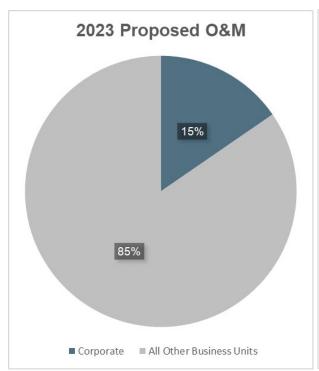
The <u>Communications</u>, <u>Marketing & Community Relations</u> segment promotes the adoption of the SMUD brand and increases awareness of programs, services, and value to the community through marketing, market research, community engagement, digital communication channels and image production and postal services.

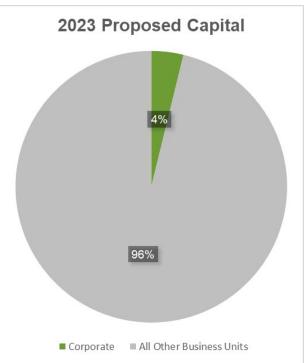
The <u>Enterprise Affairs</u> segment houses enterprise-level efforts including the Hazard Mitigation Program and other miscellaneous items.



Business Unit Budget Summary

The following section includes the budget report for the Business Unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Corporate Business Unit represents for SMUD for each of the cost categories.







Corporate Budget Summary by Segment (\$000s)

2000 2000 4.01 8/ 01							
Segment by Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget		
Governance							
O&M Expense	\$12,688	\$11,413	\$12,929	\$1,516	13%		
Public Good Expense	Ψ12,000	Ψ11,410	Ψ12,525	Ψ1,010	-		
Total O&M Expenses	12,688	11,413	12,929	1,516	13%		
Capital Expenditures	· -			· -	-		
Segment Total	12,688	11,413	12,929	1,516	13%		
Finance							
O&M Expense	43,956	44,047	49,207	5,160	12%		
Public Good Expense	-	-	-	-	-		
Total O&M Expenses	43,956	44,047	49,207	5,160	12%		
Capital Expenditures	-	-	-	-			
Segment Total	43,956	44,047	49,207	5,160	12%		
Legal, Gov't Affairs & Reliability Compliance							
O&M Expense	12,766	13,802	14,420	618	4%		
Public Good Expense	-	-	-	-	-		
Total O&M Expenses	12,766	13,802	14,420	618	4%		
Capital Expenditures	-	-	-	-	-		
Segment Total	12,766	13,802	14,420	618	4%		
Facilities, Security & Emergency Ops							
O&M Expense	7,918	6,710	9,098	2,388	36%		
Public Good Expense	-	-	-	-	-		
Total O&M Expenses	7,918	6,710	9,098	2,388	36%		
Capital Expenditures	17,935	17,061	14,474	(2,587)	-15%		
Segment Total	25,852	23,771	23,572	(199)	-1%		
Procurement, Warehouse & Fleet							
O&M Expense	1,657	1,760	1,779	19	1%		
Public Good Expense	-	-	-	-			
Total O&M Expenses	1,657	1,760	1,779	19	1%		
Capital Expenditures	9,268	12,716	9,323	(3,392)			
Segment Total	10,925	14,475	11,102	(3,373)	-23%		
Communications, Marketing & Community Rel							
O&M Expense	24,121	26,123	26,902	779	3%		
Public Good Expense	1,096	1,924	1,922	(1)			
Total O&M Expenses	25,217	28,047	28,824	778	3%		
Capital Expenditures Segment Total	25,217	28,047	28,824	778	3%		
Jeginent rotal	20,217	20,047	20,024	770	370		
Enterprise Affairs	4 700	050	505	054	4040/		
O&M Expense	1,706	252	505	254	101%		
Public Good Expense	4 700		-	- 054	4040/		
Total O&M Expenses	1,706	252	505	254	101%		
Capital Expenditures Segment Total	1,706	252	505	254	101%		
-	,						
Corporate Business Unit	104.040	104 400	444.000	40.704	400/		
O&M Expense Public Good Expense	104,812	104,106	114,839	10,734	10%		
·	1,096	1,924	1,922	(1)	0%		
O&M Revenue Applied to SMUD Capital & Public Good	(42) (3.840)	(4,955)	(5,497)	(542)	- 11%		
Net O&M Expenses	(3,840) 102,025	101,074	111,265	10,191	10%		
Capital Expenditures	27,203	29,777	23,798	(5,979)			
Capital Experiences			20,130	(0,019)	-2070		
Net Capital Expenditures	27,203	29,777	23,798	(5,979)	-20%		
Total Business Unit Budget	\$129,228	\$130,851	\$135,062	\$4,212	3%		
· · · · · · · · · · · · · · · · · · ·	, -,	,	,	. , =			



The 2023 Proposed <u>O&M</u> Budget is higher than the 2022 Budget by \$10.7M, or 10%. This is driven primarily by an increase in insurance premiums, a shifting of staff expense from Enterprise BU to Corporate, Facility Project planning for the new Power Control Center building design, additional outside legal costs, and new funding for the Community Impact Plan.

The 2023 Proposed <u>Public Good</u> Budget is lower than the 2022 Budget by (\$1K), or 0%. There is no significant change year to year.

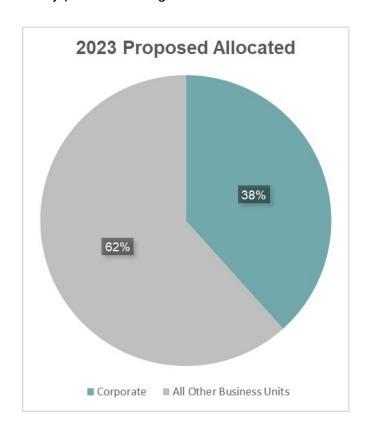
The Applied to SMUD Capital & Public Good line on the report above indicates the amount that FERC allows of administrative and general expenses to be allocated to capital and public good work processes. SMUD has chosen a portion of Treasury and Risk Management (including Insurance) as the base of this allocation. Therefore, the allocation applied to other Business Units is shown in the report above to avoid duplication of overall O&M dollars.

