

Overview

Seattle City Light (City Light) is a municipally owned electric utility that operates as a department of the City of Seattle. The utility serves a population of approximately 955,000 people living in a 131 square-mile area, which includes the City of Seattle and several adjoining jurisdictions. To serve these customers, City Light owns, maintains, and operates a multi-billion-dollar physical plant. The physical plant includes:

- A power generation system consisting of seven hydroelectric plants on the Pend Oreille, Skagit, Cedar, and Tolt rivers with a combined capacity of approximately 2,000 megawatts.
- 667 miles of high-voltage transmission lines.
- A distribution system with 16 major substations and more than 2,500 miles of overhead and underground cable.
- A state-of-the-art System Operations Center coordinating the City's electric system.
- Billing and metering technology tracking over 481,000 accounts.

City Light's Capital Improvement Program (CIP) is the vehicle for repairing, upgrading, and expanding this infrastructure. With planned spending of \$2.7 billion over the 2023-2028 timeframe, the CIP funds a variety of safety improvements, mitigation activities, and licensing requirements. Funding for the CIP comes primarily from retail electricity sales, sales of surplus power on the wholesale market, and the sale of revenue bonds. Federal and state grant funding is also an expected source in this timeframe.

Thematic Priorities

The CIP underpins City Light's core mission of providing customers with affordable, reliable, and environmentally responsible energy services. The CIP reflects ongoing operational priorities as well as new business strategies identified in the utility's 2023-2028 Strategic Plan Update. The update continues work on the five business strategies first described in last year's 2022-2026 Strategic Plan:

1. Improve the Customer Experience

City Light is focused on engaging with our customers and helping employees see the impact of their actions from the customers' perspective. We are making investments to enhance accessibility, offer new program choices, and better meet our customers' diverse needs.

2. Create Our Energy Future

Creating our energy future involves responsibly growing demand for clean energy through electrification, investing in access to low-cost carbon-free renewable power, and building and maintaining a smart, resilient, flexible, dynamic, and reliable grid infrastructure. Past budgets added significant funding for electrification and grid modernization in anticipation of federal and state infrastructure grant opportunities.

3. Develop Workforce and Organizational Agility

Our industry is transforming quickly, and so are our customers' needs. City Light is building an organization that is nimble, adaptive, and responsive by investing in strong change management, workforce development, and new technology resources.

4. Ensure Financial Stewardship and Affordability

To deliver rates that are affordable for all, City Light is leaning into strong fiscal management and new pricing options to help customers manage their energy bills through efficient use of City Light's products and services.

5. We Power

"We Power" refers to our core mission as a utility – to provide our customers with affordable, reliable, and environmentally responsible energy services. Critical CIP efforts funded in past budgets include Skagit Relicensing and the Accelerated Pole Replacement Program; both initiatives continue in the 2023-2024 Budget. Other key capital investments include:

- a) Dam Trash Racks. Our hydro projects rely on large steel trash racks that prevent debris from flowing into the dam penstock and damaging the generators. In January 2022, the trash rack at Diablo Dam was severely damaged by an accumulation of woody debris, taking the generator offline and creating safety concerns. This request provides funding to repair or replace the Diablo trash rack as well as install automated rakes to preventatively remove debris from the trash racks at Ross, Gorge, Diablo, Cedar Falls, and Boundary dams. 2023-2028 \$7.5M total
- b) Newhalem Creek Hydroelectric Project Decommissioning. The Federal Energy Regulatory Commission (FERC) license for Newhalem Creek expires in 2027, and City Light will not pursue a new license for the project because the cost would far exceed its value. This request funds all anticipated costs of decommissioning Newhalem Creek based on our request to FERC, including engineering, permitting, planning, coordination with license participants, and removal of the dam, powerhouse, and other infrastructure needed to return the site to its natural state. 2023-2028 \$18.0M total

Notable CIP areas that advance our 2023-2028 Strategic Plan and core planning and operational needs include:

Investments to Create Our Energy Future

The CIP includes funding for projects to advance Seattle's transition away from fossil fuels to achieve a zero-carbon city. Grid modernization investments will update and modernize the distribution system to improve resiliency, add flexibility, and maintain reliability. Projects supporting electrification include large-scale maritime electrification projects, as well as ongoing expansion of electric vehicle charging infrastructure. Green energy resource growth will enable projects to develop distributed generation (solar, wind, etc.), energy storage, demand-side management, and other distributed energy resource (DER) technology. City Light will pursue grant matching funds of federal and state stimulus dollars to leverage and accelerate City Light's Utility Next program.

Technology and Cyber Security

Improvements are planned for various foundational technology systems that underpin our system operations and customer interactions. Investments include an expanded customer self-service portal, upgraded advanced meter infrastructure, and improved customer metering and billing systems to provide a better service experience for customers. Upgrades to the Geospatial Information System (GIS) and the Outage Management System (OMS) will facilitate new energy technologies as part of grid transformation. A major upgrade of the Work and Asset Management System (WAMS) is also in the initial planning stages. To safeguard our technology assets and harden against cyber threats, advanced developments in cyber security programs, technology governance, and operations are funded.

Hydroelectric Project Relicensing

The federal license for the Skagit River Hydroelectric Project, a series of three dams that produces approximately 20% of City Light's owned generation capacity, expires in 2025. Renewing the license with FERC also means reviewing the safety, cost, environmental, and cultural impacts of the continued

operation of the project. Between 2020 and 2023, City Light is collaborating with local partners to develop an application for a new license that will last for the next 30-50 years. The license will include requirements around protecting the environment and the culture of the watershed and its surrounding communities. In addition, the South Fork Tolt Hydroelectric Project is also up for FERC license renewal in 2027. For the Boundary Hydroelectric Project, various protection, mitigation, and enhancement activities are needed to fulfill requirements mandated by its 2014 FERC license and settlement agreement.

Transmission & Distribution Infrastructure Maintenance

Reliable energy delivery requires proactive maintenance of transmission and distribution assets. The utility has accelerated the pace of pole replacements due to a critical need to replace deteriorating poles that are critical for reliability as well as public safety. Other major program investments include expansion of the network distribution system in the north downtown area to realize systemwide benefits from the new Denny Substation, as well as replacement of failing underground cables.

Preserving Hydroelectric Generation Assets

Preservation of Seattle's legacy hydroelectric generation facilities is accomplished through prudent investments and proactive maintenance. Planned enhancements include a wide range of dam safety investments; an improved outage management system; long-term planning for small legacy hydroelectric projects such as Cedar Falls; improvements of ancillary systems and facilities such as powerhouse systems; plant automation; and cyber security investments.

Workforce, Facilities and Fleets

Supporting an agile workforce requires a work environment conductive to productivity, collaboration, and innovation. A major restacking project will fund renovation of office space in the Seattle Municipal Tower to improve ergonomics, modify workspaces to accommodate modern technology and collaboration, and reduce the utility's footprint in the downtown core. Similarly, strategic fleet investments will replace aging vehicles with electric-powered alternatives that are greener and more efficient.

Race and Social Justice

City Light is committed to leading with equity and prioritizing investments in ways that deliver value to underserved and under-represented communities. The utility is actively engaged in the Citywide effort to rebuild Seattle as a city that is racially just, equitable, and inclusive. In developing and executing the CIP, work groups seeking incremental funding participated in an equity lab with City Light's RSJ Change Team to seek diverse perspectives and identify opportunities to incorporate social justice work into implementation plans. City Light will work to prioritize positive outcomes and reverse historic inequities for underserved communities, including Black, Indigenous, and people of color as well as immigrants, refugees, persons experiencing low incomes, English language learners, youth, and seniors. This includes prioritizing the electrification of public transit to deliver better air quality and other health benefits to historically underserved communities. Other benefits include a focus on job creation and economic activity with an emphasis on historically excluded populations.

Project Selection Criteria

City Light's planning process is designed to ensure project funding meets customers' current and future needs, and to position the utility to meet current and future strategic and operational challenges. Project ideas come from throughout City Light. Members of each of the utility's organizational lines of business (e.g., power supply, transmission and distribution, fleets and facilities, technology, and customer service) prioritize capital spending within their divisions and then submit

2023-2028 Adopted Capital Improvement Program

recommended projects through a centralized capital budgeting system.

Programs with ongoing funding are prioritized using six criteria: Criticality, Need (Urgency), Environmental, Innovations, RSJI and Safety. The process gives priority to mandatory requirements and existing projects before considering future projects and new initiatives. City Light's staff-level Capital Planning Team and executive-level Capital Asset Review and Evaluation Committee (CARE) review the scored and prioritized list of projects. The prioritized list of programs, historical spending analysis, and strategic plan initiatives are inputs used to develop City Light's six-year CIP.

For any capital project with a total cost exceeding \$1.0 million, utility staff complete an intake to document the project expectations, rationale, and a cost-benefit analysis of alternatives. Availability of funding and labor resources limits the CIP, and to balance overall needs within these constraints, City Light may rescope, reschedule, or defer projects in the six-year CIP.

2023-2028 Adopted CIP Highlights

The 2023-2028 Adopted CIP outlines \$2.7 billion in capital spending over six years for power supply, transmission, distribution, external projects, and central utility needs.

2023-2028 Adopted CIP Summary of Allocations by Program (in 1,000s)

Program/SubProgram	2023	2024	2025	2026	2027	2028
■ Central Utility Projects	33,229,086	34,682,887	27,202,809	27,539,300	27,500,900	25,444,186
CUSTOMER AND BILLING	45,000	45,000	45,000	45,000	45,000	45,000
Finance and IT Systems	2,264,060	2,848,902	2,748,810	2,793,017	1,636,588	1,620,086
FLEETS AND FACILITIES	30,920,026	31,788,985	24,408,999	24,701,282	25,819,312	23,779,100
■ Distribution	265,543,186	262,128,706	269,756,142	279,796,616	282,249,608	267,995,897
DISTRIBUTION OTHER	34,073,743	24,399,272	25,002,316	27,861,304	27,542,673	22,495,019
NETWORK	21,926,036	22,653,437	21,771,024	24,232,697	24,028,322	22,664,967
RADIAL	110,629,526	121,028,402	128,125,170	132,080,534	130,092,542	111,414,921
SERVICE CONNECTIONS	70,666,166	69,047,121	72,453,010	71,483,083	70,308,770	81,168,214
SUBSTATIONS	28,247,714	25,000,474	22,404,622	24,138, 99 8	30,277,301	30,252,776
■ External Projects	37,785,380	30,346,857	31,785,159	30,415,870	33,455,623	28,427,550
LOCAL JURISDICTIONS	15,515,542	15,404,552	20,230,250	23,332,835	26,681,448	21,412,531
TRANSPORTATION RELOCATIONS	22,269,838	14,942,304	11,554,909	7,083,035	6,774,174	7,015,019
■ Power Supply	139,042,603	110,329,090	114,484,108	104,259,402	100,271,688	121,599,744
BOUNDARY	56,135,687	31,877,505	19,965,659	23,039,836	21,577,454	44,917,188
CEDAR FALLS - TOLT	3,494,891	3,809,097	7,542,436	8,095,898	5,918,099	5,960,735
Conservation & Environmental	47,642,520	47,588,281	46,847,178	47,215,213	47,253,388	46,695,349
POWER SUPPLY OTHER	1,561,439	1,840,132	1,902,783	1,429,127	1,184,196	1,660,179
SKAGIT	30,208,066	25,214,076	38,226,051	24,479,328	24,338,551	22,366,293
■ Transmission	8,771,668	6,852,878	6,773,874	6,797,570	6,927,182	7,325,924
TRANSMISSION	8,771,668	6,852,878	6,773,874	6,797,570	6,927,182	7,325,924
Grand Total	484,371,924	444,340,417	450,002,092	448,808,758	450,405,001	450,793,302

A selection of projects from each program follows.

Central Utility Projects

Projects in this program provide for centralized billing and customer service systems, financial and information technology systems, and vehicle fleets and facilities that are not part of the power generating plant (e.g., equipment shops, service centers, and maintenance yards). This program also includes City Light's work on transportation electrification.

For 2023, there is \$33.2 million in funding for 21 projects in Central Utility including \$2.0 million in additional funding for Equipment Fleet Replacement (MC-CL-XF9101) and \$500,000 for a new Master project for the System Control Center System Map Board Replacement. Highlights include:

- Equipment Fleet Replacement (MC-CL-XF9101): \$9,555,978
 This ongoing project funds the purchase of light-duty and heavy-duty mobile equipment fleet vehicles. This includes replacement of specialized fleet vehicles for electric utility use, as well as enhancements and additions of green alternatives such as electric powered vehicles.
- Office Furniture and Equipment Replacement (MC-CL-XF9103): \$8,864,991
 This ongoing project funds renovations of office space and capital replacement of office equipment, including modular office workstations, conference room ensemble furniture, flexible group workspaces, and major office machines. Improvements will enhance worker safety, with improved light, airflow, and ergonomics, as well as enhance productivity and team collaboration. This project also supports the City's Space Reduction Pilot, which aims to reduce the utility's footprint in the downtown core by 25% to achieve cost efficiencies.
- Transportation Electrification (MC-CL-XF9239): \$5,006,246
 This ongoing project develops electrification infrastructure to support light-duty, medium-duty, and heavy-duty electric vehicles as well as ferry and port systems. Efforts support electrified public transit, fleet electrification, and electric vehicle charging.
- <u>Substation Comprehensive Improvements (MC-CL-XF9161): \$2,678,736</u>
 This ongoing project funds substation improvements identified in City Light's Comprehensive Facilities Plan, seismic fitness reports, and periodic inspections targeting transmission and distribution buildings. The project implements items necessary to support assigned personnel, such as lunchroom and locker room facilities required by union contracts, as well as structural and mechanical corrections and enhancements at substation facilities.
- <u>Seismic Mitigation (MC-CL-XF9134): \$1,005,958</u>
 This ongoing project funds structural upgrades to buildings. This project is for miscellaneous, unidentified seismic issues other than the Georgetown Steam Plant, Service Centers and Substations, which are funded through other projects. The project protects City Light's assets, employees, customers, visitors, equipment, and materials.
- System Control Center System Map Board Replacement (MC-CL-ZF9985): \$500,000
 This new project funds the replacement of the existing system map board in the System Control Center (SCC). The current map board is no longer supported by the vendor and replacement parts are no longer available. This replacement is critical for the SCC to monitor the electric transmission and distribution systems while making decisions that impact safety of employees, customers, the public, and City Light infrastructure.

Distribution

Projects in this program include improvements to City Light's distribution substations, relays, feeders, network distribution systems, overhead and underground radial distribution systems, service connections, customer meters, operational technology, and other facilities and assets related to the distribution system.

For 2023, there is \$265.5 million included for 57 projects in Distribution. Highlights include:

Overhead Equipment Replacements (MC-CL-YR8351): \$52,311,164

This ongoing project replaces overhead distribution equipment nearing the end of its usable life, is overloaded, or no longer has an available supply of spare parts. These items include, but are not limited to, poles, cross-arms, transformers, and open-wire secondaries.

- Underground Equipment Replacements (MC-CL-YR8353): \$22,777,296
 This ongoing project replaces and improves underground electrical system equipment that is failing or approaching the end of its useful life. This project enhances distribution system reliability, avoiding unplanned outages or interruption of service due to equipment failure.
- Medium Overhead and Underground Services (MC-CL-ZS8366): \$22,146,963
 This ongoing project funds engineering and installation of radial electric power service connections with medium-sized power requirements of 50 KVA to 2.5 MVA and 26 kV. The cost of this work is generally reimbursed by the requesting customer.
- <u>Software Replacement Strategy (MC-CL-YD9969): \$17,932,757</u>
 This project funds the upgrade or replacement of key applications and systems as part of the Utility Technology Portfolio. Timely upgrades and replacements ensure that technology and enterprise level software resources are kept up to date, are fully functional and continue to deliver more benefits and technology automations to internal and external customers.
- Pole Attachments (MC-CL-YR8452): \$17,063,755
 This ongoing project funds preparing poles for the attachment of communication infrastructure owned by other entities. The construction costs associated with this work are typically fully reimbursable and attachments generate ongoing revenues through pole attachment rental fees.
- Network Additions and Services Broad Street Substation (MC-CL-ZS8363): \$9,320,301
 This ongoing project funds electrical service connections, capacity additions, and related improvements in response to customer service requests within the Broad Street network area. The project also funds replacement or installation of network transformers, network protectors and specialty transformers, or in-building vault retrofits or other short duration system improvement needs that may be identified during construction.
- <u>Network Additions and Services First Hill, Massachusetts, Union, & University (MC-CL-ZS8364):</u> \$7,963,544
 - This ongoing project provides electrical service connections and related improvements in response to customer service requests within the First Hill, Massachusetts, Union, and University District network areas. The project performs capacity additions work associated with service connections to customers, including condominiums, office buildings, medical facilities, hotels, and commercial and apartment buildings. The project also replaces or installs network transformers, network protectors, and specialty transformers, and performs short-duration system improvement work identified during operations, including retrofitting in-building vaults.
- Small Overhead and Underground Services (MC-CL-ZS8367): \$7,652,749
 This ongoing project funds engineering and installation of radial electric power service connections with small size power requirements of less than 50 KVA and 26 kV. The cost of this work is generally reimbursed by the requesting customer.
- <u>Substation Breaker Replacements & Reliability Additions (MC-CL-YS7779): \$7,645,068</u>
 This ongoing project funds the review of City Light's inventory of approximately 400 transmission and distribution voltage circuit breakers. It determines which have the greatest wear, gas or oil leaks, maintenance cost, and service stress. It prioritizes replacement of circuit breakers with highest risk of failure.
- <u>Denny Substation Network (MC-CL-YN8404): \$7,103,425</u>
 This ongoing project funds network system work in the Denny Substation network area. Work may include design and construction, engineering design at the substation network interface, and underground conversion of streetlights, traffic signals, and telecom and fiber optic systems.