The 2023 Proposed <u>Capital</u> Budget is lower than the 2022 Budget by (\$6.0M), or -20%. This is driven by fewer Fleet purchases due to supply chain constraints, fewer Facilities projects to plan and execute and the completion of more costly projects in 2022. These projects include SMUD HQ Site Civil work, the Child Care Center Tenant Improvements and PSO Console Replacement work.



Corporate Allocated Budget Summary by Segment (\$000s)

Allocated expenditures are included in all SMUD Business Unit O&M and Capital line items. The Allocated Budget of this Business Unit is presented here for informational purposes only and is not additive to the previously presented budget amounts.



Segment and Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
Facilities, Security & Emergency Ops Allocated Expense	21,940	24,871	24,548	(324)	-1%
Procurement, Warehouse & Fleet Allocated Expense	26,298	23,993	26,447	2,454	10%
Communications, Marketing & Community Re Allocated Expense	lations \$1,468	\$1,499	\$1,558	\$58	4%
Corporate Business Unit Total Total Allocated Expense	\$49,707	\$50,363	\$52,552	\$2,189	4%



The 2023 Proposed <u>Allocated</u> Budget is higher than the 2022 Budget by \$2.2M, or 4%. This increase is driven primarily by an increase in fuel costs due to pricing and an increase in warehouse material purchase pricing due to supply chain constraints. This is partially offset by a reduction in Procurement labor and vendor support costs.

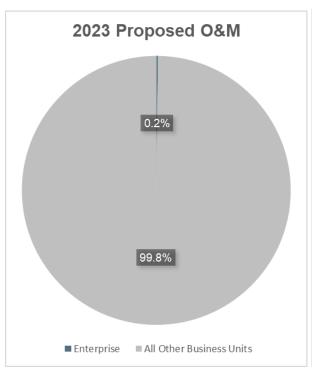


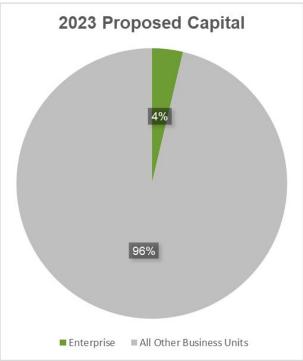
Enterprise Business Unit

The Enterprise budget includes corporate contingency, claims, reserves, settlements, and other company-wide special items. Also included is the cost of worker's compensation and other post-employment benefits.

Business Unit Budget Summary

The following section includes the budget report for the business unit presented by its segments and by the cost categories. Additionally, you can see from the charts what proportion the Enterprise Business Unit represents for SMUD for each of the cost categories.







Enterprise Budget Summary by Segment (\$000s)

Segment by Funding Type	2022 Forecast	2022 Budget	2023 Proposed	\$ Change vs Budget	% Change vs Budget
General					
O&M Expense	\$12,448	\$1,515	\$1,519	\$4	0%
Public Good Expense	15	-	-	· <u>-</u>	-
Total O&M Expenses	12,463	1,515	1,519	4	0%
Capital Expenditures	-	-	8,152	8,152	100%
Segment Total	12,463	1,515	9,671	8,156	538%
Contingency					
O&M Expense	-	(10,699)	-	10,699	-100%
Public Good Expense	-	-	-	-	-
Total O&M Expenses	-	(10,699)	-	10,699	-100%
Capital Expenditures	-	(15,000)	15,000	30,000	200%
Segment Total	-	(25,699)	15,000	40,699	158%
Enterprise Business Unit					
O&M Expense	12,448	(9,184)	1,519	10,704	117%
Public Good Expense	15	-	-	-	-
O&M Revenue	-	-	-	-	-
Net O&M Expenses	12,463	(9,184)	1,519	10,704	117%
Capital Expenditures	-	(15,000)	23,152	38,152	254%
Capital Revenue	-	-	-	-	-
Net Capital Expenditures	-	(15,000)	23,152	38,152	254%
Total Business Unit Budget	\$12,463	(\$24,184)	\$24,671	\$48,855	202%

The 2023 Proposed O&M Budget is higher than the 2022 Budget by \$10.7M, or 117%. This Business Unit houses enterprise level costs for Contingency, Other Employment Benefits, and General/Miscellaneous items such as Claims Administration. The increase is due to planning a credit amount for Operational Excellence related items in 2022 that is not being carried forward in 2023 since any Operational Excellence savings are now embedded in the individual Business Unit Budgets.

The 2023 Proposed <u>Capital</u> Budget is higher than the 2022 Budget by \$38.2M, or 254%. This represents a shift in methodology for capital reserve planning. In 2022 we planned a credit of \$15M to anticipate slippage in capital costs. In 2023 we are moving back to our more conservative methodology of planning our normal capital reserve of \$15M. There is also \$8.2M planned for the interconnection fee as part of the Coyote Creek project.



Supplemental Information

- 1. Power Supply Details
 - a. Power Supply Assumptions
 - b. Energy Sales & Requirements
 - c. Energy Requirements
 - d. SMUD Generation Sources
 - e. Purchased Power
- 2. Cost Categories
- 3. Cost Category Descriptions
- 4. Financial Statement Line Item Descriptions
- 5. Performance Metrics
- 6. Resolutions



Power Supply & Requirements

Power Supply Assumptions

The 2030 Zero Carbon Plan is the basis for the operating assumptions for the 2023 Budget. Electricity and natural gas prices are forecasted to be higher than what was projected in the 2022 Budget. The Upper American River Project (UARP) generation will be higher due to fewer planned outages, renewable generation is expected to be higher than the 2022 budget and thermal generation is expected to be lower.

Energy Sales & Requirements

Total expected supply requirements are forecasted to be approximately 3% higher than the 2022 budget. Our expected retail energy sales to customers are projected to increase and our expected system peak load is forecasted to decrease.