- Substation Equipment Improvements (MC-CL-YS7752): \$6,442,297
 - This ongoing project adds, replaces, and upgrades substation equipment, particularly substation electrical and control equipment. The project also funds installation of remote control and monitoring of substation equipment from the System Control Center, which facilitates faster response time to correct system instability or outages. This work maintains and improves system reliability, permits compliance with high voltage and environmental regulations, and ensures safe work sites.
- Relaying Improvements (MC-CL-YS7753): \$5,471,485
 - This ongoing project replaces protective relays to ensure system reliability by protecting the rest of the distribution system from potentially cascading effects if one part fails to operate properly. It upgrades relay technology, allowing remote control and documentation of system events, which enhances the detection and management of equipment problems.
- Large Overhead and Underground Services (MC-CL-ZS8365) \$5,017,501
 This ongoing project provides large size electric power service connections from City Light's distribution system to the customer's meter for power requirements of greater than 3 MVA and 26 kV radial services. Most of this related work is billable to the customer. The project allows City Light to provide service to new customers in a safe, reliable, timely and cost-effective manner, fulfilling its commitment to be a customer and community-focused organization.

External Projects

Projects in this program respond to requests from local jurisdictions to relocate distribution services from overhead to underground systems per the terms of franchise agreements; maintain and upgrade the streetlight system; relocate utility infrastructure in response to major transportation projects; and provide capital improvements in response to other customer-requested service needs.

For 2023, the CIP includes \$37.8 million in funding for eight External Projects. Additional funding of \$5.2 million was added for streetlighting projects: \$1.4 million for LED Technology Upgrade (ZL8441) and \$3.8 million for Red Tickets Backlog (ZL8378). Funding of \$7.5 million for overhead to underground relocations for the Shoreline 175th Street project was added to Local Transportation Driven Relocations (ZT8369). Highlights include:

- Local Transportation Driven Relocations (MC-CL-ZT8369): \$17,967,790
 - This ongoing project funds relocation of electrical lines to accommodate or take advantage of transportation-related projects, street vacations, or other projects initiated by outside agencies such as SDOT, WSDOT, or suburban municipalities. Work includes modifications to the distribution system, including replacement or modifications of line segments, poles, and underground facilities. Some costs may be reimbursable by the requesting outside agencies.
- Streetlight Arterial, Residential and Flood (MC-CL-ZL8378): \$6,707,075
 This ongoing project funds streetlights and floodlights requested by various taxing jurisdictions and other customers. Lights may be provided in public right of way and on private property, for either public or private benefit.
- <u>Transportation Streetlights (MC-CL-ZL8377): \$5,457,810</u>
 This ongoing project funds relocation of streetlights displaced by City of Seattle transportation projects.
- <u>LED Streetlight Conversion Program (MC-CL-ZL8441) \$3,350,657</u>
 This project is the second-generation replacement of LED luminaires and will be deployed with a controls system to replace all cobrahead streetlights. The project is expected to achieve an additional 20% annual energy savings and prevent 2,720 metric tons of carbon from being released

into the atmosphere. Included in this project will be a color temperature reduction to 3000K to improve customer reports of discomfort glare. This project continues the work originally chartered in 2009 to upgrade all City-owned streetlights to LED, which achieved an estimated annual 40% energy savings and avoided 5,446 metric tons of carbon released into the atmosphere. Since then, the LED industry has matured, and the original fixtures are no longer a benchmark of efficiency and are nearing the end of life.

- SR 520 Bridge Relocations (MC-CL-ZT8435): \$2,054,489
 This project funds relocation and installation of power service infrastructure, such as feeder extensions, to support WSDOT's replacement of the State Route 520 Bridge from Montlake to I-5.
 This project is projected to be fully reimbursable by WSDOT.
- Alaskan Way Viaduct and Seawall Replacement Utility Relocations (MC-CL-ZT8307): \$1,303,014
 This project funds relocation of electric distribution infrastructure associated with the replacement of the Alaskan Way Viaduct and improvements to the Seawall and Central Waterfront.

Power Supply

Projects in this program include energy efficiency, environmental claims, improvements to dams, generators, powerhouses, as well as compliance work to meet federal licensing and environmental mitigation requirements for hydroelectric dams. Rebuilds or replacements of major power production equipment are sequenced to reduce the impact to power generation and to minimize fluctuations in the annual amount of capital spending.

For 2023, the CIP includes \$139.0 million in funding for 48 projects in Power Supply. A new Master project and \$2.0 million in funding was added for the Newhalem Creek Hydroelectric Project Decommissioning (XS6307) – total project cost \$18.0 million. Funding of \$4.9 million was added for the Diablo Dam Trash Rack Replacement (XS6405) – total project cost \$7.6 million. Highlights include:

- Energy Efficiency (MC-CL-WC2250) \$31,935,643
 This ongoing project funds energy efficiency programs at City Light.
- Boundary Licensing Mitigation (MC-CL-XB6987): \$28,996,913
 This ongoing project implements protection, mitigation, and enhancement measures (PMEs) required by the terms and conditions of the Boundary Hydroelectric Project license issued by FERC in 2013. The license allows for the continued operation of the project, City Light's largest generating station producing approximately 25% to 40% of its power supply.
- Boundary Powerhouse Unit 52 Generator Rebuild (MC-CL-XB6535): \$13,380,079
 This project funds rewinding and refurbishing of the Boundary Powerhouse Unit 52 generator and upgrades its fire-suppression system. Work may also include mechanical upgrades or installations of seal rings, wicket gates, and diagnostic equipment. This programmatic maintenance helps extend the useful life of the generator.
- <u>Environmental Claims (MC-CL-WC3133) \$12,107,384</u>
 This ongoing project funds all environmental liability clean-up and remediation work on City Light owned and non-owned properties, whether voluntary or ordered by state or federal environmental regulating agencies.
- Skagit Relicensing (MC-CL-XS6986): \$9,056,220
 This ongoing project provides support of the relicensing activities for the Skagit River Hydroelectric Project, including support of staff, environmental studies, documentation, and consultation.
 Relicensing work began in 2019. The current FERC license for the Skagit Project expires in 2025, and the license application is due to FERC in May 2023.
- Boundary Powerhouse Generator Step-up Transformer Replacement (MC-CL-XB6493): \$8,048,071

This project replaces six existing step-up transformers at Boundary Dam and funds the purchase of a seventh transformer to keep as a spare in inventory due to long lead times for these specialized parts. This project helps avoid prolonged loss of generation due to forced outage.

- Skagit Facility Minor Improvements Program (MC-CL-XS6405): \$5,383,271
 This ongoing project provides funding for emergent capital improvement needs for various facilities at the Skagit Project. This project also funds small scheduled capital projects with cost estimates of less than \$25,000.
- Newhalem Creek Hydroelectric Project Decommissioning (MC-CL-XS6307) \$1,994,220
 This project funds the decommissioning of the Newhalem Creek Hydroelectric Project. City Light is coordinating with FERC and intervenors in the process to surrender the license for the Newhalem Creek Hydroelectric Project, as well the planning, design, and decommissioning of the facilities.

Transmission

Projects in this program fund refurbishment and expansion of utility-owned high-voltage transmission infrastructure that transports electricity from generation facilities to City Light's service territory, as well as within the service territory.

For 2023, the CIP budget includes \$8.8 million for five projects in Transmission. Highlights include:

- <u>Transmission Reliability (MC-CL-YT7104: \$4,080,022</u>
 This ongoing project funds replacement and improvement of transmission structures and conductors. This work may include engineering, construction, and related work, as well as minor improvements to overhead or underground transmission system assets to improve reliability.
- <u>Transmission Tower Refurbishment (MC-CL-YT7130): \$3,795,171</u>
 This ongoing project funds programmatic painting and refurbishment of approximately 1,700 steel transmission tower structures. Metal transmission towers have a long life if properly maintained, while replacements are disruptive and can cost more than \$2 million per tower.

CIP Revenue Sources

Approximately 60% of the CIP is funded through the sale of revenue bonds, based on financial policies set forth in Resolution 31187. The remaining 40% is funded by revenues from retail electric rates, wholesale sales, direct customer billings for service connections and other customer requested work, and assorted fees. Federal and state grant funding are also anticipated funding sources in this six-year timeframe; these funds will be added to the CIP as the grants are approved.

Summary of Upcoming Budget Issues and Challenges

Budget Issues

City Light's strategic plan commitment to hold rate increases to levels resembling inflation limits CIP spending to the amounts previously identified in the adopted six-year plan. This means that change requests with new funding needs must be offset with reductions elsewhere in the CIP. Within this financially constrained environment, the utility will continue to provide services in a timely and efficient manner.

The Undergrounding Program does not include the funding needed to make substantial progress on this body of work. Supply chain and staffing constraints have exacerbated the long lead times needed to design and replace underground cabling. Therefore, funding is being shifted to offset other critical capital funding needs until a more focused effort can resume on undergrounding. For instance, City Light

is working on policies and funding approaches to re-evaluate the program going forward and anticipates significant customer outreach once policy and funding options have been presented to the Mayor's Office and City Council. Ultimately, resources will need to be assigned to increase replacement of failing underground cables, similar to the increased funding allocated for the Accelerated Pole Replacement Program the past few years. There may be future rate impacts associated with adequately funding the undergrounding work in the future.

The six-year CIP does not currently include all costs associated with relicensing of the Skagit Hydroelectric Project. Costs are expected to be significant and at this time there is not sufficient information to project these costs and include them in the spending plan, but they will likely have future rate impacts.

Challenges

There are several challenges that will transform our business over the next decade:

- New technologies are transforming how people use electricity. Commercialization of energy technologies poses a potential risk to City Light. New options and products for controlling consumption, generating, and storing electricity will impact how customers interact with their local utility. Utilities must continue to evolve and to develop their products and services to best serve shifting customer needs and expectations. Additionally, the utility's viability is expected to remain an important component to ensure that the transforming landscape results in an equitable energy future that does not leave disadvantaged communities behind.
- Areas of declining retail energy consumption and electrification. Advances in energy efficiency have reduced consumer energy demand, particularly for those with access to modern energy efficient technology and dwellings. Due in part to energy efficient building codes and new technologies, today's multifamily units consume approximately half as much energy as older single-family homes. At the same time, electrification of buildings and transportation promises to increase demand for electricity, reinforcing the critical need for grid investments that will be required to effectively serve this new demand. This changing landscape calls for managing impacts to rates while also understanding and compensating for inequities in access to green, cost-saving technologies.
- Impact of retirements and legacy practices. As more employees become eligible for retirement and
 workflows are not documented or digitized, City Light risks the loss of institutional memory, costly
 service interruptions, and a potential impact to service delivery. Capital technology investments
 need to encompass broader project scopes that include more process standardizations and
 automations, as well as robust organizational change management activities to facilitate the
 workforce's adoption of new processes and tools.
- <u>Climate change continues, and clean energy is more valuable than ever</u>. Weather pattern changes affect reservoir levels and seasonal energy consumption, leading to increasing volatility of energy supply and demand. Since 1910, City Light has provided its customers with reliable, affordable, and environmentally responsive clean energy. As the utility continues this tradition and plans for the future, it must account for future growth in power supply demands from its customers due to transportation electrification, while prioritizing emission reductions and ensuring an equitable clean energy transition for all customers served.

Future Projects/What is on the Horizon

Demand for transportation and building electrification continues to grow and will support multiple
policy commitments and Green New Deal priorities. Prospects for large scale commercial
electrification include maritime applications, including ferries, the port, various types of commercial
ships, trucking, and multiple large-scale district energy electrification projects.

Seattle City Light

• The transition to the new 5G network is driving a large number of requests for attachment space on poles. The impact of 5G deployment will touch nearly every pole in City Light's distribution system and will provide a growing stream of rental revenue.

City Council Changes to the Proposed CIP

The City Council made no change to the 2023-2028 Proposed CIP.

Advanced Metering Infrastructure

Project No: MC-CL-ZS8426 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Facility Location: Citywide

Current Project Stage: Stage 6 - Closeout Council District: Multiple

Start/End Date: 2015 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$102,219 Urban Village: Not in an Urban Village

The first phase of this project replaced approximately 400,000 meters with Smart Meters. The second phase of this project funds the replacement of approximately 25,000 remaining meters with Smart Meters allowing two-way communication between Seattle City Light and its customers, residential or commercial. Smart Meters continuously record and transmit consumption data to the utility. They also automate meter reading, increase customer service, heighten billing capacity, reduce energy consumption, improve outage restoration efficiency, and support rate structure flexibility. Implementation of the project positions the utility to comply with North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) programs and requirements.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	94,377	6,406	1,436	-	-	-	-	-	102,219
Total:	94,377	6,406	1,436	-	-	-	-	-	102,219
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	94,377	6,406	1,436	-	-	-	-	-	102,219
Total:	94.377	6.406	1.436	_		-			102.219

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 299

Alaskan Way Viaduct and Seawall Replacement - Utility Relocations

Project No: MC-CL-ZT8307 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Facility Location: SR 99 / Battery St

Current Project Stage: Stage 5 - Construction Council District: Council District 7

Start/End Date: 2002 - 2025 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$257,116 **Urban Village:** Not in an Urban Village

This project provides relocation of electric distribution infrastructure associated with the replacement of the Alaskan Way Viaduct and improvements to the Seawall and Central Waterfront.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	233,079	22,600	1,303	109	25	-	-	-	257,116
Total:	233,079	22,600	1,303	109	25	-	-	-	257,116
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	233,079	22,600	1,303	109	25	-	-	-	257,116

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 300

CIP Project Page Seattle City Light

BO Lead and Asbestos

Project No: MC-CL-XF9231 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: **Bothell Receiving Substation**

Council District: Current Project Stage: Stage 6 - Closeout Citywide

Start/End Date: 2013 - 2022 **Neighborhood District:** Outside City of Seattle

Outside City of Seattle **Total Project Cost:** \$1,201 **Urban Village:**

This project provides funding for the removal of contaminants, sewer remediation, and decommissioning of the water tower at the Bothell Substation. Removal of lead and asbestos in the Craneway Area is necessary in order to make the area space useable. The existing septic system does not meet code and needs to be removed or abandoned in place. The sanitary system then needs to be connected with services out to the street. The water tower needs to be deconstructed and removed as it is no longer used or needed and represents a risk to the substation if it deteriorates to the point of collapsing.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,046	155	-	-	-	-	-	-	1,201
Total:	1,046	155	-	-	-	-	-	-	1,201
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,046	155	-	-	-	-	-	-	1,201
Total:	1,046	155	-	-	-	-	-	-	1,201

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 301

Boundary - Access Road Stability Improvements

Project No: MC-CL-XB6615 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 2 - Initiation, Project Definition, & Council District: Outside City of Seattle

Planning

Start/End Date: 2017 - 2028 Neighborhood District: Outside City of Seattle

Total Project Cost: \$5,707 **Urban Village:** Outside City of Seattle

This project constructs a substantial slope stabilization in the area of the West Access Road cut to limit maintenance inputs, ensure continued access to the powerhouse, and improve safety (present debris flows occasionally contain larger sized rocks). The relocated portions of the West Access Road's slopes have continued to ravel since relocation occurred in the early 00's. There is a risk that the slope could fail in a more conclusive fashion and block access to the powerhouse. Additionally, the upslope interceptor ditch (a concrete channel) suffered undermining erosion causing the concrete to subside and not perform well at channelizing and conveying sheet flow away from the slope face.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	857	-	-	-	-	-	650	4,200	5,707
Total:	857	-	-	-	-	-	650	4,200	5,707
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	857	-	-	-	-	-	650	4,200	5,707
Total:	857	-	-	-	-	-	650	4,200	5,707

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 302

Boundary - DC Battery System & Charge Modernization

Project No: MC-CL-XB6566 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 5 - Construction Council District: Outside City of Seattle

Start/End Date: 2017 - 2027 Neighborhood District: Outside City of Seattle

Total Project Cost: \$3,983 Urban Village: Outside City of Seattle

This project replaces the multiple existing DC battery systems at Boundary.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,538	1	15	761	960	698	10	-	3,983
Total:	1,538	1	15	761	960	698	10	-	3,983
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,538	1	15	761	960	698	10	-	3,983

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 303

Boundary - Level 6 Deck Stabilization

Project No: MC-CL-XB6604 BSL Code: BC-CL-X

Project Type:DiscreteBSL Name:Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2017 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$3,031 Urban Village: Not in an Urban Village

This project installs a new system of rock bolts and other forms of rock anchors to improve the structural stability of the Level 6 Deck on Boundary Dam. This portion of the dam is attached to and supported by the adjacent rock. Inspections revealed a weakness in the current attachments and use of the deck by heavy equipment is restricted until these improvements are made. This project also includes stabilization of rock blocks in the powerhouse machine hall.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,940	30	10	50	-	-	-	-	3,031
Total:	2,940	30	10	50	-	-	-	-	3,031
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,940	30	10	50	-	-	-	-	3,031
Total:	2.940	30	10	50	-	-	-	-	3.031

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 304

Boundary - Licensing Mitigation

Project No: MC-CL-XB6987 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: New Investment Location: 10382 Boundary Rd, Metaline, WA 99153

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project implements Protection, Mitigation and Enhancement measures (PME) required by the terms and conditions of a settlement agreement and new license to be issued by the Federal Energy Regulatory Commission (FERC). The license allows for the continued operation of the Boundary Hydroelectric Project, Seattle City Light's largest generating station producing approximately 25 to 40% of the City's power supply.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	112,281	43,049	28,997	14,126	8,066	15,377	10,159	29,775	261,829
Total:	112,281	43,049	28,997	14,126	8,066	15,377	10,159	29,775	261,829
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	112,281	43,049	28,997	14,126	8,066	15,377	10,159	29,775	261,829
Total:	112,281	43,049	28,997	14,126	8,066	15,377	10,159	29,775	261,829

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 305

Boundary - Unit 56 Exciter Replacement

Project No: MC-CL-XB6603 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2017 - 2021 Neighborhood District: Outside City of Seattle

Total Project Cost: \$1,968 **Urban Village:** Outside City of Seattle

This project provides installation of a new electrical exciter on the Boundary Powerhouse Unit 56 Generator. The unit's schedule for a rewind started in 2014, increasing the capacity of the unit. The project also provides an upgraded exciter needed to reliably realize the additional capacity over the new life of the unit.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,968	-	-	-	-	-	-	-	1,968
Total:	1,968	-	-	-	-	-	-	-	1,968
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,968	-	-	-	-	-	-	-	1,968
Total:	1,968	-	-	-	-	-	-	-	1,968

O&M Impacts: NA

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^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 306