The following tables provide additional information regarding generation, purchased power and market transactions

	2022	2023	Change vs
Description	Budget	Proposed	Budget
Expected System Peak (MW)	2,874	2,806	(68)
Expected Retail Energy Sales (GWh)	10,166	10,458	292
Expected Wholesale Sales, Distribution & Transmission Losses (GWh)	444	452	8
Expected Supply Requirements (GWh)	10,610	10,910	300
Generation:			
Total SMUD Generation (GWh)	7,410	7,429	19
SMUD Generation as a % of expected supply requirement	70%	68%	-2%
Purchased Power:			
Net Purchased Power (GWh)	3,199	3,481	282
Net Purchased Power as % of expected supply requirement	30%	32%	2%
Gas:			
Expected Gas Burn (NG+Biogas) for Thermal Generation and Steam Sales (mmBtu)	40,112,300	38,291,660	(1,820,640)
Committed Fuel (NG+Biogas) Purchases (mmBtu)	33,998,352	31,722,212	(2,276,140)
Committed Purchases (NG+Green Gas) as a % of Expected for Thermal Generation and Steam Sales	85%	83%	-2%
Actual / forward prices of uncommitted transactions:			
On Peak Power Price Forecast (\$/MWh)	\$74	\$88	\$14
Off Peak Power Price Forecast (\$/MWh)	\$60	\$75	\$15
Flat Power Price Forecast (\$/MWh)	\$68	\$82	\$14
Forward Natural Gas Price Forecast (\$/mmBtu)	\$5.61	\$6.55	\$0.94



Energy Requirements

Summary (GWh)	2022 Budget	2023 Proposed	Change vs Budget	% Change vs Budget
Generation:			-	
SMUD-Owned Large Hydro	1,252	1,576	324	26%
SMUD-Owned Gas Fired	5,149	4,380	(769)	-15%
SMUD-Owned Renewable	1,009	1,473	464	46%
Total Generation	7,410	7,429	19	0.3%
Market Energy:				
Market Sales	(2,898)	(3,607)	(709)	24%
Long-Term Contracts	4,494	5,424	930	21%
Short-Term Purchases	63	0	(63)	-100%
Market Purchases	1,581	1,707	126	8%
Total Market Transactions	3,240	3,524	284	9%
Market Energy:				
Transmission Losses	(41)	(43)	(2)	5%
Total Supply Requirement	10,609	10,910	301	3%

The following pages have details about the budget assumptions for SMUD's power supply by generation and purchasing sources.



SMUD Generation Sources

SMUD Hydroelectric (Upper American River Project)

The 2023 Budget assumes median rainfall and normal starting reservoir levels in 2023. Generation is expected to be 1,303 GWh.

Other SMUD Generation: South Fork, Chili Bar, Photovoltaic, Hedge Battery, Solano Wind

The 2023 Budget assumes average generation subject to limitations governing the operation of each plant. The largest contributor, Solano Wind is expected to generate 593 GWh.

Cosumnes Power Plant

This 570 MW gas-fired combined cycle power plant began commercial operation in February 2006. Forecasted generation from this plant in 2023 is 3,761 GWh.

Carson Cogeneration

This gas-fired cogeneration project, which began commercial operation in October 1995, consists of a 65 MW combined cycle unit and a 42 MW peaking unit. With the installation of an auxiliary steam boiler in 2017, if running the cogeneration unit is uneconomic, it can be turned off. Energy will be supplied from the auxiliary boiler instead of the cogeneration unit. The forecasted generation from this facility in 2023 is 399 GWh.

Procter & Gamble Cogeneration

This gas-fired cogeneration plant began commercial operation in March 1997. It consists of a 136 MW combined cycle power plant and a 50 MW peaking unit that became operational in May 2001. With the installation of an auxiliary steam boiler in 2016, if running the cogeneration unit is uneconomic, it can be turned off. Steam will be supplied from the auxiliary boiler instead of the cogeneration unit. Forecasted generation from this facility in 2023 is 725 GWh.

Campbell Soup Cogeneration

This gas-fired combined cycle plant began commercial operation in December 1997. It consists of a 160 MW combined cycle power unit. Beginning in 2008 the 72 MW McClellan gas turbine is also included under SPA. Forecasted generation from these two units in 2023 is 591 GWh.



Purchased Power

The 2023 Budget assumes delivery of energy and capacity from the following contracts:

Counterparty	Capacity MW	Energy GWh	Expiration Date
Western Area Power Administration (WAPA) / Central Valley Project (CVP)	265 MW	511 GWh	
Western Area Power Administration (WAPA)		30 GWh	
Loyalton Biomass	4.2 MW	10 GWh	2023
Santa Cruz Landfill	1.5 MW	12 GWh	2024
Sutter Energy Center	258 MW	1,463 GWh	2024
Kiefer Landfill	12 MW	109 GWh	Kiefer I - 2024 Kiefer II - 2026
IBR Highwinds	50 MW	98 GWh	2025
MM Yolo	2.4 MW	21 GWh	2026
enXco - Solar	1 MW	2 GWh	2028
Feed-in-Tariff Solar Projects	100 MW	210 GWh	2030
Calpine Geysers Geothermal	100 MW	876 GWh	2032
Van Warmerdam Dairy Biogas	0.5 MW	2 GWh	2033
New Hope Dairy Biogas	0.4 MW	2 GWh	2033
Patua (aka Gradient) Geothermal	19 MW	146 GWh	2033
Conergy Solar	1.3 MW	2 GWh	2034
Van Steyn Dairy Biogas	0.12 MW	1 GWh	2035
Rancho Seco Solar I	11 MW	22 GWh	2036
Recurrent Solar	60 MW	171 GWh	2037
Rancho Seco Solar II	160 MW	284 GWh	2039
CalEnergy	30 MW	223 GWh	2039
Grady Wind	200 MW	897 GWh	2043
Wildflower Solar	13 MW	31 GWh	2045
Navajo Solar	100 MW	301 GWh	2051



The balance of energy requirements to meet forecasted sales to customers will be met by short-term purchases of energy.

Some of the long-term and short-term contracts will be delivered over SMUD's 528 MW share of the California-Oregon Transmission Project (Northwest) or under the South-of-Tesla transmission agreement with PG&E (Southwest & Southern California). These purchases are coordinated through SMUD's membership in the Western Systems Power Pool (WSPP), which facilitates sales and exchanges among its 30 member utilities, and through market trading.

Lastly, another 5-year extension to the WAPA Custom Product ~300-MW sale/purchase contract with WAPA allows SMUD to import additional power from California Oregon Border through 2024.