Boundary Control Room Alarm System Replacement

MC-CL-XB6637 **BSL Code: Project No:** BC-CL-X

BSL Name: Project Type: Discrete Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Stage 2 - Initiation, Project Definition, & **Council District: Current Project Stage:** Outside City of Seattle

Planning

Start/End Date: 2019 - 2026 **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: \$346 **Urban Village:** Not in an Urban Village

This project replaces the system of alarms and annunciator panels in the Boundary Control room with a modern system that integrates with the current automation system. Alarms will be routed to PH Operator terminals where information will be displayed as to the nature of the alarm. Due to the large number of circuits that will need to be replaced, this project will be implemented in phases over several years.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	95	34	61	52	52	52	-	-	346
Total:	95	34	61	52	52	52	-	-	346
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	95	34	61	52	52	52	-	-	346
Total:	95	34	61	52	52	52	-	-	346

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 307

Boundary DC Panel Upgrade

Project No: MC-CL-XB6628 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration **Location:** Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2017 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$998 Urban Village: Not in an Urban Village

This project replaces and upgrades DC panels at Boundary. The panel capacity has been maxed out from the addition of many control circuits, resulting in multiple circuits being connected to the same breaker. The work will include a load study, design of new main and sub panels, and construction. These panels provide back-up service to critical equipment via batteries in the event of a power failure in the powerhouse.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	982	16	-	-	-	-	-	-	998
Total:	982	16	-	-	-	-	-	-	998
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	982	16	-	-	-	-	-	-	998
Total:	982	16	-	-	-	-	-	-	998

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 308

Boundary Facilities Master Plan

Project No: MC-CL-XB6642 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project installs a new system of rock bolts and other forms of rock anchors to improve the structural stability of the Level 6 Deck on Boundary Dam. This portion of the dam is attached to and supported by the adjacent rock. An inspection revealed a weakness in the current attachments and use of the deck by heavy equipment is restricted until these improvements are made.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	16	105	100	101	102	102	103	500	1,129
Total:	16	105	100	101	102	102	103	500	1,129
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	16	105	100	101	102	102	103	500	1,129
Total:	16	105	100	101	102	102	103	500	1,129

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 309

Boundary Facility - Minor Improvements Program

Project No: MC-CL-XB6401 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 10382 Boundary Rd, Metaline, WA 99153

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides funding for emergent capital projects, specifically related to Boundary Facilities. These projects are by definition, unforeseeable, unscheduled, unpredictable, and occur on a first-come, first serve basis.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	22,722	620	1,038	2,126	1,540	1,972	4,208	3,472	37,698
Total:	22,722	620	1,038	2,126	1,540	1,972	4,208	3,472	37,698
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	22,722	620	1,038	2,126	1,540	1,972	4,208	3,472	37,698
Total:	22,722	620	1,038	2,126	1,540	1,972	4,208	3,472	37,698

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 310

Boundary Fiber Ring Upgrade

Project No: MC-CL-XB6635 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 1 - Pre-Project Development Council District: Outside City of Seattle

Start/End Date: 2027 - 2028 Neighborhood District: Outside City of Seattle

Total Project Cost: \$849 **Urban Village:** Not in an Urban Village

This project installs additional fiber between Boundary powerhouse and the service area. This is necessary to continue to modernize our powerhouse controls, machine monitoring, cyber security systems and work environment.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	-	-	-	-	422	428	849
Total:	-	-	-	-	-	-	422	428	849
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	-	-	-	-	422	428	849
Total:	-	-	-	-	-	-	422	428	849

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 311

Boundary Governor Rehabilitation

Project No: MC-CL-XB6641 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 1 - Pre-Project Development **Council District:** Outside City of Seattle

Start/End Date: 2026 - 2028 Neighborhood District: Outside City of Seattle

Total Project Cost: \$8,664 **Urban Village:** Not in an Urban Village

This project replaces the control systems on all six Boundary generating units. A condition assessment of the Boundary generating units found a number of problems with the governor controls including poor transfer between primary and backup operation, reset problems, and controller lock-up.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	-	-	-	199	4,236	4,228	8,664
Total:	-	-	-	-	-	199	4,236	4,228	8,664
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	-	-	-	199	4,236	4,228	8,664
Total:	-	-	-	-	-	199	4,236	4,228	8,664

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 312

Boundary Powerhouse - Unit 51 Generator Rebuild

Project No: MC-CL-XB6351 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 10382 Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2017 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$41,143 **Urban Village:** Not in an Urban Village

This project provides the rewinding and refurbishing of the Unit 51 generator to extend its useful life, which is part of a programmatic series of projects to maintain the Utility's aging generators. It also replaces the carbon dioxide fire-suppression system with a water sprinkler system to enhance worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	40,868	263	8	4	-	-	-	-	41,143
Total:	40,868	263	8	4	-	-	-	-	41,143
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	40,868	263	8	4	-	-	-	-	41,143
Total:	40.868	263	8	4	-	-	-	-	41.143

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 313

Boundary Powerhouse - Unit 52 Generator Rebuild

Project No: MC-CL-XB6535 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration **Location:** Boundary Rd, Metaline, WA 99153

 Current Project Stage:
 Stage 3 - Design
 Council District:
 Outside City of Seattle

Start/End Date: 2019 - 2024 Neighborhood District: Outside City of Seattle

Total Project Cost: \$35,330 **Urban Village:** Outside City of Seattle

This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 52 generator and upgrades its fire-suppression system. Work may also include mechanical upgrades or installations of seal rings, wicket gates, and diagnostic equipment. This programmatic maintenance helps extend the useful life of the generator.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	84	19,997	13,380	1,869	-	-	-	-	35,330
Total:	84	19,997	13,380	1,869	-	-	-	-	35,330
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	84	19,997	13,380	1,869	-	-	-	-	35,330
Total:	84	19.997	13.380	1.869	-	-	-	-	35.330

Boundary Powerhouse - Unit 54 Generator Rebuild

Project No: MC-CL-XB6353 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 10382 Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 5 - Construction Council District: Outside City of Seattle

Start/End Date: 2018 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$35,153 Urban Village: Not in an Urban Village

This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 54 generator and upgrades the fire-suppression system. Work may also include mechanical upgrades or installations of seal rings, wicket gates, and diagnostic equipment. This programmatic maintenance helps extend the useful life of the generator.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	22,233	13,617	245	58	-	-	-	-	36,153
Total:	22,233	13,617	245	58	-	-	-	-	36,153
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	22,233	13,617	245	58	-	-	-	-	36,153

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 315

Boundary Powerhouse Generator Step-up Transformer Replacement

Project No: MC-CL-XB6493 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: New Facility Location: 10382 Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 5 - Construction Council District: Outside City of Seattle

Start/End Date: 2010 - 2026 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$47,727 **Urban Village:** Not in an Urban Village

This project replaces six existing step-up transformers at Boundary Dam and funds the purchase of a seventh transformer to keep as a spare in inventory due to long lead times for these specialized parts. This project helps avoid prolonged loss of generation due to forced outage.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	19,757	10,565	8,048	6,104	3,018	235	-	-	47,727
Total:	19,757	10,565	8,048	6,104	3,018	235	-	-	47,727
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	19,757	10,565	8,048	6,104	3,018	235	-	-	47,727
Total:	19,757	10,565	8,048	6,104	3,018	235	-	-	47,727

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 316

Boundary Station Service Transformer Replacement

Project No: MC-CL-XB6627 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 1 - Pre-Project Development Council District: Outside City of Seattle

Start/End Date: 2019 - 2027 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$12,588 Urban Village: Not in an Urban Village

This project replaces two aging station service transformers at Boundary. It is assumed that they will be specified and procured together but installed in two sequential years. Station service transformers provide power to the powerhouse, dam and service area. It is likely that the rating of the transformers will need to be increased to accommodate load increases associated with the addition of new circuits in the powerhouse for automation, controls and machine monitoring.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	77	452	2,424	4,571	3,308	1,623	135	-	12,588
Total:	77	452	2,424	4,571	3,308	1,623	135	-	12,588
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	77	452	2,424	4,571	3,308	1,623	135	=	12,588
Total:	77	452	2,424	4,571	3,308	1,623	135	-	12,588

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 317

Boundary Sump Pump Drive Replacement

Project No: MC-CL-XB6633 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Boundary Rd, Metaline, WA 99153

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2019 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$512 Urban Village: Not in an Urban Village

This project replaces and modernizes drive systems for sump pump at Boundary powerhouse. Portions of Boundary powerhouse are below the level of the tailrace and there is a reliance on a series of sump pumps to keep the powerhouse dry. Projects to replace the sump pumps are completed, and now the drive systems for each pump need to be replaced and modernized.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	278	235	-	-	-	-	-	-	512
Total:	278	235	-	-	-	-	-	-	512
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	278	235	-	-	-	-	-	-	512
Total:	278	235	-	-	-	-	-	-	512

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 318

Broad Street Substation - Network

Project No: MC-CL-YN8203 **BSL Code:** BC-CL-Y

Transmission and Distribution - CIP **Project Type:** Ongoing **BSL Name:**

319 6th AVE N **Project Category: New Facility** Location:

Current Project Stage: Council District: N/A Multiple

Start/End Date: N/A **Neighborhood District:** Multiple

Total Project Cost: N/A **Urban Village:** Multiple

This ongoing project funds a programmatic approach for comprehensive management of underground network assets serving customers in the Belltown and Denny Regrade areas. The project enhances network reliability and provides sufficient service capacity for the growing electrical power needs of the Denny Triangle and potentially a portion of South Lake Union area.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	93,785	4,421	2,552	2,725	2,702	3,248	3,612	3,553	116,598
Total:	93,785	4,421	2,552	2,725	2,702	3,248	3,612	3,553	116,598
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	93,785	4,421	2,552	2,725	2,702	3,248	3,612	3,553	116,598
Total:	93,785	4,421	2,552	2,725	2,702	3,248	3,612	3,553	116,598

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 319

Building Envelope Upgrades

Project No: MC-CL-XF9072 BSL Code: BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project replaces or restores exterior moisture and thermal barrier components of buildings such as roofing and insulation systems, exterior siding and cladding systems, windows and exterior doors. This project allows for the proactive replacement of building exteriors in order to avert costly structural damage and prevent the growth of toxic mold inside wall cavities and ceiling spaces that can easily render a building uninhabitable. The project also enhances operational efficiency by mitigating emergency repairs which disrupt utility operations.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	14,322	234	43	241	1,097	1,119	1,411	734	19,201
Total:	14,322	234	43	241	1,097	1,119	1,411	734	19,201
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	14,322	234	43	241	1,097	1,119	1,411	734	19,201
Total:	14,322	234	43	241	1,097	1,119	1,411	734	19,201

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 320

Call Center Improvements - City Light

Project No: MC-CL-ZC9972 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: University District / Roosevelt / Northgate

Current Project Stage: N/A Council District: Council District 5

Start/End Date: N/A Neighborhood District: Northwest

Total Project Cost: N/A Urban Village: Multiple

This ongoing project funds costs for the joint Seattle Public Utilities and Seattle City Light call center improvements. This project focuses on the capital improvement of the call center facility and systems.

_	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	511	-	45	45	45	45	45	45	781
Total:	511	-	45	45	45	45	45	45	781
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	511	_	45	45	45	45	45	45	781
Total:	511	-	45	45	45	45	45	45	781

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 321

Cedar Falls Powerhouse - Unit 5/6 Generator Protective Relay

Project No: MC-CL-XC6450 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 19901 Cedar Falls Rd SE, North Bend,

WA 98045

Current Project Stage: Stage 5 - Construction Council District: Outside City of Seattle

Start/End Date: 2007 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$3,299 **Urban Village:** Not in an Urban Village

This project upgrades the present generator protection for Units 5 and 6, which lacks some basic protection elements to protect it from abnormal frequency and voltages. Upgrading and reconfiguring the protective relays is critical to preparing the new Cedar Falls substation for operation. This project replaces existing protective relays, upgrades the generator protection packages, and replaces the electrical and mechanical lockout relays. The project permits City Light to comply with the North American Electric Reliability Council (NERC) and the Western Electricity Coordinating Council (WECC) regional requirements for maintaining the generator in-service during system disturbances.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,359	1,505	435	-	-	-	-	-	3,299
Total:	1,359	1,505	435	-	-	-	-	-	3,299
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,359	1,505	435	-	-	-	-	-	3,299
Total:	1,359	1,505	435	-	-	-	-	-	3,299

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 322

Cedar Falls Powerhouse - Valvehouse Rehabilitation

Project No: MC-CL-XC6324 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 19901 Cedar Falls Rd SE, North Bend,

WA 98045

Current Project Stage: Stage 6 - Closeout **Council District:** Outside City of Seattle

Start/End Date: 2023 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: Urban Village: Not in an Urban Village

This project provides rehabilitation to the Cedar Falls Valvehouse. Rehabilitation may include exterior structural improvements, replacement of windows, oil spill prevention, and interior remodeling.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	-	-	-	-	-	-	=
Total:	-	-	-	-	-	-	-	-	-
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	_	_	-	-	-	-	-	-	-
Total:	-	-	-	-	-	-	-	-	_

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 323

Cedar Falls Rehabilitation

Project No: MC-CL-XC6625 **BSL Code:** BC-CL-X

BSL Name: Project Type: Ongoing Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Cedar Falls

Current Project Stage: N/A **Council District:** Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This project funds the rehabilitation of the Cedar Falls Hydroelectric Project, which includes completion of the Cedar Falls project analysis, equipment inspections, penstock analysis, building analysis which will uncover items City Lights as a dam owner must address. These items will ensure public and employee safety, and environmental stewardship.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,585	=	-	-	-	-	=	=	1,586
Total:	1,585	-	-	-	-	-	-	-	1,586
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,585	=	=	-	=	-	-	=	1,586
Total:	1,585	-	-	-	-	-	-	-	1,586

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 324

Cedar Falls Substation & Bank 6 Replacement

Project No: MC-CL-XC6573 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Cedar Falls

Current Project Stage: Council District: Stage 5 - Construction Outside City of Seattle

Start/End Date: 2018 - 2023 **Neighborhood District:** Outside City of Seattle

Total Project Cost: \$15,097 **Urban Village:** Outside City of Seattle

This project replaces the 60-year-old Bank 6 power step up transformer at Cedar Falls. Bank 6 provides the connection between Cedar Falls Generating Units 5 and 6 and the transmission system. The transformer is approaching the end of its useful life and the goal of this project is to replace it during a planned outage before it fails.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	6,260	8,619	218	-	-	-	=	=	15,097
Total:	6,260	8,619	218	-	-	-	-	-	15,097
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	6,260	8,619	218	-	-	-	-	-	15,097
Total:	6,260	8,619	218	-	-	-	-	-	15,097

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 325

Cedar Falls/South Fork Tolt - Minor Improvements Program

Project No: MC-CL-XC6406 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration **Location:** 19901 Cedar Falls Rd SE, North Bend,

WA 98045

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds emergent capital projects related to the Cedar Falls and South Fork Tolt Facilities. In addition, it funds scheduled, small capital projects that have cost estimates less than \$25,000. These projects are unforeseeable, unscheduled, unpredictable, and occur on a first-come, first serve basis.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	17,407	1,004	998	1,912	1,396	1,822	2,473	2,300	29,312
Total:	17,407	1,004	998	1,912	1,396	1,822	2,473	2,300	29,312
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	17,407	1,004	998	1,912	1,396	1,822	2,473	2,300	29,312
Total:	17,407	1,004	998	1,912	1,396	1,822	2,473	2,300	29,312

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 326

Center City Connector Streetcar City Light

Project No: MC-CL-ZT8470 **BSL Code:** BC-CL-Z

Project Type: Discrete **BSL Name:** Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: City Wide

Council District: Current Project Stage: Stage 3 - Design Multiple

Start/End Date: 2015 - 2022 **Neighborhood District:** Multiple

Total Project Cost: \$1,001 **Urban Village:** Multiple

This project provides power relocations & service for the proposed SDOT Center City Connector Streetcar project. City Light has buried primary distribution power cables, some of which are encased in old clay tile ducts, which do not meet current standards, and are unlikely to be able to withstand the forces generated by the streetcar's operation. Any streetcar alignment to be built across such old facilities would likely need a reinforced roadbed for SCL facilities to withstand the additional weight.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	844	157	-	-	-	-	-	-	1,001
Total:	844	157	-	-	-	-	-	-	1,001
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	844	157	-	-	-	-	-	-	1,001
Total:	844	157	-	-	-	-	-	-	1,001

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 327

CenTrio Electrification

Project No: MC-CL-ZS8510 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Investment Location: System Wide

Current Project Stage: Stage 1 - Pre-Project Development Council District: Council District 2

Start/End Date: 2022 - 2023 Neighborhood District: Downtown

Total Project Cost: \$700 Urban Village: Downtown

This project funds the plan, design, procurement, construction, and commission of large City Light capital investment projects to deliver infrastructure required to meet electrification of CenTrio, a franchise utility that delivers steam for heating of multiple downtown buildings in Seattle.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	700	-	-	-	-	-	-	700
Total:	-	700	-	-	-	-	-	-	700
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	700	-	-	-	-	-	-	700
Total:	-	700	-	-	-	-	-	-	700

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 328

Communications Improvements

Project No: MC-CL-YD9009 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides funding for unforeseen emergent and critical work on City Light's communications systems to replace communications components due to failure, changing regulatory and security requirements, and requests from customers or other agencies. This project enhances flexibility to address emergent communication systems problems.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	10,990	950	928	902	971	1,033	1,366	1,511	18,650
Total:	10,990	950	928	902	971	1,033	1,366	1,511	18,650
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	10,990	950	928	902	971	1,033	1,366	1,511	18,650
Total:	10,990	950	928	902	971	1,033	1,366	1,511	18,650

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 329

Creston-Nelson to Intergate East Feeder Installation

Project No: MC-CL-ZO8430 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Facility Location: Tukwila

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2009 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$9,374 **Urban Village:** Not in an Urban Village

This project installs a new feeder to supply the Sabey Corporation's Intergate East Internet Center in Tukwila from the Creston-Nelson Substation. The project includes design, permit preparation, and evaluates customer load requirements.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	8,832	542	-	-	-	-	-	-	9,374
Total:	8,832	542	-	-	-	-	-	-	9,374
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	8,832	542	-	-	-	-	-	-	9,374
Total:	8,832	542	-	-	-	-	-	-	9,374

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 330

Dallas Ave. 26 kV Crossing

Project No: MC-CL-YR8322 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: Dallas Ave S

Current Project Stage: Stage 3 - Design Council District: Council District 2

Start/End Date: 2005 - 2027 Neighborhood District: Greater Duwamish

Total Project Cost: \$11,486 **Urban Village:** South Park

This project reinstalls two 26kV feeders across the Duwamish River. This crossing backs up the Cambridge Corridor Crossing, providing redundant power supply to the area along East Marginal Way South. The area has many large industrial accounts.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	782	506	7	234	38	4,919	5,000	-	11,486
Total:	782	506	7	234	38	4,919	5,000	-	11,486
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	782	506	7	234	38	4,919	5,000	-	11,486
Total:	782	506	7	234	38	4,919	5,000	-	11,486

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 331

Dam Safety Part 12 Improvements

Project No: MC-CL-XB6626 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Improved Facility Location: System Wide

Council District: Current Project Stage: N/A Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This project provides the support analysis and data required to meet FERC regulations. City Light must demonstrate that the dams are monitored and engineering improvements are based on current climate conditions, most current engineering standards, and the appropriate devices, instrumentation, and tools. Activities may include Skagit bulkhead, Boundary new instrumentation, Diablo & Gorge GPS System, Boundary instrumentation, Boundary Part 12 Implementation and Skagit Part 12 Implementation.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,914	1,231	1,233	1,308	2,150	2,224	1,640	2,299	13,998
Total:	1,914	1,231	1,233	1,308	2,150	2,224	1,640	2,299	13,998
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,914	1,231	1,233	1,308	2,150	2,224	1,640	2,299	13,998
Total:	1,914	1,231	1,233	1,308	2,150	2,224	1,640	2,299	13,998

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 332

Data Warehouse Implementation

Project No: MC-CL-ZF9975 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: Stage 5 - Execution (IT Only) Council District: Citywide

Start/End Date: 2017 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$367 **Urban Village:** Not in an Urban Village

This project funds the development of data marts to be added to a Data Warehouse. The data marts enable City Light to build reports from any front-end business intelligence tool such as Cognos, Oracle OBIEE and OUA, Tableau, or Power BI.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	144	223	-	-	-	-	367
Total:	-	-	144	223	-	-	-	-	367
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	144	223	-	-	-	-	367
Total:	-	-	144	223	-	-	-	-	367

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 333

Denny Substation - Network

Project No: MC-CL-YN8404 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: Valley Street

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Lake Union

Total Project Cost: N/A Urban Village: South Lake Union

This ongoing project funds network system work in the Denny Substation network area. Work may include design and construction, engineering design at the substation network interface, and underground conversion of streetlights, traffic signals, and telecom and fiber optic systems.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	106,403	2,752	7,103	7,500	7,500	6,666	6,814	4,995	149,734
Total:	106,403	2,752	7,103	7,500	7,500	6,666	6,814	4,995	149,734
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
			2023 7,103	2024 7,500	2025 7,500	2026 6,666	2027 6,814	2028 4,995	Total 149,734

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 334

Denny Substation Tenant Improvements

Project No: MC-CL-XF9235 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Valley Street

Current Project Stage: Stage 6 - Closeout Council District: Multiple

Start/End Date: 2015 - 2022 Neighborhood District: Lake Union

Total Project Cost: \$7,158 **Urban Village:** South Lake Union

This project will program, design, and construct interior improvements within two building shell spaces within the Denny Substation. The two spaces are a southwest shell space which may house a community center or similar public amenity and a southeast shell space which may house a learning resource center or similar public amenity.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,257	3,901	-	-	-	-	-	-	7,158
Total:	3,257	3,901	-	-	-	-	-	-	7,158
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,257	3,901	-	-	-	-	-	-	7,158
Total:	3.257	3.901	-	-	-	-	-	-	7.158

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 335

Denny Substation Transmission Lines

Project No: MC-CL-YT7125 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Citywide

Project Category: New Facility Location: System wide

Current Project Stage: Stage 2 - Initiation, Project Definition, & Council District:

Planning

Start/End Date: 2008 - 2030 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$24,773 **Urban Village:** Not in an Urban Village

This project provides work associated with the design and construction of new transmission lines to support the new Denny Substation. This expansion would divide the existing Pine to Broad Street transmission line into two transmission lines to improve system reliability and resiliency.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	17,596	6,048	217	220	220	210	233	29	24,773
Total:	17,596	6,048	217	220	220	210	233	29	24,773
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	17,596	6,048	217	220	220	210	233	29	24,773
Total:	17,596	6,048	217	220	220	210	233	29	24,773

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 336

Diablo - Load Interrupters Replacement

Project No: MC-CL-XS6532 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 126 Stte Highway 20

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2015 - 2021 Neighborhood District: Outside City of Seattle

Total Project Cost: \$6,016 **Urban Village:** Outside City of Seattle

This project replaces load interrupters at Diablo Banks Generators No. 31 and 32. The existing 230kV load interrupters have reached the end of their useful life and need to be replaced. This project will replace the load interrupters with SF6 Gas Insulated circuit breakers.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	6,009	7	-	-	-	-	-	-	6,016
Total:	6,009	7	-	-	-	-	-	-	6,016
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	6,009	7	-	-	-	-	-	-	6,016
Total:	6,009	7	-	-	-	-	-	-	6,016

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 337

Diablo - Replace Bank Transformers

MC-CL-XS6589 BC-CL-X Project No: **BSL Code:**

Project Type: BSL Name: Power Supply - CIP Discrete

Project Category: Rehabilitation or Restoration Location: Milepost 126 Stte Highway 20

Current Project Stage: Stage 1 - Pre-Project Development **Council District:** Outside City of Seattle

Start/End Date: 2028 - 2029 **Neighborhood District:** Outside City of Seattle

Total Project Cost: \$315 **Urban Village:** Outside City of Seattle

This project replaces the two Diablo generator step up transformer banks as they reach the end of their useful life.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	-	-	-	-	-	315	315
Total:	-	-	-	-	-	-	-	315	315
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	-	-	-	-	-	315	315
Total:	-	-	-	-	-	-	-	315	315

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 338

Diablo Dam - Spill Gate Trunnion Upgrades

Project No: MC-CL-XS6610 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 126 Stte Highway 20

 Current Project Stage:
 N/A
 Council District:
 Outside City of Seattle

 Start/End Date:
 N/A
 Neighborhood District:
 Outside City of Seattle

 Total Project Cost:
 N/A
 Urban Village:
 Outside City of Seattle

This project provides replacement of the trunnion bushings in all 20 of Diablo Dam's spill gates with new synthetic bushings that are permanently sealed and lubricated, and perform associated supporting work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,082	931	645	755	347	-	-	-	4,759
Total:	2,082	931	645	755	347	-	-	-	4,759
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,082	931	645	755	347	-	-	-	4,759
Total:	2,082	931	645	755	347				4,759

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 339

Diablo Facility - Lines Protection Upgrades

Project No: MC-CL-XS6483 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 126 State Highway 20

Council District: Current Project Stage: Stage 6 - Closeout Outside City of Seattle

Start/End Date: 2011 - 2021 **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: \$6,600 **Urban Village:** Not in an Urban Village

This project provides updated line protection schemes on the Diablo Facility D1, D2, & D3, R! and R2 Lines, utilizing electro-mechanical relays. The project also replaces existing relays, which are approaching the reasonable service life and lack essential fault location capability. The project replacements include microprocessor based digital relays, fault location and event reporting, lockout and test switching capabilities, and communication assisted transfer trip utilizing the mirrored bits function of the digital relays.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	6,599	-	-	-	-	-	-	-	6,600
Total:	6,599	-	-	-	-	-	-	-	6,600
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	6,599	-	-	-	-	-	-	-	6,600
Total:	6,599	-	-	-	-	-	-	-	6,600

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 340

Distribution Area Communications Networks

Project No: MC-CL-YD9307 **BSL Code:** BC-CL-Y

Project Type: Ongoing **BSL Name:** Transmission and Distribution - CIP

Project Category: New Facility Location: Citywide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project installs fiber cable and equipment to all City Light dams, substations and service centers to create a secure, reliable, fast and redundant digital communications system for operations command and control. The fiber infrastructure provides a secure path for power distribution system control and dispatch, Energy Management System data, and other City Light communications. This project also supports Substation Automation, Distribution Automation, Distributed Generation, and automated meter reading projects.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	27,975	3,709	2,256	1,000	1,000	1,000	1,000	1,000	38,940
Total:	27,975	3,709	2,256	1,000	1,000	1,000	1,000	1,000	38,940
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	27,975	3,709	2,256	1,000	1,000	1,000	1,000	1,000	38,940
Total:	27,975	3,709	2,256	1,000	1,000	1,000	1,000	1,000	38,940

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 341

Distribution Automation

Project No: MC-CL-YR8425 **BSL Code:** BC-CL-Y

Project Type: Ongoing **BSL Name:** Transmission and Distribution - CIP

Rehabilitation or Restoration Location: Citywide **Project Category:**

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project automates radial distribution feeders, which includes installation of equipment to provide remote control of operations of switches on power lines and gather real time data on conditions in distribution power lines. The installation of strategically placed switches provides the ability to automatically perform outage restoration, shift blocks of load to maximize efficiencies of feeders, and reconfigure the feeder grid. Typical operation involves remotely detecting that a feeder fault has occurred, locating the damaged portion of the feeder between two remote controlled line switches, isolating the damaged portion of the feeder by opening appropriate remote controlled line switches, and re-energizing undamaged portions of the feeder via the primary feeder source and one or more backup sources using automatically controlled tie switches.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	14,260	4,101	3,210	3,092	3,141	3,200	3,662	4,000	38,665
Total:	14,260	4,101	3,210	3,092	3,141	3,200	3,662	4,000	38,665
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	14,260	4,101	3,210	3,092	3,141	3,200	3,662	4,000	38,665
Total:	14,260	4,101	3,210	3,092	3,141	3,200	3,662	4,000	38,665

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 342

Distribution Management System

Project No: MC-CL-YD9966 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: Citywide

Current Project Stage: Stage 1 - Pre-Project Development Council District: Citywide

Start/End Date: 2027 - 2028 Neighborhood District: Multiple

Total Project Cost: \$6,829 Urban Village: Multiple

This project provides installation of the Distribution Management System (DMS). This comprehensive software application enables Power Dispatchers to operate automated distribution devices more effectively by interfacing with the Utility's Energy Management System (EMS), Outage Management System (OMS), Customer Information System, and the Geospatial Information System. The DMS will improve planning, coordination, and operations by enabling dispatchers to improve their switching operations for planned shutdowns. It will also make it easier to prepare planned outages and reduce the area needed for an outage.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	=	-	-	-	-	-	6,829	-	6,829
Total:	-	-	-	-	-	-	6,829	-	6,829
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	-	-	-	-	6,829	-	6,829
Total:	-	-	-	-	-	-	6,829	-	6,829

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 343

Document Management System

Project No: MC-CL-ZF9962 **BSL Code:** BC-CL-Z

Customer Focused - CIP **Project Type:** Ongoing **BSL Name:**

Project Category: Rehabilitation or Restoration Location: System Wide

N/A **Council District: Current Project Stage:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This project plans, builds, deploys, and provides ongoing management of an enterprise document management system that effectively and efficiently captures, secures, shares, and distributes digital and paper-based documents and reports. The project streamlines collaboration, automates routine tasks, and lowers costs related to creation, management, and storage of business documents. The project provides the governance and audit capabilities needed to minimize the risks and costs associated with regulatory and legal compliance.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,362	2,013	872	872	1,000	1,848	1,000	931	11,897
Total:	3,362	2,013	872	872	1,000	1,848	1,000	931	11,897
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,362	2,013	872	872	1,000	1,848	1,000	931	11,897
Total:	3,362	2,013	872	872	1,000	1,848	1,000	931	11,897

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 344

Electric Vehicle Infrastructure

Project No: MC-CL-XF9237 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: New Investment Location: Citywide

Council District: Current Project Stage: N/A Multiple

Start/End Date: N/A **Neighborhood District:** Multiple

Total Project Cost: N/A **Urban Village:** Multiple

This ongoing project funds the implementation of City Light's public electric vehicle charging pilot project. This project will deploy 26 public EV fast chargers within the service area, at both City-owned property and private sites. City Light owns and installs the charging infrastructure. This program allows customers access to carbon-neutral electricity that customers are demanding, better utilize current utility assets, and contribute to the Clean, Renewable-Powered City initiative and the aggressive goals of the Drive Clean Seattle Initiative.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,943	1,053	-	-	-	-	-	-	4,996
Total:	3,943	1,053	-	-	-	-	-	-	4,996
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,943	1,053	-	-	-	-	-	-	4,996
Total:	3,943	1,053	-	-	-	-	-	-	4,996

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 345

Endangered Species Act Mitigation

Project No: MC-CL-XP6990 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds work that protects and restores fisheries habitat in the Skagit and Tolt river basins. It implements the Endangered Species Act (ESA) Program for recovery of listed fish species that are potentially affected by City Light projects. The project includes land purchase, restoration, assessment, and management. The project reduces the likelihood of third party lawsuits under ESA and the reopening of claims by Federal agencies, e.g. the U.S. Fish and Wildlife Service, seeking additional measures to protect and restore the listed species.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	14,874	2,413	1,169	1,192	1,213	1,124	615	1,079	23,678
Total:	14,874	2,413	1,169	1,192	1,213	1,124	615	1,079	23,678
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	14,874	2,413	1,169	1,192	1,213	1,124	615	1,079	23,678
Total:	14,874	2,413	1,169	1,192	1,213	1,124	615	1,079	23,678

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 346

Energy Conservation

Project No: MC-CL-XF9320 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project installs improvements at SCL facilities to reduce energy consumption. Work is performed at facilities including generation sites, service centers, and substations. With documented savings, some project costs may be recovered from the Bonneville Power Administration.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	8,056	1,423	850	600	600	-	-	-	11,529
Total:	8,056	1,423	850	600	600	-	-	-	11,529
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	8,056	1,423	850	600	600	-	-	-	11,529
Total:	8,056	1,423	850	600	600	-	-	-	11,529

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 347

Energy Efficiency

Project No: MC-CL-WC2250 BSL Code: BC-CL-W

Project Type: Ongoing BSL Name: Conservation & Environmental - CIP

Project Category: Improved Facility Location: System Wide

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This ongoing project funds energy efficiency programs at City Light.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	28,904	31,936	31,842	31,063	31,394	31,394	33,300	219,831
Total:	-	28,904	31,936	31,842	31,063	31,394	31,394	33,300	219,831
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	28,904	31,936	31,842	31,063	31,394	31,394	33,300	219,831
Total:	-	28,904	31,936	31,842	31,063	31,394	31,394	33,300	219,831

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 348

Energy Management System Upgrade

Project No: MC-CL-YD9979 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: Stage 5 - Execution (IT Only) Council District: Citywide

Start/End Date: 2020 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$1,650 Urban Village: Not in an Urban Village

This project funds the upgrade to maintain the City Light vendor supported Energy Management System (EMS) for Supervisory Control and Data Acquisition (SCADA) for power system operation that is current with industry technology, cyber security and regulatory compliant for highly available and reliable system operation. The EMS Replacement Project was deployed in 2016 with a planned investment objective to maintain current vendor support with software and hardware.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,523	266	-	-	-	-	-	-	1,789
Total:	1,523	266	-	-	-	-	-	-	1,789
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,523	266	-	-	-	-	-	-	1,789
Total:	1,523	266	-	-	-	-	-	-	1,789

O&M Impacts: NA

* Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 349

Enterprise Geographic Information System

Citywide

Project No: MC-CL-YD9957 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: Stage 2 - Initiation, Project Definition, & Council District:

Planning

Start/End Date: 2015 - 2024 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$8,616 **Urban Village:** Not in an Urban Village

This project investigates, evaluates, and makes a recommendation to develop a unified GIS system that meets all of the needs of the Utility, replacing the two separate and incompatible Geographic Information Systems (GIS) that City Light currently maintains, and allowing integration with future software systems (such as Mobile Workforce).