Cost Categories

The Budget includes the following major components:

OPERATING EXPENSES (O&M): Expenses related to producing and acquiring energy, operating and maintaining the electrical delivery system, providing service to customers including public goods (energy efficiency, low-income assistance, new renewable generation sources, and research and development of advanced technologies) programs, and corporate activities. Included within this category as a separate line item are commodity costs associated with energy supply. These costs include purchased power, fuel for energy production, and transmission wheeling costs.

Also included under Zero Carbon Energy Solutions are fuel, operating and interest expense associated with SFA: Carson Cogeneration plant, Procter & Gamble plant, Campbell Soup Cogeneration plant, Cosumnes Power Plant; NCGA No. 1, and NCEA pass-through gas costs. These expenses are shown in the SMUD Budget because SMUD will reimburse SFA, NCGA No. 1 and NCEA for their costs under the terms of the Power and Gas Purchase Agreements. The detailed SFA, NCGA No. 1 and NCEA Budgets are also in separate booklets and/or resolutions as they will be approved by the SFA, NCGA No. 1 and NCEA Commissions.

CAPITAL INVESTMENT: Investment in additions and improvements to SMUD's property, plant and equipment. The Capital Investment budget includes all qualifying costs related to acquiring or constructing tangible and intangible assets which meet SMUD's capitalization guidelines - cost exceeding \$5,000 and an estimated service life greater than two years. SMUD follows Federal Energy Regulatory Commission (FERC) capitalization guidelines which dictate the inclusion of all direct costs (labor, employee benefits, materials, services and other) and a proportionate share of indirect costs (engineering and construction supervision and support, transportation, insurance, etc.) related to capital projects. Capital assets are depreciated on a straight-line basis over their estimated useful service life.

ALLOCATED: Costs in four business units: Information Technology, Workforce, Diversity & Inclusion, Energy Delivery & Operations and Corporate, which enable the business units to perform work. These costs are allocated to both O&M and capital, based on the quantity of labor hours. The aggregated allocated costs are presented in the budget documentation separately as information only; the actual costs are reflected in each of the Business Unit's budgets as the total cost of their work processes.

DEBT SERVICE: Interest expense on and principal repayments of SMUD's outstanding long-term debt and commercial paper notes, any revenues or payments on interest rate swaps, and trustee fees and debt issuance costs. Detail is provided in the Debt Service Summary.

Return to **Budget Summary** section



Expense Type Descriptions

Activity Type Labor: SMUD employee labor planned to a business unit work process. Each Activity Type has a standard hourly charge-out rate that is based on work (non-leave) hours, average annual employee salaries, and includes benefits.

Materials & Equipment: Materials and equipment either issued from inventory or purchased for a specific project or task.

Other Expenses: Is a grouping of several non-material costs including dues and publications, memberships, training, travel, rents, leases, license fees, taxes, advertising, utilities, and postage.

Outside Services: The cost of outside services contracts, consultants, and outside legal counsel services.

Insurance: The cost of property and liability insurance.

Rebates & Incentives: The cost of rebates and incentives paid to customers for energy efficiency, building electrification and electric transportation programs.

Commodities: The cost of purchased power, wheeling, and fuel for SMUD and JPA generating plants, net of surplus/wholesale power sales which is revenue generated from selling energy which is not needed to meet SMUD retail load.

Reimbursements: Reimbursements, cost-sharing grants, or pass-through amounts received from outside parties to reduce net costs.

Allocations/Surcharges: Includes cost center overheads and surcharges. Cost center overheads are a rate developed to recover the indirect costs of a Cost Center and includes activity type labor for administration, supervision, training, and miscellaneous general expenses such as office supplies and travel. It is assessed per hour of activity type labor planned directly to the work. Surcharge rates are developed to recover 1) an allocation of internal service costs such as transportation and technology assessed per hour of activity type labor planned directly to the work, 2) the costs of procuring outside service agreements (excluding outside legal service) and cost of procuring, storing, and handling materials and equipment assessed relative to the contract amount or whether material issued from inventory or purchased specifically for a project or task, and 3) miscellaneous general and administrative SMUD expenses including insurance and risk management, cash management, debt management, and other assessed to capital and public good projects based on a flat percentage of overall SMUD activity type labor.



Financial Statement Line Item Descriptions

Sales to Customers: The Sales to Customers budget is the revenue received from our residential and commercial electrical customers for power usage.

RSF & Other Deferrals: The Rate Stabilization Fund (RSF) & Other Deferrals budget includes revenues deferred to the rate stabilization fund.

Other Electric Revenue: The Other Electric Revenue budget is the revenue received from other services such as Community Energy Services (CCAs), LCFS revenues, steam sales, rental income and miscellaneous services revenues.

Commodities: The Commodities budget includes the long, medium and short-term power, electric transmission, and natural gas purchases. The budget is shown net of surplus and wholesale power sales revenue, which represents revenues from the sale of generation and bulk power purchases which are surplus to our generation needs.

Customer & Community Services: The Customer & Community Services budget includes all residential and commercial customer-focused services such as the Contact Center, retail client services and customer experiences. Also included are costs for billing, revenue assurance, and commercial development and business attraction. Lastly, this budget includes support of the Community Energy Services (CCAs).

Energy Delivery & Operations: The Energy Delivery & Operations budget includes the costs of generating electricity, delivering it to our customers and maintaining the ability to do so safely and reliably. Also, the cost of electrical transmission, line inspections, corrective and preventative maintenance, vegetation management, and underground cable work are included here. Lastly, this budget includes program management services for construction and other non-technology projects, transmission and distribution planning and operations, environmental, safety and real estate services.

Zero Carbon Energy Solutions: The Zero Carbon Energy Solutions budget includes the design, construction, maintenance, and transition of SMUD's power generation assets, the sale and procurement of energy resources and settlements of energy transactions, and customer program implementation. This consists of operating and maintaining SMUD's hydroelectric reservoirs and powerhouses, thermal and cogeneration power plants, gas pipeline, and renewable generation wind and solar resources. Also included is establishing and developing new business partnerships that align and support SMUD's 2030 zero carbon goal.

Enterprise Strategy: The Energy Strategy budget includes enterprise strategic planning and prioritization, resource market strategy and planning, customer, and grid strategy support of DERs, integrated distributed resources, low carbon fuel standard work, Zero Carbon and R&D strategies. Also, included are revenue strategy functions like load forecasting and rates and pricing as well as enterprise prioritization.



Information Technology: The Information Technology budget includes costs for the delivery and support of information technology systems, applications, and hardware. Also included are the costs associated with maintaining and ensuring IT system availability, providing a framework to safeguard information, planning, and setting the enterprise technology strategy, and supporting the enterprise's technology needs.

Workforce, Diversity & Inclusion: The Workforce, Diversity & Inclusion budget includes the costs of employee services such as talent management, benefits management, learning and development programs as well as work for developing and implementing strategies and initiatives to establish SMUD as a diverse and inclusive employer. Also included are sustainable communities' initiatives and programs.

Corporate: The Corporate budget includes the costs associated with corporate governance such as executive management and internal audit; strategic and finance functions like accounting, treasury, financial planning, and enterprise performance; and enterprise services such as procurement, warehouse, vehicle fleet operations, facilities operations and maintenance, and communications, marketing, and community relations. Also included are legal functions including legislative, regulatory, government affairs, corporate legal and records management, as well as ensuring adherence to all industry reliability and compliance standards and requirements.

Enterprise: The Enterprise budget includes corporate contingency, claims, reserves, settlements, and other company-wide special items. Also included is the cost of worker's compensation and other post-employment benefits.

Public Good: Public Goods programs include customer public good programs such as solar rebates and incentives, low income & medical rate subsidies and administration, emerging technologies, energy efficiency, and building electrification. It also includes energy operations public good programs such as EV charging, research and development, renewable initiatives such as biomass gasification, and distributed technology.

Depreciation, Depletion and Amortization: The depreciation, depletion and amortization budget is the depreciation of SMUD's electric utility plant-in-service and the Carson Cogeneration, Procter & Gamble Cogeneration, Campbell Soup Cogeneration and Cosumnes plants. The Budget amount is based on existing plant-in-service and estimated completion dates for construction work-in-progress, and the most current depreciation rates. It also includes amortization of costs associated with the new operating license for SMUD's Upper American River Project (UARP) hydroelectric generation facilities and Rancho Seco fuel decommissioning.

Interest Income and Other: The interest income and other budget is SMUD's interest income, based on the assumption that SMUD will earn an average of approximately 0.85 percent on unrestricted and restricted cash balances. This line also includes any interest earned by SFA, NCGA No. 1 and NCEA on their fund balances. Also included in this line is miscellaneous income.

Other Non-Cash: The other non-cash budget includes write-off of preliminary project costs, which is an estimate of costs to be written off related to projects which SMUD has deferred preliminary costs until feasibility or planning studies can be completed and final determination can be made on whether such projects will be developed. It also includes the corporate capital surcharge. Also



included is Contribution in Aid of Construction (CIAC). This represents the recognition of money received for prior development costs and for grant projects for capital items. The receipt of funds being recognized on the income statement is made in order to match the money received with the depreciation. Additionally, advance capacity payments are included here, as well as Fuel Sales to SMUD from NCGA and NCEA and uncollectable accounts on loan and other billings, as well as some JPA allocations

Interest Expense: The interest expense budget includes interest on long-term debt and commercial paper which reflects SMUD's obligation for existing debt, and interest expense on SFA, NCGA No. 1 and NCEA bonds.

Interest Payments: Represents the cash basis interest payments on SMUD, SFA, NCGA No.1 and NCEA bonds, commercial paper notes, and SMUD's share of TANC bonds, not including amortization of deferred bond issuance costs and gain/loss on bond refundings.

Principal Payments: Represents scheduled repayment of long-term debt.

Cash Available to Pay Fixed Costs: Represents the net cash flow before interest expense on a consolidated basis.

Fixed Charge Coverage Ratio: The fixed charge coverage ratio is a measure of the number of times net cash flow before interest expense on a consolidated basis covers total cash debt service payments, including both interest and principal, for SMUD, SFA and SMUD's share of TANC debt service.

Rate Stabilization Fund: This is a fund set up by the Board to provide a cushion against a rate increase in years where weather conditions or other non-controllable events cause large budget variances. No transfers in or out of the Rate Stabilization Funds are budgeted.

Unrestricted Cash: Cash available for operating and capital expenditures. Detail of change is shown on the Pro Forma Sources and Uses of Cash.

Restricted for Debt Service: Amounts deposited in restricted debt service funds as fixed by Bond Resolutions.

Decommissioning Fund: Amounts set aside with external trustee to cover estimated cost of decommissioning Rancho Seco. SMUD received a certification of completion of decommissioning from the Nuclear Regulatory Commission (NRC) in 2009. The remaining funds are for decommissioning of the spent fuel storage facility in 2028.

Return to Financial Statements section



Performance Metrics

Strategic	Metric	2022	2022	2023
Direction	inctité	Forecast	Target	Target
SD-2	Competitive System Average Rates			
Competitive	Percent below Pacific Gas & Electric	45.5%	18.0%	18.0%
Rates	Percent below each Customer Class	42.0%	Meet 10% Goal for each Customer class	Meet 10% Goal for each Customer class
	Fixed Charge Ratio of at least 1.50 [1]	1.50	1.93	2.05
	SMUD Availability of Generation Assets [2]	74%	97%	97%
	Overall Availability of Transmission Assets	100%	>99.99%	>99.99%
	Distribution System Reliability [3]			
SD-3 Access to	Duration of Outages (SAIDI)			
Credit Markets	SAIDI With Major Event	N/A	67.5 - 93.3 min	67.5 - 93.3 min
	SAIDI Excludes Major Event	62.3	49.7 - 68.7 min	49.7 - 68.7 min
	Frequency of Outages (SAIFI)			
	SAIFI With Major Event	N/A	0.99 - 1.33	0.99 - 1.33
	SAIFI Excludes Major Event	1.06	0.85 - 1.14	0.85 - 1.14
SD-5	Customer Satisfaction Survey [4]	95%	95%	95%
Customer Relations	Value for What You Pay [5]	72%	70%	73%
	Shift safety culture, improve safety results, and maintain positive financial performance			
	Leading Indicator			
	Employee-Supervisor Interactions [6]	152%	95%	95%
	Incident Reports ≤ 3 days [7]	100%	95%	95%
SD-6 Safety	Incident Investigations ≤ 5 days [8]	100%	95%	95%
	Days Away Restricted Time (DART)			
	Severity incidents to 13 or less than by 2025	5	23	19
	Workers' Compensation			
	Workers' compensation program performance	\$0.43	\$0.76	\$0.67
SD-8 Employee	Employee Engagement [9]			
Relations	Sustain Employee Engagement	N/A	N/A	>80%
	Reduce carbon emissions			
	Energy efficiency and electrification from buildings [10] (2030 goal: 365,000)	91,803 [a]	131,359 [b]	99,987 [c]
SD-9 Resource	Energy efficiency and electrification from transportation [11] (2030 goal: 1,000,000)	94,848 [a]	88,383	117,000 [b]
Planning	Procure Renewable Energy to achieve SMUD's Renewable Portfolio Standards requirements [12]			
	% of SMUD's Retail Sales (Statutes require: 44% by 2024, 52% by 2027, and 60% by 2030)	37.0%	35.8%	41.3%
SD-13 Economic Development	Supplier Education and Economic Development (SEED) - Percent of Contract Dollars [13]	22%	20%	20%