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,260	1,924	3,204	2,228	-	-	-	=	8,616
Total:	1,260	1,924	3,204	2,228	-	-	-	-	8,616
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,260	1,924	3,204	2,228	-	-	-	=	8,616
Total:	1,260	1,924	3,204	2,228	-	-	-	-	8,616

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 350

Enterprise Software Solution Replacement Strategy

Project No: MC-CL-YD9969 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: City Wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This project funds the upgrade or replacement of components of the Utility Technology Portfolio. Timely upgrades and replacements ensure that technology and enterprise level software resources are kept up to date and fully functional.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	19,352	21,279	17,933	10,829	11,628	14,567	7,523	9,575	112,685
Total:	19,352	21,279	17,933	10,829	11,628	14,567	7,523	9,575	112,685
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	19,352	21,279	17,933	10,829	11,628	14,567	7,523	9,575	112,685
Total:	19,352	21,279	17,933	10,829	11,628	14,567	7,523	9,575	112,685

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 351

Environmental Claims

Project No: MC-CL-WC3133 BSL Code: BC-CL-W

Project Type: Ongoing BSL Name: Conservation & Environmental - CIP

Project Category: Improved Facility Location: System Wide

 Current Project Stage:
 N/A
 Council District:
 Multiple

 Start/End Date:
 N/A
 Neighborhood District:
 Multiple

 Total Project Cost:
 N/A
 Urban Village:
 Multiple

This ongoing project funds all environmental liability clean-up and remediation work on City Light owned and non-owned properties, whether voluntary or ordered by State or Federal environmental regulating agencies.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	11,644	12,107	12,113	12,118	12,124	12,130	13,246	85,482
Total:	-	11,644	12,107	12,113	12,118	12,124	12,130	13,246	85,482
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	11,644	12,107	12,113	12,118	12,124	12,130	13,246	85,482
Total:	-	11,644	12,107	12,113	12,118	12,124	12,130	13,246	85,482

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 352

Environmental Safeguarding and Remediation of Facilities

Project No: MC-CL-XF9152 **BSL Code:** BC-CL-X

BSL Name: Project Type: Ongoing Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A **Council District:** Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project provides improvements to prevent air and water pollution at City Light facilities. Projects may include ventilation for painting operations, storage equipment for toxic material, containment provisions to provide protection in the event of a spill or leak, and handling equipment to enable safe movement of hazardous items.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	664	72	69	138	31	32	41	60	1,109
Total:	664	72	69	138	31	32	41	60	1,109
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	664	72	69	138	31	32	41	60	1,109
Total:	664	72	69	138	31	32	41	60	1,109

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 353

Equipment Fleet Replacement

Project No: MC-CL-XF9101 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds the purchase of light-duty and heavy-duty mobile equipment fleet vehicles. This includes replacement of specialized fleet vehicles for electric utility use, as well as enhancements and additions of green alternatives such as electric powered vehicles.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	87,110	23,305	9,556	8,690	9,190	10,648	10,700	10,700	169,898
Total:	87,110	23,305	9,556	8,690	9,190	10,648	10,700	10,700	169,898
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	87,110	23,305	9,556	8,690	9,190	10,648	10,700	10,700	169,898
Total:	87,110	23,305	9,556	8,690	9,190	10,648	10,700	10,700	169,898

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 354

Facilities Infrastructure Improvements

Project No: MC-CL-XF9156 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project upgrades and replaces the structural, electrical or mechanical systems, or other base building systems critical to building operations, and site development items. Work under this project may include plumbing replacements, HVAC related systems, power distribution systems, tanks, elevators, fire suppression systems, drainage systems, exterior and interior lighting, landscaping, irrigation, paving, stairs, and sidewalks. This project is intended for emergent work not yet identified and is not intended as a duplicate for other infrastructure improvements included in specific projects.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,428	-	628	629	100	245	232	651	6,912
Total:	4,428	-	628	629	100	245	232	651	6,912
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,428	-	628	629	100	245	232	651	6,912
Total:	4,428	-	628	629	100	245	232	651	6,912

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 355

Facilities Regulatory Compliance

Project No: MC-CL-XF9151 BSL Code: BC-CL-X

 Project Type:
 Ongoing
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project is for the investigation of contamination and remediation, if necessary, of property that the utility is targeting for disposal.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,221	3,524	357	365	383	377	383	383	7,994
Total:	2,221	3,524	357	365	383	377	383	383	7,994
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,221	3,524	357	365	383	377	383	383	7,994
Total:	2,221	3,524	357	365	383	377	383	383	7,994

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 356

First Hill - Network

Project No: MC-CL-YN8301 **BSL Code:** BC-CL-Y

BSL Name: Transmission and Distribution - CIP **Project Type:** Ongoing

1100 Madison St **Project Category:** Rehabilitation or Restoration Location:

N/A **Council District:** Council District 3 **Current Project Stage:**

Start/End Date: N/A **Neighborhood District:** East District

Total Project Cost: N/A **Urban Village:** First Hill/Capitol Hill

This ongoing project funds a programmatic approach for comprehensive management of underground network assets serving customers in the First Hill area. This project funds annual work required, such as balancing feeder cables to their maximum service build out limit, performing engineering analysis to determine system feeder assignments, required for new service connections, and replacement of cables that fail while in service.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	18,182	1,970	3,776	3,808	2,955	3,766	3,284	3,228	40,968
Total:	18,182	1,970	3,776	3,808	2,955	3,766	3,284	3,228	40,968
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	18,182	1,970	3,776	3,808	2,955	3,766	3,284	3,228	40,968
Total:	18,182	1,970	3,776	3,808	2,955	3,766	3,284	3,228	40,968

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 357

Fork Tolt License Mitigation

Project No: MC-CL-WC3131 BSL Code: BC-CL-W

Project Type: Ongoing BSL Name: Conservation & Environmental - CIP

Project Category: Improved Facility Location: System Wide

 Current Project Stage:
 N/A
 Council District:
 Outside City of Seattle

 Start/End Date:
 N/A
 Neighborhood District:
 Outside City of Seattle

 Total Project Cost:
 N/A
 Urban Village:
 Outside City of Seattle

This ongoing project funds activities related to the South Fork Tolt License Mitigation and Settlement Agreement from 1988 to 2028. Activities include but are not limited to spawning surveys and placement of woody debris.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	268	143	145	146	148	149	149	1,148
Total:	-	268	143	145	146	148	149	149	1,148
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	268	143	145	146	148	149	149	1,148
Total:	-	268	143	145	146	148	149	149	1,148

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 358

Georgetown Steamplant Access Road

Project No: MC-CL-XF9233 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Off Wa 99 At King County Airport

 Current Project Stage:
 Stage 5 - Construction
 Council District:
 Council District 2

Start/End Date: 2015 - 2023 Neighborhood District: Greater Duwamish

Total Project Cost: \$3,235 **Urban Village:** Greater Duwamish

This project will design and construct a road and associated infrastructure for public access to the Georgetown Steam Plant. This work will be partially funded by King County, who initiated street development in 2000 that cut off access to the steam plant.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	382	2,852	-	-	-	-	-	-	3,235
Total:	382	2,852	-	-	-	-	-	-	3,235
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	382	2,852	-	-	-	-	-	-	3,235
Total:	382	2,852	-	-	-	-	-	-	3,235

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 359

Gorge - 240V AC Station Service Switchgear Replacement

Project No: MC-CL-XS6581 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 121 Stte Highway 20

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2017 - 2022 Neighborhood District: Outside City of Seattle

Total Project Cost: \$2,167 **Urban Village:** Outside City of Seattle

This project mitigates safety hazards at the Gorge and Diablo Powerhouses by replacing the 240V circuit breakers with new breakers that allow for remote operation. Recent policy and regulation changes related to electrical Arc Flash hazards have highlighted safety issues related to this equipment.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,148	19	-	-	-	-	-	-	2,167
Total:	2,148	19	-	-	-	-	-	-	2,167
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,148	19	-	-	-	-	-	-	2,167
Total:	2,148	19	-	-	-	-	-	-	2,167

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 360

Gorge Crane Rehabilitation

Project No: MC-CL-XS6639 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 121 State Highway 20

Current Project Stage: Stage 2 - Initiation, Project Definition, & Council District: Outside City of Seattle

Planning

Start/End Date: 2021 - 2027 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$17,747 **Urban Village:** Not in an Urban Village

This project refurbishes or replaces mechanical and electrical systems for the Gorge powerhouse cranes and will provide safety upgrades to comply with current code. The Gorge powerhouse crane has never undergone a major refurbishment. The three Gorge generating units are planned for overhauls within the next ten years, and will require a reliable crane. The crane control system is being modernized to allow for better control and accuracy.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	41	180	1,281	4,879	6,190	5,139	38	=	17,747
Total:	41	180	1,281	4,879	6,190	5,139	38	-	17,747
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	41	180	1,281	4,879	6,190	5,139	38	=	17,747
Total:	41	180	1,281	4,879	6,190	5,139	38	-	17,747

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 361

CIP Project Page Seattle City Light

Gorge U21-24 overhauls

Project No: MC-CL-XS6640 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 121 State Highway 20

Council District: Current Project Stage: Stage 1 - Pre-Project Development Outside City of Seattle

Start/End Date: 2023 - 2028 **Neighborhood District:** Outside City of Seattle

Total Project Cost: \$28,994 **Urban Village:** Not in an Urban Village

This project overhauls Gorge units 21 - 24. The final scope of work will be determined during project chartering, but is expected to include replacing the stator winding, stator core, and excitation system. Refurbishment is expected for rotor components and other mechanical components. Planning is currently forecast to start in 2022 which would mean construction on the first unit would likely begin in 2025.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	48	534	1,020	7,275	8,142	11,975	28,994
Total:	-	-	48	534	1,020	7,275	8,142	11,975	28,994
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	48	534	1,020	7,275	8,142	11,975	28,994
Total:	-	-	48	534	1.020	7.275	8.142	11.975	28.994

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 362

Grid Modernization

Project No: MC-CL-YD9510 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Improved Facility Location: System Wide

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This project funds installation of technology and equipment to modernize the distribution grid, including distribution system sensors, automated and remote switches, and demand response systems. This project implements the Grid Modernization Plan and Roadmap, which describes the work needed to build a next-generation electric grid that can flexibly and cost-effectively absorb demand growth from electrification of buildings and transportation.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	1,719	3,195	3,291	3,389	3,491	3,596	3,668	22,349
Total:	-	1,719	3,195	3,291	3,389	3,491	3,596	3,668	22,349
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	1,719	3,195	3,291	3,389	3,491	3,596	3,668	22,349
Total:	-	1.719	3.195	3.291	3.389	3,491	3.596	3.668	22.349

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 363

Hydro Project Spill Containment

Project No: MC-CL-XP6530 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A Urban Village: Outside City of Seattle

This ongoing project funds upgrades to generating plants that will either prevent oil spills through process improvements and equipment replacement, or provide additional containment capacity for accidental spills. These upgrades will include replacing oil filled transformers with dry-type transformers, building larger containment basins around oil filled equipment, reconfiguring powerhouse sumps, installing oil/water separators, and replacing greased valve bushings with greaseless bushings.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,640	161	192	-	-	-	-	-	2,993
Total:	2,640	161	192	-	-	-	-	-	2,993
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,640	161	192	-	-	-	-	-	2,993
Total:	2,640	161	192	-	-	-	-	-	2,993

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 364

Interbay Substation - Development

Project No: MC-CL-YS7756 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: 17th Ave West

Current Project Stage: Stage 1 - Pre-Project Development Council District: Council District 7

Start/End Date: 2022 - 2028 Neighborhood District: Magnolia/Queen Anne

Total Project Cost: \$695 Urban Village: Ballard-Interbay Northend

This project plans, designs, and constructs a 26 kV substation in the Interbay area. This project installs 2-100 MVA transformers into a facility large enough to accommodate a third transformer at the site if required in the future. The project adds to the distribution network and provides a new path for power to the area. It provides assurance to the developers who are interested in projects in the South Lake Union district that City Light will be able to serve their needs reliably.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	98	86	88	89	111	114	109	695
Total:	-	98	86	88	89	111	114	109	695
Fund Appropriations /	LTD	2022							
Allocations *	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	Actuals -	Revised 98	2023 86	2024 88	2025 89	2026	2027 114	2028 109	Total 695

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 365

CIP Project Page Seattle City Light

IT Infrastructure

Project No: MC-CL-ZF9915 **BSL Code:** BC-CL-Z

Project Type: Ongoing **BSL Name:** Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds replacement and improvement of the Utility's information technology infrastructure. This infrastructure provides applications, data storage, and print services to the utility, and supports activities and applications including Microsoft Outlook, remote connectivity, electronic communications and recording of power marketing transactions (E-tagging), the City InWeb and network, common and City Light applications, UNIX services, and infrastructure change management. Components purchased by this project include servers, network and communications equipment, disk storage, and application and operating system software. Infrastructure is upgraded or replaced based upon a combination of factors, such as maintenance schedules, equipment warranties, availability of vendor support, Gartner recommendations, application growth, and security demands.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9	95	98	98	98	98	-	-	494
Total:	9	95	98	98	98	98	-	-	494
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9	95	98	98	98	98	-	=	494
Total:	9	95	98	98	98	98	-	-	494

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 366

IT Security Upgrades

Project No: MC-CL-ZF9960 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

The ongoing project updates or replaces information security systems that are at high risk of failure. The project enhances vulnerability and intrusion detection as well as response capabilities and procedures. The project provides (by way of illustration but not limitation) for implementation of systems to replace or upgrade firewalls, routers, switches, operating systems, intrusion detection capabilities, security information and event management, Linux patching procedures, Dynamic Host Configuration Protocol server, Domain Name System server, internal vulnerability scanning, and physical security cameras and networks for City Light locations.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	165	1,351	651	657	651	848	637	689	5,649
Total:	165	1,351	651	657	651	848	637	689	5,649
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	165	1,351	651	657	651	848	637	689	5,649
Total:	165	1,351	651	657	651	848	637	689	5,649

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 367

Landis and Gyr RTU Modernization Boundary, Cedar Falls and Skagit

Project No: MC-CL-XB6565 BSL Code: BC-CL-X

 Project Type:
 Ongoing
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration **Location:** Boundary, Skagit and Cedar Falls power

facilities

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides the installation of new remote temperature monitoring equipment at the Boundary, Skagit, and Cedar Falls power facilities.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	276	1,090	577	748	770	558	-	-	4,019
Total:	276	1,090	577	748	770	558	-	-	4,019
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	276	1,090	577	748	770	558	-	-	4,019
Total:	276	1,090	577	748	770	558	-	-	4,019

CIP Project Page Seattle City Light

Large Overhead and Underground Services

Project No: MC-CL-ZS8365 **BSL Code:** BC-CL-Z

Customer Focused - CIP **Project Type:** Ongoing **BSL Name:**

Project Category: New Facility Location: System wide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project provides large size electric power service connections from City Light's distribution system to the customer's meter for power requirements of greater than 3 MVA and 26 kV radial services. The project allows City Light to provide service to new customers in a safe, reliable, timely and cost effective manner as a means to fulfill its commitment to be a customer and community-focused organization. The cost of some of this work is generally reimbursed by the requesting customer.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	37,236	3,381	5,018	5,329	5,189	5,284	5,385	5,492	72,313
Total:	37,236	3,381	5,018	5,329	5,189	5,284	5,385	5,492	72,313
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	37,236	3,381	5,018	5,329	5,189	5,284	5,385	5,492	72,313
Total:	37,236	3,381	5,018	5,329	5,189	5,284	5,385	5,492	72,313

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 369

LRDS Editor Upgrade

BC-CL-Y **Project No:** MC-CL-YD9977 **BSL Code:**

Project Type: BSL Name: Transmission and Distribution - CIP Discrete

Rehabilitation or Restoration Location: Citywide **Project Category:**

Current Project Stage: Stage 5 - Execution (IT Only) **Council District:** Multiple

Start/End Date: 2018 - 2023 **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: \$4,178 **Urban Village:** Not in an Urban Village

This project funds the LRDS (Looped Radial Distribution System) ArcFM Editor Upgrade which will replace a Seattle City Light production software system that is at end of life.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,266	2,641	270	-	-	-	-	-	4,178
Total:	1,266	2,641	270	-	-	-	-	-	4,178
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,266	2,641	270	-	-	-	-	-	4,178
Total:	1,266	2,641	270	-	-	-	-	-	4,178

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 370

Major Emergency

Project No: MC-CL-ZS8380 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project covers unexpected problems that occur with the electrical system and result in repairs of over \$100,000 for any one event and for capital costs that are incurred during any single emergency situation lasting over 48 hours.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	27,996	4,522	3,000	3,000	3,000	3,000	3,000	3,000	50,518
Total:	27,996	4,522	3,000	3,000	3,000	3,000	3,000	3,000	50,518
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	27,996	4,522	3,000	3,000	3,000	3,000	3,000	3,000	50,518
Total:	27,996	4,522	3,000	3,000	3,000	3,000	3,000	3,000	50,518

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 371

Maritime Transportation Electrification

Project No: MC-CL-ZS8520 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Investment Location: System Wide

Current Project Stage: N/A Council District 7, Council District 7, Council District 1

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

The ongoing program will plan, design, procure, construct, and commission large City Light capital investment projects to deliver infrastructure required to meet electrification, environmental justice, and/or sustainability goals and mandates and customer demand associated with Maritime Transportation (MARTEP). MARTEP Projects stem from public and private maritime transportation efforts to transition from emission-based energy sources to City Light electrical service and that requires City Light to design and construct new infrastructure.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	800	2,000	2,000	2,000	7,000	4,000	4,000	21,800
Total:	-	800	2,000	2,000	2,000	7,000	4,000	4,000	21,800
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	800	2,000	2,000	2,000	7,000	4,000	4,000	21,800
Total:	-	800	2,000	2,000	2,000	7,000	4,000	4,000	21,800

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 372

Massachusetts Street Substation - Networks

Project No: MC-CL-YN8202 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: 1555 Utah Ave S

Current Project Stage: N/A Council District: Council District 2

Start/End Date: N/A Neighborhood District: Greater Duwamish

Total Project Cost: N/A Urban Village: Greater Duwamish

The ongoing project increases Massachusetts Street Substation network capacity. It funds a programmatic approach for comprehensive management of underground network assets serving customers in Pioneer Square and the area bounded by University Street, Third Avenue, Terrace Street, and the Freeway. The project funds completion of engineering design and analysis and construction work required to improve and enhance the network system supporting existing and neat future network customers in the areas. This project defers the need date for a new network substation until no further capacity is available from Union Street and the other network substations. It provides sufficient and reliable electrical capacity for the growing power needs of City Light customers.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	43,173	3,520	3,359	3,404	3,341	4,176	3,649	3,642	68,264
Total:	43,173	3,520	3,359	3,404	3,341	4,176	3,649	3,642	68,264
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	43,173	3,520	3,359	3,404	3,341	4,176	3,649	3,642	68,264
Total:	43,173	3,520	3,359	3,404	3,341	4,176	3,649	3,642	68,264

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 373

Medium Overhead and Underground Services

Project No: MC-CL-ZS8366 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides engineering and installation of radial electric power service connections with medium-sized power requirements of 50 KVA to 2.5 MVA and 26 kV. The cost of some of this work is generally reimbursed by the requesting customer.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	209,000	25,863	22,147	22,707	23,202	20,851	21,228	26,635	371,632
Total:	209,000	25,863	22,147	22,707	23,202	20,851	21,228	26,635	371,632
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	209,000	25,863	22,147	22,707	23,202	20,851	21,228	26,635	371,632
Total:	209,000	25,863	22,147	22,707	23,202	20,851	21,228	26,635	371,632

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 374

CIP Project Page Seattle City Light

Meter Additions

Project No: MC-CL-ZS8054 **BSL Code:** BC-CL-Z

BSL Name: Customer Focused - CIP **Project Type:** Ongoing

Project Category: New Facility Location: System wide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project provides new or replacement meters for both residential and commercial services. Work included in this project includes nstallations of new and/or upgraded meter services; obsolete meter exchanges; audits of new meter services, solar metering, and technology impacting the distribution system; testing, calibration, meter inventory management, and verifying electrical measurement standards. This project ensures accurate customer billing.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	52,303	7,431	4,120	4,151	4,225	4,303	4,687	4,744	85,963
Total:	52,303	7,431	4,120	4,151	4,225	4,303	4,687	4,744	85,963
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	52,303	7,431	4,120	4,151	4,225	4,303	4,687	4,744	85,963
Total:	52,303	7,431	4,120	4,151	4,225	4,303	4,687	4,744	85,963

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 375

Miscellaneous Building Improvements

Project No: MC-CL-XF9007 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Citywide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds improvements to City Light's buildings and facilities. The project provides cost effective asset preservation measures, and funds projects that allow City Light to meet safety and health code requirements.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	13,397	270	-	-	-	-	-	-	13,667
Total:	13,397	270	-	-	-	-	-	-	13,667
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	13,397	270	-	-	-	-	-	-	13,667
Total:	13,397	270	-	-	-	-	-	-	13,667

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 376

Mobile Workforce Implementation

Project No: MC-CL-YR8429 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: Citywide

Current Project Stage: Stage 5 - Execution (IT Only) Council District: Citywide

Start/End Date: 2017 - 2027 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$6,262 **Urban Village:** Not in an Urban Village

This project provides mobile communication and computing equipment for City Light workers to use in the field. The project improves operational efficiencies for scheduling of crews, rapid revision of crew schedules during emergencies, and reducing transit time between job sites.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	411	529	-	2,154	2,208	961	-	-	6,262
Total:	411	529	-	2,154	2,208	961	-	-	6,262
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	411	529	-	2,154	2,208	961	-	-	6,262
Total:	411	529	-	2,154	2,208	961	-	-	6,262

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 377

CIP Project Page Seattle City Light

Network Additions and Services - Denny

Project No: MC-CL-ZS8405 **BSL Code:** BC-CL-Z

BSL Name: Customer Focused - CIP **Project Type:** Ongoing

Project Category: New Facility Location: Valley Street

Council District: TBD **Current Project Stage:** N/A

Start/End Date: N/A **Neighborhood District:** Lake Union

Total Project Cost: N/A **Urban Village:** South Lake Union

This ongoing project provides electrical service connections and related improvements in response to customer service needs within the North Downtown network area. The project provides civil and electrical design assistance to customers to connect existing and proposed buildings to the North Downtown network system. This project also performs capacity addition work associated with service connections, and replaces or installs network transformers, network protectors, and bus tie-switches.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	21,070	6,295	4,242	4,335	4,409	4,613	4,804	5,023	54,790
Total:	21,070	6,295	4,242	4,335	4,409	4,613	4,804	5,023	54,790
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	21,070	6,295	4,242	4,335	4,409	4,613	4,804	5,023	54,790
Total:	21,070	6,295	4,242	4,335	4,409	4,613	4,804	5,023	54,790

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 378

Network Additions and Services: Broad Street Substation

Project No: MC-CL-ZS8363 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: 319 6th AV N

Current Project Stage: N/A Council District: Council District 7

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This ongoing project provides electrical service connections, capacity additions, and related improvements in response to customer service requests within the Broad Street network area. The project also funds replacement or installation of network transformers, network protectors and specialty transformers, or inbuilding vault retrofits or other short duration system improvement needs that may be identified during construction.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	113,614	9,181	9,320	9,599	10,080	10,308	10,604	10,988	183,694
Total:	113,614	9,181	9,320	9,599	10,080	10,308	10,604	10,988	183,694
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	113,614	9,181	9,320	9,599	10,080	10,308	10,604	10,988	183,694
Total:	113,614	9,181	9,320	9,599	10,080	10,308	10,604	10,988	183,694

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 379

Network Additions and Services: First Hill, Massachusetts, Union & University

Project No: MC-CL-ZS8364 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: 1555 Utah AV S

Current Project Stage: N/A Council District: Council District 2

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This ongoing project provides electrical service connections and related improvements in response to customer service requests within the First Hill, Massachusetts, Union, and University District network areas. The project performs capacity additions work associated with service connections to customers, including condominiums, office buildings, medical facilities, hotels, and commercial and apartment buildings. The project also replaces or installs network transformers, network protectors and specialty transformers, and performs short-duration system improvement work identified during operations, including retrofitting in-building vaults.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	72,691	8,603	7,964	6,255	8,521	4,133	4,435	8,935	121,538
Total:	72,691	8,603	7,964	6,255	8,521	4,133	4,435	8,935	121,538
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	72,691	8,603	7,964	6,255	8,521	4,133	4,435	8,935	121,538
Total:	72.691	8.603	7.964	6.255	8.521	4.133	4.435	8.935	121.538

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 380

Network Hazeltine Upgrade

Project No: MC-CL-YN8129 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project upgrades City Light's remote vault monitoring capability for the Digital Grid system (formerly Hazeltine system). The project consists of substation receivers, workstations, applications, server pairs and alarm PCs. The project provides remote monitoring of network transformers, protectors, vaults, and supports daily utility operations. The project enhances the network monitoring capability by allowing a real time alarm and an event generated from the field to be processed and sent to the alarm PCs of an abnormal electrical component or environmental condition occurrence. The most crucial alarm PC is situated in the System Control Center where it is monitored by with Power Dispatchers 24/7.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	8,155	550	644	645	658	715	724	724	12,816
Total:	8,155	550	644	645	658	715	724	724	12,816
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	8,155	550	644	645	658	715	724	724	12,816
Total:	8.155	550	644	645	658	715	724	724	12.816

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 381

Network Maintenance Hole and Vault Rebuild

BSL Code: Project No: MC-CL-YN8130 BC-CL-Y

BSL Name: Transmission and Distribution - CIP **Project Type:** Ongoing

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A **Council District:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project repairs or replaces damaged electrical manholes, vaults and ducts located in the street right of way within the Downtown Central and Pioneer Square business districts. The project provides reliable and safe electrical service to the network, and enhances safety for City Light crews and the public by reducing the large backlog of old or damaged electrical facilities.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	42,117	2,853	1,921	1,946	1,968	2,444	2,445	3,058	58,752
Total:	42,117	2,853	1,921	1,946	1,968	2,444	2,445	3,058	58,752
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	42,117	2,853	1,921	1,946	1,968	2,444	2,445	3,058	58,752
Total:	42,117	2,853	1,921	1,946	1,968	2,444	2,445	3,058	58,752

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 382

New Customer Information System

Project No: MC-CL-ZC9937 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: 700 5th Avenue

Current Project Stage: Stage 5 - Execution (IT Only) Council District: Council District 3

Start/End Date: 2015 - 2023 Neighborhood District: Downtown

Total Project Cost: \$69,430 Urban Village: Downtown

This project provides upgrades to the Customer Information System known as the Utility Self Service Portal that serves customers of both Seattle Public Utilities and City Light. This project empowers the customer to utilize real-time, self-serve options that improves engagement between the utilities and customers, enhances web presence, and enables both customer-facing and internal process efficiencies.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	65,029	4,402	-	-	-	-	-	-	69,430
Total:	65,029	4,402	-	-	-	-	-	-	69,430
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	65,029	4,402	-	_	-	-	-	-	69,430
Total:	65,029	4,402	-	_	-	-	-	-	69,430

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 383

New Technology

Project No: MC-CL-ZF9980 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Investment Location: System Wide

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project funds new technologies outlined in the Utility Technology Roadmap. In 2021, City Light went through a thorough process to develop a comprehensive Utility Technology Roadmap. The outcome outlined all the major needs to support the strategic focus for improve customer engagement and experience through improved processes and relationship management, establish foundational technology for the modernization of the grid, and improving operational technology within a seven-year period.

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 384

Newhalem - Generator 20/Support Facility Rebuild

Project No: MC-CL-XS6479 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 500 Newhalem Creek Rd, Marblemount,

WA 98267

Current Project Stage: Stage 6 - Closeout **Council District:** Outside City of Seattle

Start/End Date: 2011 - 2028 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$7,009 **Urban Village:** Not in an Urban Village

This project provides rehabilitation of the Newhalem Generator 20 turbine runner and penstock. Placed in service in 1921, the turbine runner and penstock have reached the end of their useful life. This system has a 2.5 megawatts generating capacity of clean renewable power. In addition, it provides emergency power backup to Newhalem and Gorge facilities.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	5,933	-	-	-	-	352	370	353	7,009
Total:	5,933	-	-	-	-	352	370	353	7,009
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	5,933	-	-	-	-	352	370	353	7,009
Total:	5,933	-	-	-	-	352	370	353	7,009

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 385

Newhalem Creek Hydroelectric Project Decommissioning

Project No: MC-CL-XS6307 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 500 Newhalem Creek Rd, Marblemount,

WA 98267

Current Project Stage: Stage 1 - Pre-Project Development Council District: Outside City of Seattle

Start/End Date: 2023 - 2028 Neighborhood District: Outside City of Seattle

Total Project Cost: \$18,043 **Urban Village:** Not in an Urban Village

This project funds the decommissioning of the Newhalem Creek Hydroelectric Project. This project comprises coordination with the Federal Energy Regulatory Commission (FERC) and intervenors in the process to surrender the license for the Newhalem Creek Hydroelectric Project, as well the planning, design, and decommissioning of the facilities.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	1,994	1,760	13,676	281	121	209	18,043
Total:	-	-	1,994	1,760	13,676	281	121	209	18,043
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	1,994	1,760	13,676	281	121	209	18,043
Total:	-	-	1,994	1,760	13,676	281	121	209	18,043

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 386

Normal Emergency

Project No: MC-CL-ZS8379 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project covers unexpected problems that occur with the electrical system incurred during any single emergency situation that lasts less than 48 hours, such as lightning storms and brief wind storms, and result in necessary repairs that cost over \$5,000.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	19,856	2,959	1,185	1,205	1,224	1,244	1,266	1,288	30,227
Total:	19,856	2,959	1,185	1,205	1,224	1,244	1,266	1,288	30,227
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	19,856	2,959	1,185	1,205	1,224	1,244	1,266	1,288	30,227
Total:	19,856	2,959	1,185	1,205	1,224	1,244	1,266	1,288	30,227

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 387

Office Furniture and Equipment Replacement

Project No: MC-CL-XF9103 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides renovations of office space and capital replacement of office equipment, including modular office workstations, conference room ensemble furniture, flexible group workspaces, and major office machines. Improvements will enhance worker safety, with improved light, airflow, and ergonomics, as well as enhance productivity and team collaboration. This project also supports the City's Space Reduction Pilot, which aims to reduce the utility's footprint in the downtown core by 25% to achieve cost efficiencies.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,928	15,447	8,865	7,719	765	762	962	661	39,109
Total:	3,928	15,447	8,865	7,719	765	762	962	661	39,109
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,928	15,447	8,865	7,719	765	762	962	661	39,109
Total:	3,928	15,447	8,865	7,719	765	762	962	661	39,109

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 388

Outage Management System Phase II Implementation

Project No: MC-CL-YD9967 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: Citywide

Current Project Stage: Council District: Multiple

Start/End Date: 2017 - 2023 Neighborhood District: Multiple

Total Project Cost: Urban Village: Multiple

This project funds City Light's Outage Management System (OMS) upgrade in order to maintain its availability to be available 100% of the time. However, its application, operating system, and database have aged to the point where OMS' availability is at risk. It was fielded in 2011 and has not been significantly modified since. The upgrade of OMS will bring it to a currently supported product version (application, OS, database, physical infrastructure, etc.). The scope of this project is to cover as much as possible of the as-is system, with an additional change to integrate with the ongoing deployment of the Advanced Metering Infrastructure (AMI) initiative. This project was transferred to MC-CL-YD9969 Software Replacement Strategy under a separate detail project.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	628	-	-	-	-	-	-	-	628
Total:	628	-	-	-	-	-	-	-	628
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	628	-	-	-	-	-	-	-	628
Total:	628	-	-	-	-	-	-	-	628

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 389

CIP Project Page Seattle City Light

Overhead 26kV Conversion

Project No: MC-CL-YR8358 **BSL Code:** BC-CL-Y

Transmission and Distribution - CIP **Project Type:** Ongoing **BSL Name:**

Project Category: Rehabilitation or Restoration Location: System Wide

N/A **Council District: Current Project Stage:** Multiple

Start/End Date: N/A **Neighborhood District:** Multiple

Total Project Cost: N/A **Urban Village:** Multiple

This ongoing project replaces the 4 kV electrical equipment remaining in the electrical distribution system with new, efficient and reliable 26 kV distribution equipment. This project increases capacity to deliver power to City Light customers, rebuilds and maintains the backbone of City Light's system, saves energy by reducing transformer and line losses, improves quality and reliability of service to customers, and releases unit substation properties for better neighborhood uses.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	18,521	1,359	819	1,458	1,677	1,783	2,091	2,144	29,852
Total:	18,521	1,359	819	1,458	1,677	1,783	2,091	2,144	29,852
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	18,521	1,359	819	1,458	1,677	1,783	2,091	2,144	29,852
Total:	18,521	1,359	819	1,458	1,677	1,783	2,091	2,144	29,852

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 390

Overhead and Underground Relocations

Project No: MC-CL-ZT8369 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides relocation of electrical lines to accommodate or take advantage of transportation-related projects, street vacations, or other projects initiated by outside agencies such as SDOT, WSDOT, or suburban municipalities. Work includes modifications to the distribution system, including replacement or modifications of line segments, poles, and underground facilities. Some costs may be reimbursable by the requesting outside agencies

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	26,779	3,246	17,968	14,323	11,432	6,883	6,774	7,015	94,419
Total:	26,779	3,246	17,968	14,323	11,432	6,883	6,774	7,015	94,419
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	26,779	3,246	17,968	14,323	11,432	6,883	6,774	7,015	94,419
Total:	26,779	3,246	17,968	14,323	11,432	6,883	6,774	7,015	94,419

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 391

Overhead Customer Driven Capacity Additions

Project No: MC-CL-YR8355 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides electrical lines from substations to customers' property lines. This project builds new and replaces old line segments, relocates lines for construction clearances and may replace rotten and damaged poles in the distribution system. This work is driven by specific customer projects, for their direct benefit, to identify and upgrade feeders that are affected before the new load from those projects comes online. City Light is reimbursed by the customers for this work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	56,289	4,272	2,498	3,291	3,944	4,570	5,220	5,941	86,027
Total:	56,289	4,272	2,498	3,291	3,944	4,570	5,220	5,941	86,027
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	56,289	4,272	2,498	3,291	3,944	4,570	5,220	5,941	86,027
Total:	56,289	4,272	2,498	3,291	3,944	4,570	5,220	5,941	86,027

Overhead Equipment Replacements

Project No: MC-CL-YR8351 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project replaces overhead distribution equipment nearing the end of its usable life, is overloaded, or no longer has an available supply of spare parts. These items include, but are not limited to, poles, cross-arms, transformers, and open-wire secondaries.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	197,629	50,898	52,311	51,046	52,373	53,149	53,979	39,747	551,132
Total:	197,629	50,898	52,311	51,046	52,373	53,149	53,979	39,747	551,132
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	197,629	50,898	52,311	51,046	52,373	53,149	53,979	39,747	551,132
Total:	197,629	50,898	52,311	51,046	52,373	53,149	53,979	39,747	551,132

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 393

CIP Project Page Seattle City Light

Overhead Outage Replacements

BC-CL-Z Project No: MC-CL-ZS8350 **BSL Code:**

Customer Focused - CIP **Project Type:** Ongoing **BSL Name:**

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A **Council District:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project supports the capitalized portion of work resulting from unplanned, non-emergency, overhead outages. These outages result from events, such as storms, accidents, and equipment failures. The project funds permanent storm repairs and construction of new infrastructure to bypass failing equipment. The project ensures that customers' electric power is restored as quickly as possible.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,946	1,047	1,135	1,155	1,174	1,195	1,217	1,240	12,110
Total:	3,946	1,047	1,135	1,155	1,174	1,195	1,217	1,240	12,110
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,946	1,047	1,135	1,155	1,174	1,195	1,217	1,240	12,110
Total:	3,946	1,047	1,135	1,155	1,174	1,195	1,217	1,240	12,110

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 394

Overhead System Capacity Additions

Project No: MC-CL-YR8356 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides electrical lines from substations to customers' property lines. This project builds new and replaces old line segments, replaces rotten and damaged poles in the distribution system. City Light customers may pay for some of this work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	47,097	2,807	2,969	3,362	3,767	4,187	4,625	5,081	73,896
Total:	47,097	2,807	2,969	3,362	3,767	4,187	4,625	5,081	73,896
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	47,097	2,807	2,969	3,362	3,767	4,187	4,625	5,081	73,896
Total:	47,097	2,807	2,969	3,362	3,767	4,187	4,625	5,081	73,896

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 395

PCB Tracking and Condition Assessment Project

Project No: MC-CL-YR9974 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project funds the purchase and implementation of a system capable of storing and analyzing complex asset condition assessment data, including inspection, testing and sampling results. This project will replace the current XFMR transformer system and would also track the environmental impacts of related transformers. This project was formerly known as "Asset Condition Assessment and Test Tracking System."