Notes to Performance Metrics:

- 1. Due to Cosumnes Power Plant extended outage, the 2022 commodity budget was augmented by an additional \$309.3M. This additional commodity cost resulted in substantially lower net income and fixed charge forecasts.
- 2. The 2022 Forecast is under target due to the outage at the Cosumnes Power Plant.
- 3. N/A No Major Events in 2022. Barring any major events, we are on track to meet reliability targets for both SAIDI and SAIFI. The major contributing factors to reliability this year are vehicle accidents, equipment failures, and underground cable failures.
- 4. April 2022, SMUD resumed normal collections activity which increased customer interactions and an additional need for SMUD support. Extensive customer communication was sent across various channels to help customers prepare for this change. In addition, Contact Center staff highlighted the importance of delivering an exceptional customer experience through refresher and soft-skills training, partnerships with agency resources to assist limited-income customers, and by leveraging flexible payment arrangement options for customers to manage their bills.
- 5. Board target is to reach 70% by the end of 2025 and 80% by the end of 2030, with neither the average commercial customer score falling below 69%, nor the average residential customer score falling below 65% in any year.
- 6. Individual workgroups across SMUD determine the target or frequency of interactions per month, quarter or twice a year with an increased focus on "Eyes on Work." As of September 2022, the target for Supervisor Employee Interactions was 6,905 the actual was 10,471 interactions for a Percentage of 152% observed for SMUD. All work group are on target to meet or exceed their 2022 Supervisor Employee Interaction target.
- 7. As of the end of September, 13 of the 13 incidents included in this metric were reported within 3 days of the supervisor being notified of the incident. The prediction is based off of the performance in the last 9 months.
- 8. As of the end of September, 13 of the 13 incidents included in this metric have been investigated and completed in SITS on or before the due date. The prediction is based off of the performance in the last 9 months.
- 9. Next Survey Q1 of 2023.
- 10. All figures in this metric series are cumulative.
 - a. Forecast is lower than target primarily because of the following:
 - i. Commercial energy efficiency and electrification programs experienced reduced activity and participation as businesses continue to experience challenging financial conditions, inflationary impacts, and increased project costs,
 - ii. Home Electricity Reports program was delayed due to longer than expected operational readiness work,



- iii. Target is a cumulative goal and includes shortfalls from prior years impacted by the COVID pandemic with continued economic and supply chain challenges.
- b. 2022 target was set based on the resource modeling tools and framework of the 2019 IRP which is being updated to reflect the assumptions and framework in line with the Zero Carbon Plan
- c. 2023 target (TBD) developed reflecting the most current resource planning and carbon reduction data and assumptions in the Zero Carbon Plan
- 11. All figures in this metric series are cumulative.
 - a. Carbon emission reductions from transportation electrification are based on an average of 3 tonnes per equivalent light duty vehicle.
 - b. 2023 target developed reflecting the most current resource planning and carbon reduction data and assumptions in the Zero Carbon Plan.
- 12. SMUD expects its 2022 Renewable Portfolio Standard (RPS) percentage to be ~37% using in year purchases and banked surplus from previous years. While we are slightly under our target for 2022 due to renewable project delays, the RPS rules allow for additional purchase of renewables across the compliance period such that total renewable generation meets the compliance period total requirements (current compliance period (4) runs from 2021 to 2024). Thus, we will procure additional renewables in 2023 and 2024 and are on track to fulfill our RPS obligations for compliance period 4.
- 13. In 2022 SEED has benefited from a number of large construction contract awards with SEED prime suppliers. This attributes to the above target forecast.



Resolutions

- 1. 2023 Budget Resolution
- 2. Debt Resolution



RESOLUTION NO. 22-12-05

WHEREAS, the proposed 2023 Budget is expected to result in a positive net income for 2023; NOW THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. This resolution may be referred to as the 2023 Budget Resolution.

Section 2. (a) There is hereby appropriated from the General Fund sufficient monies for the payment of demands against SMUD which relate to obligations incurred for the purposes and within the amount specified for such purposes in the following projection of SMUD's program for the period January 1, 2023, through December 31, 2023.

Operations and maintenance:

Commodity - purchased power, fuel, and wheeling	\$484,983,574
Public Goods	75,458,718
Customer, energy delivery, enterprise strategy, workforce diversity & inclusion, information technology, corporate services and Rancho Seco	692,762,054
Sub-Total	\$1,253,204,346
Debt Service Capital and reserve	225,492,038 624,924,320
TOTAL	\$2,103,620,704

(b) The Commodity line item budget is based on assumptions of average rainfall and temperatures during 2023. SMUD has in place a

Hydro Generation Adjustment (HGA) mechanism whereby, based on the actual rainfall amounts between April 1, 2022 and March 31, 2023 in comparison to the budget assumptions, SMUD may transfer funds to or from the Hydro Rate Stabilization Fund and, once pre-established limits are met, increase or decrease customer rates. The Commodity line item budget will be increased or reduced based on the actual transfer and/or change in customer revenues from the HGA adjustment.