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	300	210	215	-	-	-	-	726
Total:	-	300	210	215	-	-	-	-	726
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	_	300	210	215	-	-	-	-	726
Total:	-	300	210	215	-	-	-	-	726

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 396

Pole Attachments

Project No: MC-CL-YR8452 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds preparing poles for the attachment of communication infrastructure owned by other entities. The construction costs associated with this work are typically fully reimbursable and attachments generate ongoing revenues through pole attachment rental fees.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	75,638	21,401	17,064	17,209	17,186	17,509	17,485	17,556	201,049
Total:	75,638	21,401	17,064	17,209	17,186	17,509	17,485	17,556	201,049
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	75,638	21,401	17,064	17,209	17,186	17,509	17,485	17,556	201,049
Total:	75,638	21,401	17,064	17,209	17,186	17,509	17,485	17,556	201,049

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 397

Power Production - Network Controls

Project No: MC-CL-XP6385 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: New Facility Location: 500 Newhalem Creek Rd, Marblemount,

WA 98267

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides the infrastructure required to install the basic control network and integrate existing, major control systems for a Skagit wide network controls program, to be located at each of the Skagit facilities. This project improves monitoring and control of the Skagit facilities, reduces maintenance and potential outages, and reduces cost and time of maintenance and outages. This project incorporates features that lead to enhanced data acquisition that is part of the NERC requirements.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	8,730	743	169	648	690	306	569	582	12,437
Total:	8,730	743	169	648	690	306	569	582	12,437
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	8,730	743	169	648	690	306	569	582	12,437
Total:	8,730	743	169	648	690	306	569	582	12,437

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 398

RCOS Power Plant Controller Replacement

Project No: MC-CL-YD9948 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: New Investment Location: System Wide

Current Project Stage: Stage 5 - Execution (IT Only) Council District: Multiple

Start/End Date: 2020 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$4,560 Urban Village: Not in an Urban Village

This project replaces the existing end of life Operational Technology (OT) computer system that provides generating unit supervisory control and data acquisition (SCADA) at each of 9 City Light power plants in conjunction with the City Light System Operations Center (SOC) for customer load and power market operation.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,796	1,764	-	-	-	-	-	-	4,560
Total:	2,796	1,764	-	-	-	-	-	-	4,560
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,796	1,764	-	-	-	-	-	-	4,560
Total:	2,796	1,764	-	-	-	-	-	-	4,560

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 399

Relaying Improvements

Project No: MC-CL-YS7753 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project replaces protective relays, to ensure system reliability by protecting the rest of the distribution system from potentially cascading effects if one part fails to operate properly. It upgrades relay technology, allowing remote control and documentation of system events, which enhances the detection and management of equipment problems.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	53,993	6,732	5,471	5,343	5,439	5,534	6,276	6,548	95,336
Total:	53,993	6,732	5,471	5,343	5,439	5,534	6,276	6,548	95,336
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	53,993	6,732	5,471	5,343	5,439	5,534	6,276	6,548	95,336
Total:	53,993	6,732	5,471	5,343	5,439	5,534	6,276	6,548	95,336

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 400

Replace Breakers BPA Covington and Maple Valley Substations

Project No: MC-CL-YS7121 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: Kent

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project meets the terms of City Light's interconnection agreement with Bonneville Power Administration (BPA) by upgrading breaker capacity in two substations that are owned by BPA, but where City Light is responsible for the breakers.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	546	11	4	4	4	4	1	1	574
Total:	546	11	4	4	4	4	1	1	574
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	546	11	4	4	4	4	1	1	574
Total:	546	11	4	4	4	4	1	1	574

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 401

CIP Project Page Seattle City Light

Ross - 480V AC Station Service Switchgear Replacement

Project No: MC-CL-XS6580 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Ross Powerhouse **Project Category:** Improved Facility Location:

Council District: Current Project Stage: N/A Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Outside City of Seattle **Total Project Cost:** N/A **Urban Village:**

This project funds the mitigation of safety hazards at the Ross switchyard by replacing all 480kV circuit breakers with new breakers that allow for remote operation. Policy changes and regulations related to electrical Arc Flash hazards have highlighted safety issues related to this equipment. This project proposes to upgrade and modernize all of the existing 240V and 480V main breakers for all station service switchgear at three powerhouses (Gorge, Diablo, and Ross) at our Skagit Hydro Project.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	6	-	-	-	-	-	-	-	6
Total:	6	-	-	-	-	-	-	-	6
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	6	-	-	-	-	-	-	-	6
Total:	6	-	-	-	-	-	-	-	6

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 402

Ross - Exciters 41-44

Project No: MC-CL-XS6564 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Ross Powehouse

Current Project Stage: Stage 2 - Initiation, Project Definition, & Council District: Outside City of Seattle

Planning

Start/End Date: 2018 - 2025 Neighborhood District: Outside City of Seattle

Total Project Cost: \$3,533 **Urban Village:** Outside City of Seattle

This project replaces the excitation systems for the four Ross generating units.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	33	219	1,487	1,634	161	-	-	-	3,533
Total:	33	219	1,487	1,634	161	-	-	-	3,533
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	33	219	1,487	1,634	161	-	-	-	3,533
Total:	33	219	1,487	1,634	161	-	-	-	3,533

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 403

Ross - Governors

Project No: MC-CL-XS6562 BSL Code: BC-CL-X

 Project Type:
 Discrete
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Ross Powehouse

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2015 - 2022 Neighborhood District: Outside City of Seattle

Total Project Cost: \$7,738 **Urban Village:** Outside City of Seattle

This project replaces governor controls on all four of the Ross Powerhouse generating units.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	6,903	834	=	-	-	-	-	-	7,738
Total:	6,903	834	-	-	-	-	-	-	7,738
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	6,903	834	=	-	-	-	-	-	7,738
Total:	6,903	834	-	-	-	-	-	-	7,738

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 404

Ross Dam - AC/DC Distribution System Upgrade

Project No: MC-CL-XS6373 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 128 State Highway 20

Council District: Current Project Stage: Stage 4 - Procurement/Bid Outside City of Seattle

Start/End Date: 2005 - 2028 **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: \$17,892 **Urban Village:** Not in an Urban Village

This project upgrades aging AC electrical distribution system at Ross Dam with a new electrical distribution system. It installs conduit, ducting, distribution panels and wire. It improves the 4 kV system, improves lighting, and provides improvements on top of the dam including a center substation room, emergency generator, valve houses, and a 130-volt battery bank. New conduit and conductors improve reliability of spillgate operations and other dam operations requiring electric power. New electrical equipment, new lighting, and the addition of emergency lighting allow staff greater operational flexibility, safety, and efficiency.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	5,095	620	103	3,156	2,624	740	3,278	2,276	17,892
Total:	5,095	620	103	3,156	2,624	740	3,278	2,276	17,892
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	5,095	620	103	3,156	2,624	740	3,278	2,276	17,892
Total:	5,095	620	103	3,156	2,624	740	3,278	2,276	17,892

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 405

Ross Powerhouse - Programmable Language Controller Upgrade

Project No: MC-CL-XS6376 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 128 State Highway 20

Current Project Stage: Stage 6 - Closeout Council District: Outside City of Seattle

Start/End Date: 2008 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$95 Urban Village: Not in an Urban Village

This project replaces the five Ross Dam Powerhouse Programmable Logic Controllers (PLC). There is one PLC for each of the four generator units, and a fifth PLC monitoring other critical powerhouse equipment. The project improves City Light's ability to make programming enhancements commensurate with operational and regulatory needs, assures comprehensive and correct documentation, and delivers a 24VDC system that eliminates the need of LOTO (Lock-Out/Tag-Out) safety procedures. It provides redundancy, which yields the ability to perform remote start-stop and other control functions of the generators.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	95	-	-	-	-	-	-	-	95
Total:	95	-	-	-	-	-	-	-	95
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	95	-	-	-	-	-	-	-	95
Total:	95	-	-	-	-	-	-	-	95

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 406

Safety Modifications

Project No: MC-CL-XF9006 **BSL Code:** BC-CL-X

BSL Name: Power Supply - CIP **Project Type:** Ongoing

Project Category: Rehabilitation or Restoration Location: Citywide

Current Project Stage: N/A **Council District:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project provides facility modifications and equipment to address imminent and critical safety needs. The project includes physical upgrades and revisions to systems, equipment, properties, and facilities, as needed to comply with safety regulations and best practices for a safe, efficient, and secure work environment.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	5,654	1,701	707	708	708	719	896	758	11,850
Total:	5,654	1,701	707	708	708	719	896	758	11,850
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	5,654	1,701	707	708	708	719	896	758	11,850
Total:	5,654	1.701	707	708	708	719	896	758	11.850

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 407

Seattle Waterfront Streetlight Installation

Project No: MC-CL-ZL8481 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: 1312 Western AVE

Current Project Stage: Stage 6 - Closeout Council District: Council District 7

Start/End Date: 2017 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$13,204 **Urban Village:** Not in an Urban Village

This project funds new streetlights in the Seattle Waterfront area. The redevelopment of the Seattle Waterfront follows the Alaskan Way Viaduct replacement and is led by the Office of the Waterfront.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,634	10,570	-	-	-	-	-	-	13,204
Total:	2,634	10,570	-	-	-	-	-	-	13,204
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,634	10,570	_	_	-	-	_	-	13,204
Total:	2,634	10,570	-	-	-	-	-	-	13,204

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 408

Security Improvements

Project No: MC-CL-YD9202 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project plans, designs and implements projects, improving the physical security of City Light critical facilities, in order to mitigate unauthorized access and criminal activities that could cause significant system damage, power outages, and other related disruptions to the electrical system. The project reduces the risk of sabotage, vandalism, theft, and terrorism that can result in the loss of valuable infrastructure for generation and distribution of power. The project also reduces risk of noncompliance with North American Reliability Council (NERC) 1200 Standards to improve security at critical facilities that house command and control systems. It enhances reliability of the power system, reduces the risk of lost revenues, and reduces the jeopardy to public safety and emergency response due to loss of lifeline services such as medical services, water and wastewater systems, communications, law enforcement, banking, transportation system, etc.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	31,894	6,634	1,414	1,406	1,406	1,994	2,574	2,000	49,322
Total:	31,894	6,634	1,414	1,406	1,406	1,994	2,574	2,000	49,322
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	31,894	6,634	1,414	1,406	1,406	1,994	2,574	2,000	49,322
Total:	31,894	6,634	1,414	1,406	1,406	1,994	2,574	2,000	49,322

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 409

Seismic Mitigation

Project No: MC-CL-XF9134 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds structural upgrades to buildings. This project is for miscellaneous, unidentified seismic issues other than the Georgetown Steam Plant, Service Centers and Substations, which are funded through other projects. The project protects City Light's assets, employees, customers, visitors, equipment, and materials.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	10,506	70	1,006	905	865	910	1,152	982	16,398
Total:	10,506	70	1,006	905	865	910	1,152	982	16,398
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	10,506	70	1,006	905	865	910	1,152	982	16,398
Total:	10,506	70	1,006	905	865	910	1,152	982	16,398

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 410

Service Center Facility Improvements

Project No: MC-CL-XF9107 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds the purchase of light-duty and heavy-duty mobile equipment fleet vehicles. This includes replacement of specialized fleet vehicles for electric utility use, as well as enhancements and additions of green alternatives such as electric powered vehicles.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	15,104	5,514	100	201	201	206	258	196	21,780
Total:	15,104	5,514	100	201	201	206	258	196	21,780
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	15,104	5,514	100	201	201	206	258	196	21,780

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 411

Skagit - Babcock Creek Crossing

Project No: MC-CL-XS6514 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category:Rehabilitation or RestorationLocation:Newhalem Creek Rd, Marblemount, WA

98267

Current Project Stage: Stage 3 - Design Council District: Outside City of Seattle

Start/End Date: 2015 - 2028 Neighborhood District: Outside City of Seattle

Total Project Cost: \$1,130 **Urban Village:** Outside City of Seattle

This project provides a permanent and more stable crossing across Babcock Creek, near Newhalem. The road to Babcock Creek provides access to a critical communication tower and currently only has a temporary bridge crossing it. The permanent crossing will be either a bridge or vented ford.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	263	1	-	-	-	125	573	169	1,130
Total:	263	1	-	-	-	125	573	169	1,130
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	263	1	-	-	-	125	573	169	1,130
Total:	263	1	-	-	-	125	573	169	1,130

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 412

Skagit - Boat Facility Improvements

Project No: MC-CL-XS6540 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Newhalem Creek Rd, Marblemount, WA

8267

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A Urban Village: Outside City of Seattle

This project provides design and construction of several new structures to support industrial and recreational boat operations on our Skagit reservoirs. Structures include a new tour dock, new dry dock, additions to the existing boat houses and a new barge landing in Diablo. The project provides improved visitor access for the Skagit Boat Tour, safer boat fueling facilities, reduced impact of snowfall on boats, consolidated barge landings, and improved dry docks.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,032	1,279	397	65	593	-	-	-	6,366
Total:	4,032	1,279	397	65	593	-	-	-	6,366
Fund Appropriations /	LTD	2022							
Allocations *	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,032	1,279	397	65	593	-	-	-	6,366

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 413

Skagit - DC Battery System

Project No: MC-CL-XS6583 **BSL Code:** BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project replaces the existing DC battery banks at the Skagit project.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,917	425	81	-	753	1,377	-	-	6,553
Total:	3,917	425	81	-	753	1,377	-	-	6,553
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,917	425	81	-	753	1,377	_	-	6,553
Total:	3.917	425	81		753	1,377		-	6,553

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 414

CIP Project Page Seattle City Light

Skagit - Relicensing

Project No: MC-CL-XS6986 **BSL Code:** BC-CL-X

BSL Name: Power Supply - CIP **Project Type:** Ongoing

Project Category: New Investment Location: Newhalem Creek Rd, Marblemount, WA

Current Project Stage: N/A **Council District:** Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Outside City of Seattle

Total Project Cost: N/A **Urban Village:** Outside City of Seattle

This ongoing project provides support of the relicensing activities for the Skagit River Hydroelectric Project including support of staff, environmental studies, documentation, and consultation needed to submit an application to relicense the project. Relicensing work will begin in 2019. The current Federal Energy Regulatory Commission (FERC) license for the Skagit Project expires in 2025, and the license application is due for submission to FERC in May 2023.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	24,107	47,524	9,056	3,590	3,591	1,089	=	-	88,957
Total:	24,107	47,524	9,056	3,590	3,591	1,089	-	-	88,957
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	24,107	47,524	9,056	3,590	3,591	1,089	=	-	88,957
Total:	24,107	47,524	9,056	3,590	3,591	1,089	-	-	88,957

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 415

Skagit - Sewer System Rehabilitation

Project No: MC-CL-XS6232 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Milepost 126 State Highway 20

Current Project Stage: Stage 3 - Design Council District: Outside City of Seattle

Start/End Date: 2015 - 2026 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$5,737 **Urban Village:** Not in an Urban Village

This project funds the replacement or repairs of numerous sewer pipe breaks, leaks, and sags in the combined Skagit River sewer/drainage collection system, located at the Diablo Dam site and also provides major renovations to the aging Newhalem wastewater treatment plant. This project eliminates potential overloads in the sewage treatment plant that can cause pollution of the Skagit River and surrounding soil contamination.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,979	11	-	98	605	44	-	-	5,737
Total:	4,979	11	-	98	605	44	-	-	5,737
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,979	11	-	98	605	44	-	-	5,737
Total:	4,979	11	-	98	605	44	-	-	5,737

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 416

Skagit Facilities Plan

Project No: MC-CL-XS6520 **BSL Code:** BC-CL-X

BSL Name: Power Supply - CIP **Project Type:** Ongoing

Project Category: Rehabilitation or Restoration Location: Newhalem Creek Rd, Marblemount, WA

Current Project Stage: N/A **Council District:** Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Outside City of Seattle

Total Project Cost: N/A **Urban Village:** Outside City of Seattle

This project implements a comprehensive facility plan to optimize buildings and structures at two Skagit town sites. The project preserves essential facilities that support SCL's power production needs, and retains important civic, cultural, and historic features in keeping with the historic preservation requirements of the Skagit FERC Licensing agreement. The project will reduce operational costs by dismantling and removing surplus facilities that require significant on-going maintenance.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,820	2,245	4,574	39	-	-	-	-	11,678
Total:	4,820	2,245	4,574	39	-	-	-	-	11,678
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,820	2,245	4,574	39	-	-	-	-	11,678
Total:	4,820	2,245	4,574	39	-	-	-	-	11,678

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 417

Skagit Facilities Plan Phase 2

Project No: MC-CL-XS6521 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project upgrades and replaces several facilities that support power generation at the Skagit including a new security office, employee housing, upgraded maintenance shops and emergency facilities.

Pagaurage	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Resources	Actuals	Reviseu	2023	2024	2025	2020	2021	2020	TOLAI
City Light Fund Revenues	76	106	45	581	551	1,657	2,984	2,002	8,003
Total:	76	106	45	581	551	1,657	2,984	2,002	8,003
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	76	106	45	581	551	1,657	2,984	2,002	8,003
Total:	76	106	45	581	551	1.657	2.984	2,002	8,003

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 418

Skagit Facility - Minor Improvements Program

Project No: MC-CL-XS6405 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 500 Newhalem Creek Rd, Marblemount,

WA 98267

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds emergent capital projects related to all Skagit Facilities, which are by definition, unforeseeable, unscheduled, unpredictable, and occur on a first-come, first serve basis, and smaller scheduled projects.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	40,597	7,029	10,283	6,063	6,390	5,178	8,773	5,017	89,331
Total:	40,597	7,029	10,283	6,063	6,390	5,178	8,773	5,017	89,331
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	40,597	7,029	10,283	6,063	6,390	5,178	8,773	5,017	89,331
Total:	40,597	7,029	10,283	6,063	6,390	5,178	8,773	5,017	89,331

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 419

Skagit Facility Conservation

Project No: MC-CL-XS6515 BSL Code: BC-CL-X

 Project Type:
 Ongoing
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Newhalem Creek Rd, Marblemount WA

8267

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides funding for structural improvements to existing facilities at Skagit, both residential and commercial. It replaces lights, windows, and HVAC systems, insulates buildings, and performs related work. The project dramatically reduces the amount of energy expended to keep structures warm or cool depending upon the season.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	771	11	117	1,448	94	-	-	-	2,442
Total:	771	11	117	1,448	94	-	-	-	2,442
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	771	11	117	1,448	94	-	-	-	2,442
Total:	771	11	117	1,448	94	-	-	-	2,442

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 420

Skagit License 1995

Project No: MC-CL-WC3125 BSL Code: BC-CL-W

Project Type: Ongoing BSL Name: Conservation & Environmental - CIP

Project Category: Improved Facility Location:

 Current Project Stage:
 N/A
 Council District:
 Outside City of Seattle

 Start/End Date:
 N/A
 Neighborhood District:
 Outside City of Seattle

 Total Project Cost:
 N/A
 Urban Village:
 Outside City of Seattle

This project funds the License Settlement Agreement for the 1995 Skagit License including activities such as fisheries, wildlife, North Cascades Environmental Learning Center, Recreation, Skagit ROW Veg Mgmt., Erosion, Plant Propagation, Historic Properties, Archaeological MOAs, Powerhouse NPDES, Aesthetics Agreement and Visual Quality, and Salmon Studies.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	3,270	3,456	3,489	3,520	3,550	3,581	-	20,866
Total:	-	3,270	3,456	3,489	3,520	3,550	3,581	-	20,866
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	3,270	3,456	3,489	3,520	3,550	3,581	-	20,866
Total:	-	3.270	3.456	3.489	3.520	3.550	3.581	-	20.866

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 421

Skagit Licensing Mitigation

Project No: MC-CL-XS6991 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 500 Newhalem Creek Rd