(c) SMUD also has in place or may enter into additional agreements under which monies will be received by SMUD in the event actual weather conditions are drier than average. In the event of below average rainfall, the Commodity line item budget will be increased by an amount equal to the payments received under these contracts.

(d) SMUD has budgeted to receive 511 gigawatt hours of energy in 2023 under its contract with the Western Area Power Administration (WAPA). This energy primarily is generated at Central Valley Project hydroelectric plants, and the actual quantity of energy received will be dependent on rainfall, carryover water storage and operation of the WAPA system to meet contractual water deliveries. Because WAPA generation facilities are spread over a wide area, insurance is not practical for offsetting variations of energy deliveries due to weather. One purpose of the Rate Stabilization Fund is to mitigate such variations. The Accountant is hereby authorized to transfer funds as follows based on actual WAPA energy deliveries in the 2023 season: for every megawatt hour below 511,000 transfer NP15 EZ Gen Hub (NP15) power price per MWh from the Fund, up to a maximum of \$3.5 million; for every megawatt hour over 511,000 transfer the NP15 power price per MWh into the Fund, up

to a maximum of \$30 million. The Commodity line item budget will be increased or reduced accordingly. The NP15 power price for the transfers is the weighted average of actual NP15 power prices based on when the energy from WAPA is received by SMUD on an hourly basis.

(e) Budgeted energy purchases necessary to meet customer energy sales requirements (10,458 GWh) are based on average weather conditions and expected customer growth in 2023. Should actual weather conditions or growth levels cause SMUD retail sales and related energy requirements to be higher, the Commodity line item budget will be increased by the NP15 power price per megawatt-hour of additional retail energy sales to offset the cost of these sales.

(f) SMUD participates in regulatory programs such as Low Carbon Fuel Standard (LCFS) and Cap-and-Trade. Under these programs, SMUD has the option to monetize the credits and allowances applicable to these programs through sales transactions. When SMUD collects revenues through these sales, it is required to apply the proceeds toward specific expenses that support the program goals. An additional purpose of the Rate Stabilization Fund is to mitigate fluctuations from regulatory programs. The Accountant is hereby authorized to transfer funds to or from the Rate Stabilization Fund to match LCFS and Cap-and-Trade revenues with expenses. The budgeted amount will be increased or decreased accordingly.

(g) For purposes of Section 11891.6 of the Municipal Utility
District Act, there shall be deemed added to each line item, in section 2a, a 10 percent
contingency. Demands against SMUD which relate to obligations incurred for each line
item and are within such line item amount plus the 10 percent contingency may be paid

without prior specific approval of this Board, provided the total of such payments during 2023 may not exceed the total budget amount plus this 10% contingency, plus the commodity contingency and adjustments for weather hedge contracts, higher retail sales and Rate Stabilization transfers as set forth in paragraphs (b), (c), (d), (e) and (f) above.

Section 3. Demands against SMUD may be paid without the prior specific approval of this Board if they relate to obligations incurred for the purpose and within the amounts specified in Section 2, provided such demands are approved by the CEO & General Manager or someone to whom he has delegated such approval authority. It is the purpose and intent of this paragraph to delegate to the CEO & General Manager authority to make purchases, to negotiate and execute contracts, and expend funds in any manner necessary or appropriate to the administration of the business affairs of SMUD, all within the amounts and for the purposes set forth above, and subject to the provisions of existing law and of all the duly passed resolutions of this Board, including the Board-approved delegations of authority.

Section 4. At monthly intervals the Treasurer shall transfer from the General Fund appropriate amounts into each of the various funds established to service SMUD's general obligation indebtedness, its Electric System Revenue Bond indebtedness, and its Electric Revenue Bond indebtedness in approximately equal installments as set forth in the tabulations on file with the Accountant. Investment authority, for all funds, is delegated to the Treasurer for a one-year period in accordance with California Code Section 53607.

Section 5. The number of permanent full-time employees during 2023 shall not exceed 2,242 employees plus a five percent contingency without further authorization of this Board.

Section 6. The Public Goods Charge shall be adjusted from 15.05 percent of 1994 revenues to 16.77 percent of 1994 revenues. The percentage allocation for the public goods charge expenditures shall be adjusted from 6.61 percent to 6.60 percent for low-income assistance, and from 6.56 percent to 8.16 percent for energy efficiency, and from 1.88 percent to 2.01 percent for research and development, and stayed the same at 0.00 percent for new renewable generation.

Section 7. The authorization for spending includes \$20.4 million of commodity for Valley Clean Energy Alliance which will be reimbursed in full to SMUD.

Approved: December 8, 2022

INTRODUCED: DIRECTOR SANBORN						
SECONDED: DIRECTOR KERTH						
DIRECTOR	AYE	NO	ABSTAIN	ABSENT		
ROSE	Х					
BUI-THOMPSON	Х					
FISHMAN	Х					
HERBER	Х					
KERTH	Х					
TAMAYO				Х		
SANBORN	Х					

RESOLUTION NO. 22-12-06

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Supplemental Resolution (Supplemental
to Resolutions No. 6457, 8107, 83-7-26
as amended by Resolution No. 87-10-22,
No. 92-12-29, No. 93-12-19, No. 94-12-16,
No. 95-12-10, No. 96-12-07, No. 97-12-18,
No. 98-11-12, No. 99-12-10, No. 00-12-11,
No. 01-12-02, No. 02-11-04, No. 03-12-14,
No. 04-12-11, No. 05-12-13, No. 06-12-08,
No. 07-12-08, No. 08-12-05, No. 09-12-08,
No. 10-12-03, No. 11-12-08, No. 12-12-06,
No. 13-12-09, No. 14-12-13, No. 15-12-08,
No. 16-12-14, No. 17-12-13, No. 18-12-12,
No. 19-11-05, No. 20-12-14, and No. 21-12-11)
declaring the intention of the Board of Directors
of the Sacramento Municipal Utility District to
Authorize the issuance of additional
Revenue Bonds
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WHEREAS, Sacramento Municipal Utility District ("SMUD") on July 23, 1970, May 2, 1974, and July 21, 1983, by the adoption by its Board of Directors of Resolutions No. 6457, 8107, and 83-7-26, as amended by Resolution No. 87-10-22 adopted October 1, 1987; Resolutions No. 92-2-11, No. 92-12-29, No. 93-12-19, No. 94-12-16, No. 95-12-10, No. 96-12-07, No. 97-12-18, No. 98-11-12, No. 99-12-10, No. 00-12-11, No. 01-12-02, No. 02-11-04, No. 03-12-14, No. 04-12-11, No. 05-12-13, No. 06-12-08, No. 07-12-08, No. 08-12-05, No. 09-12-08, No. 10-12-03, No. 11-12-08, No. 12-12-06, No. 13-12-09, No. 14-12-13, No.15-12-08, No.17-12-13, No. 18-12-12, 19-11-05, 20-12-14, and 21-12-11 adopted by the Board of Directors on February 6, 1992, December 17, 1992, December 16, 1993, December 15, 1994, December 14, 1995, December 19, 1996, December 17,

1997, November 30, 1998, December 2, 1999, December 7, 2000, December 6, 2001, November 7, 2002, December 4, 2003, December 2, 2004, December 1, 2005, December 7, 2006, December 6, 2007, December 4, 2008, December 3, 2009, December 3, 2010, December 1, 2011, December 6, 2012, December 5, 2013, December 4, 2014, December 3, 2015, December 1, 2016, December 21, 2017, December 20, 2018, November 21, 2019, December 10, 2020, and December 9, 2021, respectively (collectively, the "Prior Resolutions"), found and determined that it was necessary to raise funds by the issuance of revenue bonds in the maximum principal amount of \$8,255,000,000 pursuant to Sections 12850, et seq., of the California Public Utilities Code (the "Act"); and

WHEREAS, in order to provide reliable electric service to its customers, it is necessary for SMUD to make certain capital improvements and other capital expenditures to its system, which capital improvements and other capital expenditures are designed to have useful lives of up to 40 years, or more; and

WHEREAS, to fairly apportion the costs of such capital improvements and other capital expenditures among SMUD's customers who will receive the benefits of such improvements, SMUD has determined to authorize the financing of such improvements and expenditures with bonds of SMUD; and

WHEREAS, to provide bond financing for such improvements and expenditures, it now appears necessary to increase the authorized issue of revenue bonds that may be issued by SMUD pursuant to the Act; and

WHEREAS, the Board of Directors of SMUD desires to inform its customers and the public of its plans for financing capital improvements and other capital expenditures to its system by specifying certain items for which the proceeds of said revenue bonds are to be used, which uses shall not include daily maintenance and operations costs; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. The Board of Directors of SMUD declares its intention to authorize the issuance of additional revenue bonds or Clean Renewable Energy Bonds for the purpose of financing, in whole or in part, the costs of the capital items identified in SMUD's 2023 capital budget, 2021 and 2022 capital expenditures not previously financed, the prepayment of purchased power or natural gas and the purchase of natural gas reserves, pipelines or storage facilities, for all of which SMUD is authorized by law to issue such bonds. SMUD has paid or reasonably expects to pay certain expenditures (the "Reimbursement Expenditures") in connection with such capital items prior to the issuance of such bonds, and hereby officially declares its intent to use certain proceeds of such bonds to reimburse the Reimbursement Expenditures. The declarations contained in this section are made solely for purposes of establishing compliance with Section 1.150-2 of the U.S. Treasury Regulations, and do not bind SMUD to make any expenditure, incur any indebtedness or proceed with the abovementioned capital expenditures.

Section 2. The maximum principal amount of the additional revenue bonds proposed to be issued under this supplemental resolution is

\$400,000,000. Such maximum principal amount is in addition to the \$8,255,000,000 principal amount of revenue bonds authorized pursuant to the Prior Resolutions. Such additional bonds may be issued in series from time to time, and it shall not be necessary that all of the bonds proposed to be issued be issued at any one time.

Proceeds from the issuance of these bonds will be used to finance capital improvements identified in SMUD's 2023 capital budget, 2021 and 2022 capital expenditures not previously financed, capital expenditures for the prepayment of purchased power or natural gas and the purchase of natural gas reserves, pipelines or storage facilities. The declarations contained in this section are made solely for purposes of establishing compliance with Section 12852 of the California Public Utilities Code, and do not bind SMUD to make any expenditure, incur any indebtedness or proceed with the above-mentioned capital expenditures.

Section 3. The maximum term of any of such bonds is 40 years.

Said maximum term shall be calculated in each case from the date of each series of bonds in the event the maximum authorized amount is divided into two or more series.

Section 4. The maximum rate of interest to be payable upon such bonds shall not exceed the interest rate per annum equal to the greater of fifteen percent (15 percent) per annum or the yield of United States Treasury bonds having a remaining term equal, as nearly as practicable, to the final maturity of such bonds, as determined by SMUD as of the date of sale of such

bonds, plus three percent (3 percent). The maximum discount with respect to such bonds shall not exceed ten percent (10 percent).

Section 5. This resolution shall take effect immediately, subject only to the right of referendum provided in Article 6a of Chapter 6 of Division 6 of the California Public Utilities Code (beginning at Section 12850 thereof).

Section 6. The Secretary of SMUD is hereby directed to publish a copy of this resolution once a week for two successive weeks in a newspaper of general circulation published within SMUD. At any time within 60 days after the date of the second such publication, a referendum petition signed by voters in number equal to at least three percent (3 percent) of the total vote cast, as defined in Section 11507 of the California Public Utilities Code, demanding the submission of this resolution to a vote of the voters of SMUD for their assent to the issuance of the proposed bonds, may be filed with the Secretary of SMUD. Upon presentation to the Secretary of SMUD of such a referendary petition, this resolution shall not be of effect unless and until it has been assented to by the voters.

Approved: December 8, 2022

INTRODUCED: DIRECTOR HERBER							
SECONDED: DIRECTOR FISHMAN							
DIRECTOR	AYE	NO	ABSTAIN	ABSENT			
ROSE	Х						
BUI-THOMPSON	Х						
FISHMAN	Х						
HERBER	Х						
KERTH	х						
TAMAYO				Х			
SANBORN	Х						