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project enhances and protects wildlife habitat on utility owned land in the Upper Skagit River and South Fork Nooksack River valleys to meet the obligations outlined in City Light's 1995 Skagit license. It includes land acquisition, restoration, and management.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,236	509	84	131	64	62	59	50	5,195
Total:	4,236	509	84	131	64	62	59	50	5,195
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,236	509	84	131	64	62	59	50	5,195
Total:	4,236	509	84	131	64	62	59	50	5,195

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 422

Skagit Powerhouses - Install Protection Relays

Project No: MC-CL-XS6415 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: 500 Newhalem Creek Rd, Marblemount,

WA 98267

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project enhances generating reliability by adding protective relays to generating systems at the Ross, Diablo, and Gorge plants, whose generator protective relays do not meet present IEEE Standards. The project funds the addition of microprocessor relays to the existing system, certain auxiliary protective equipment, and modifies the design of the existing protection system to upgrade functionality. This will limit the potential for damage when surges and faults occur in transmission lines due to lightning strikes, load rejections, and other unexpected events.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9,074	329	13	480	1,566	1,160	-	-	12,624
Total:	9,074	329	13	480	1,566	1,160	-	-	12,624
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9,074	329	13	480	1,566	1,160	-	=	12,624
Total:	9,074	329	13	480	1,566	1,160	-	-	12,624

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 423

Small Overhead and Underground Services

Project No: MC-CL-ZS8367 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides engineering and installation of radial electric power service connections with small size power requirements of less than 50 KVA and 26 kV. The cost of some of this work is generally reimbursed by the requesting customer.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	93,747	10,031	7,653	7,839	7,930	8,027	8,129	8,238	151,594
Total:	93,747	10,031	7,653	7,839	7,930	8,027	8,129	8,238	151,594
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	93,747	10,031	7,653	7,839	7,930	8,027	8,129	8,238	151,594
Total:	93,747	10,031	7,653	7,839	7,930	8,027	8,129	8,238	151,594

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 424

CIP Project Page Seattle City Light

SMT AutoLab

Project No: MC-CL-XP6600 **BSL Code:** BC-CL-X

Project Type: Discrete **BSL Name:** Power Supply - CIP

Project Category: Improved Facility Location: System Wide

Council District: Current Project Stage: Stage 1 - Pre-Project Development Outside City of Seattle

Start/End Date: 2019 - 2023 **Neighborhood District:** Outside City of Seattle

Total Project Cost: \$145 **Urban Village:** Not in an Urban Village

This project provides expansion of the AutoLab in the Seattle Municipal Tower to what is now the Central Files Room. The extra space will be used as an equipment lab for Power Production electrical engineers to conduct necessary testing of cyber security, remote monitoring and automation equipment in a simulation environment. The testing will be conducted prior to installing and activating the equipment at our generation sites. This project also provides required HVAC upgrades as well as the installation of equipment racks, wire ways, and access security.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	114	31	-	-	-	-	-	145
Total:	-	114	31	-	-	-	-	-	145
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	114	31	-	-	-	-	-	145
Total:	-	114	31	-	-	-	-	-	145

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 425

Solar Microgrid for Resilience

Project No: MC-CL-XF9238 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: New Investment Location: TBD

Current Project Stage: Stage 6 - Closeout Council District: TBD

Start/End Date: 2016 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$5,148 Urban Village: Not in an Urban Village

This project provides construction of an islandable microgrid located at a City of Seattle designated emergency shelter such as a community center, where a solar photovoltaic (PV) system coupled with an appropriately-sized battery energy storage system will be installed. The project provides backup power to support critical emergency facilities and services during extended power outages when electricity distribution facilities are down due to a catastrophic event, such as an earthquake, severe windstorm (or associated flooding), fire or landslide. The Washington State Dept. of Commerce will grant the utility approximately half of the funding to cover the costs for this project.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,099	2,048	-	-	-	-	-	-	5,148
Total:	3,099	2,048	-	-	-	-	-	-	5,148
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,099	2,048	-	-	-	-	-	-	5,148
Total:	3,099	2,048	-	-	-	-	-	-	5,148

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 426

CIP Project Page Seattle City Light

Sound Transit - City Light System Upgrades

Project No: MC-CL-ZT8475 **BSL Code:** BC-CL-Z

Project Type: Discrete **BSL Name:** Customer Focused - CIP

Project Category: Improved Facility Location: City Wide

Council District: Current Project Stage: Stage 6 - Closeout Multiple

Start/End Date: 2017 - 2021 **Neighborhood District:** Multiple

Total Project Cost: \$617 **Urban Village:** Multiple

This project increases the capacity of City Light power distribution systems to serve increased power requirements projected for Sound Transit's Link system. Initial upgrades will be in the Capitol Hill Sound Transit Station area. Construction there may be underway in 2017. Other areas projected to need power distribution system upgrades include area between the International District Station and Lake Washington, the University of Washington Station area, areas in the Rainier valley, and some areas along the proposed Lynnwood Link line.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	617	-	-	-	-	-	-	-	617
Total:	617	-	-	-	-	-	-	-	617
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	617	-	-	-	-	-	-	-	617
Total:	617	-	-	-	-	-	-	-	617

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 427

Sound Transit 3 - City Light

Project No: MC-CL-ZT8467 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: New Facility Location: Citywide

Current Project Stage: N/A Council District: Multiple

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides the engineering and construction of relocated and/or new Seattle City Light facilities required for two new light rail lines and related transit facilities from downtown Seattle to Ballard and West Seattle, approved in November 2017 as part of the Sound Transit 3 initiative. City Light activities include engineering and construction of electric power feeder relocations and upgrades, power services for the planned light rail lines, and various other tasks. Sound Transit's plans will require City Light work through several future budget cycles.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	86	1,191	275	510	95	200	-	-	2,356
Total:	86	1,191	275	510	95	200	-	-	2,356
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	86	1,191	275	510	95	200	-	-	2,356
Total:	86	1,191	275	510	95	200	-	-	2,356

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 428

Sound Transit Lynnwood - City Light

Project No: MC-CL-ZT8471 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: City Wide

Current Project Stage: Stage 5 - Construction Council District: Outside City of Seattle

Start/End Date: 2015 - 2025 Neighborhood District: Outside City of Seattle

Total Project Cost: \$13,875 Urban Village: Outside City of Seattle

This project supports Sound Transit's Lynwood Link, which will extend from the Northgate Transit Center at 5th Ave NE & NE 100th Street to our service area boundary at NE 200th Street, near the I-5 Right of Way. This project will include 100 blocks of relocations, a significant fraction of which will convert lines from overhead to underground. The project will install two feeders for each of the light rail line's traction power stations and upgrade the radial system's capacity where needed to serve the new load. The low and medium power service connections for the line's stations will be handled through the existing service projects.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	8,800	4,402	670	-	3	-	-	-	13,875
Total:	8,800	4,402	670	-	3	-	-	-	13,875
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	8,800	4,402	670	-	3	-	-	-	13,875
Total:	8,800	4,402	670	-	3	-	-	-	13,875

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 429

Special Work Equipment - Generation Plant

Project No: MC-CL-XP6102 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Outside City of Seattle

Current Project Stage: N/A **Council District:** Outside City of Seattle

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds the purchase of machinery and tools, and special work equipment to be used for operations activities at all the utility's generating sites, to ensure timely and efficient maintenance of generation facilities. Purchases are based on a five-year plan to ensure updates for technological improvements.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9,546	1,004	-	-	-	-	-	-	10,550
Total:	9,546	1,004	-	-	-	-	-	-	10,550
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9,546	1,004	-	-	-	-	-	-	10,550
Total:	9.546	1.004	-	-	-	-	-	-	10.550

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 430

Special Work Equipment - Other Plant

Project No: MC-CL-YD9102 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides new tools and work equipment to replace old or broken tools for all individual City Light units, except those required at the generation plants or substations, which have their own capital projects for special work equipment. The project ensures that field crews and other employees can accomplish their work assignments. The project supports the Department's goals of safety, productivity and employee morale.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	11,067	1,015	793	794	795	796	821	800	16,881
Total:	11,067	1,015	793	794	795	796	821	800	16,881
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	11,067	1,015	793	794	795	796	821	800	16,881
Total:	11,067	1,015	793	794	795	796	821	800	16,881

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 431

Special Work Equipment - Shops

Project No: MC-CL-XF8389 BSL Code: BC-CL-X

 Project Type:
 Ongoing
 BSL Name:
 Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides new tools and work equipment to replace outdated equipment and testing software that is no longer supported. The project updates technical systems to current standards and provides the tools to ensure that City Light transformers are safe and will last up to and beyond the average life span for this equipment.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	2,030	428	316	325	334	341	342	340	4,456
Total:	2,030	428	316	325	334	341	342	340	4,456
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	2,030	428	316	325	334	341	342	340	4,456
Total:	2,030	428	316	325	334	341	342	340	4,456

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 432

ST Northlink - City Light

Project No: MC-CL-ZT8427 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Facility Location: University District /Roosevelt/Northgate

Current Project Stage: Stage 6 - Closeout Council District:

Start/End Date: 2010 - 2021 Neighborhood District: Northwest

Total Project Cost: \$1,007 Urban Village: Multiple

This project provides management and construction of SCL's utility relocations and feeder construction needed for Sound Transit to build the North Link light rail line to the proposed Sound Transit Northgate Station, from the University of Washington Station, as part of the design and construction agreements made between the City of Seattle and Sound Transit.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	853	154	-	-	-	-	=	=	1,007
Total:	853	154	-	-	-	-	-	-	1,007
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	853	154	-	-	-	-	-	-	1,007
Total:	853	154	-	-	-	-	-	-	1,007

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 433

State Route 520 Bridge Relocations

Project No: MC-CL-ZT8435 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: SR 520 / Lake Washington

Current Project Stage: Stage 5 - Construction Council District: Citywide

Start/End Date: 2017 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$10,500 **Urban Village:** Not in an Urban Village

This project provides relocation and installation of power service infrastructure, such as feeder extensions, to support WSDOT's replacement of the State Route 520 Bridge from Montlake to I-5. This project is projected to be fully reimbursable by WSDOT.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	1,339	7,107	2,054	-	-	-	-	-	10,500
Total:	1,339	7,107	2,054	-	-	-	-	-	10,500
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	1,339	7,107	2,054	-	-	-	-	-	10,500
Total:	1,339	7,107	2,054	-	-	-	-	-	10,500

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 434

Stormwater Compliance

Project No: MC-CL-YD9236 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: City Wide

Current Project Stage: N/A Council District:

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This ongoing project funds the installation of lighted canopies and the associated drainage improvements that are necessary to bring City Light into compliance with the current rules and regulations. As a result of a City wide storm water audit and several surprise inspections from the Department of Ecology, it was discovered that there are several areas where measures are needed to bring City Light's storm water protection program into compliance. Some of our facilities drain directly to Superfund sites and the successful implementation of a compliant storm water system not only reduces our liability in the short term, but it has a direct impact on the amount of funding we may be ordered to provide for the cleanup of current and future Superfund sites. Currently, City Light stores raw materials (gravel, cold mix, backfill material, vegetative matter), salvage material (wire, metal products, electronics, transformers, poles) and warehouse materials (timbers, unfinished metal, galvanized poles) outside, where product can leach into the drainage systems.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	619	392	-	-	-	-	-	-	1,011
Total:	619	392	-	-	-	-	-	-	1,011
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	619	392	-	-	-	-	-	-	1,011
Total:	619	392	-	-	-	-	-	-	1,011

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 435

CIP Project Page Seattle City Light

Streetlight LED Conversion Program

Project No: MC-CL-ZL8441 **BSL Code:** BC-CL-Z

Project Type: Ongoing **BSL Name:** Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: Citywide

Council District: Current Project Stage: N/A Multiple

Start/End Date: N/A **Neighborhood District:** Multiple

Total Project Cost: N/A **Urban Village:** Multiple

This ongoing project is the second-generation replacement of LED luminaires and will be deployed with a controls system to replace all cobrahead streetlights. The project is expected to achieve an additional 20% annual energy savings and prevent 2,720 metric tons of carbon from being released into the atmosphere. Included in this project will be a color temperature reduction to 3000K to improve customer reports of discomfort glare. This project continues the work originally chartered in 2009 to upgrade all City-owned streetlights to LED, which achieved an estimated annual 40% energy savings and avoided 5,446 metric tons of carbon released into the atmosphere. Since then, the LED industry has matured, and the original fixtures are no longer a benchmark of efficiency and are nearing the end of life.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	42,300	6,785	3,351	3,406	5,317	6,900	5,000	5,336	78,393
Total:	42,300	6,785	3,351	3,406	5,317	6,900	5,000	5,336	78,393
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	42,300	6,785	3,351	3,406	5,317	6,900	5,000	5,336	78,393
Total:	42,300	6,785	3,351	3,406	5,317	6,900	5,000	5,336	78,393

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 436

Streetlights: Arterial, Residential and Floodlights

Project No: MC-CL-ZL8378 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project funds streetlights and floodlights requested by various taxing jurisdictions and other customers. Lights may be provided in public right of way and on private property, for either public or private benefit.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	45,450	4,816	6,707	6,398	8,950	10,299	14,385	9,077	106,082
Total:	45,450	4,816	6,707	6,398	8,950	10,299	14,385	9,077	106,082
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
General Fund	_	160	-	-	-	-	-	-	160
Light Fund	45,450	4,656	6,707	6,398	8,950	10,299	14,385	9,077	105,922
Total:	45,450	4,816	6,707	6,398	8,950	10,299	14,385	9,077	106,082

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 437

Substation Automation

Project No: MC-CL-YS8424 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project replaces and upgrades substation automation systems, including Remote Terminal Units (RTU) and annunciators, in each of City Light's fourteen substations, and upgrades equipment at two substations annually. The project reduces the likelihood and length of system outages due to failure as the current equipment is wearing out and cannot be replaced in kind because the equipment is no longer manufactured. The project also enhances energy efficiency, and reduces the probability of fines from appropriate governing bodies if loss of a substation, due to equipment failure, causes instability of the western interconnection grid and/or loss of load.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9,752	955	1,236	1,259	1,316	1,341	1,376	1,405	18,640
Total:	9,752	955	1,236	1,259	1,316	1,341	1,376	1,405	18,640
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9,752	955	1,236	1,259	1,316	1,341	1,376	1,405	18,640
Total:	9.752	955	1.236	1.259	1.316	1.341	1.376	1.405	18.640

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 438

Substation Breaker Replacements and Reliability Additions

Project No: MC-CL-YS7779 **BSL Code:** BC-CL-Y

Transmission and Distribution - CIP **Project Type:** Ongoing **BSL Name:**

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: Council District: Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project provides the review of City Light's inventory of approximately 400 transmission and distribution voltage circuit breakers. It determines which have the greatest wear, gas or oil leaks, maintenance cost, and service stress. It replaces those circuit breakers with the priority given to those with the highest risk of failure.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	54,339	5,957	7,645	5,500	5,500	5,500	5,500	7,341	97,282
Total:	54,339	5,957	7,645	5,500	5,500	5,500	5,500	7,341	97,282
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	54,339	5,957	7,645	5,500	5,500	5,500	5,500	7,341	97,282
Total:	54,339	5,957	7,645	5,500	5,500	5,500	5,500	7,341	97,282

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 439

Substation Capacity Additions

Project No: MC-CL-YS7751 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project adds new infrastructure to existing substations and systems, adds capacity to existing substations to meet increasing load demands, and enhances safety, reliability, and efficiency in the transmission of power from the substations to the distribution system.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	15,084	1,867	2,991	2,247	1,307	1,325	2,007	2,547	29,376
Total:	15,084	1,867	2,991	2,247	1,307	1,325	2,007	2,547	29,376
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	15,084	1,867	2,991	2,247	1,307	1,325	2,007	2,547	29,376
Total:	15,084	1,867	2,991	2,247	1,307	1,325	2,007	2,547	29,376

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 440

Substation Comprehensive Improvements

Project No: MC-CL-XF9161 **BSL Code:** BC-CL-X

BSL Name: Project Type: Ongoing Power Supply - CIP

Improved Facility **Project Category:** Location: System wide

Current Project Stage: Council District: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds substation improvements identified in City Light's Comprehensive Facilities Plan, seismic fitness reports, and periodic inspections targeting transmission and distribution buildings. The project implements items necessary to support assigned personnel, such as lunchroom and locker room facilities required by the union contracts, as well as structural and mechanical corrections and enhancements at substation facilities.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	4,005	1,215	2,679	2,677	1,892	2,341	3,234	2,392	20,435
Total:	4,005	1,215	2,679	2,677	1,892	2,341	3,234	2,392	20,435
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	4,005	1,215	2,679	2,677	1,892	2,341	3,234	2,392	20,435
Total:	4,005	1,215	2,679	2,677	1,892	2,341	3,234	2,392	20,435

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 441

CIP Project Page Seattle City Light

Substation Equipment Improvements

Project No: MC-CL-YS7752 **BSL Code:** BC-CL-Y

Project Type: Ongoing **BSL Name:** Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

N/A **Council District: Current Project Stage:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project adds, replaces, and upgrades substation equipment, particularly substation electrical and control equipment. The project also funds installation of remote control and monitoring of substation equipment from the System Control Center, which facilitates faster response time to correct system instability or outages. This work maintains and improves system reliability, permits compliance with high voltage and environmental regulations, and ensures safe work sites.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	61,638	5,174	6,442	6,313	4,000	5,891	6,917	4,000	100,375
Total:	61,638	5,174	6,442	6,313	4,000	5,891	6,917	4,000	100,375
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	61,638	5,174	6,442	6,313	4,000	5,891	6,917	4,000	100,375
Total:	61,638	5,174	6,442	6,313	4,000	5,891	6,917	4,000	100,375

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 442

Substation Plant Improvements

Project No: MC-CL-YS7750 **BSL Code:** BC-CL-Y

BSL Name: Transmission and Distribution - CIP **Project Type:** Ongoing

System wide **Project Category:** Rehabilitation or Restoration Location:

Current Project Stage: N/A **Council District:** Citywide

Neighborhood District: Start/End Date: N/A Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project upgrades and retrofits substation buildings, their facilities and systems, and related structures. The project includes environmental improvements, and removal and replacement of outdated utilities and structures. The project provides station security, safe working conditions, and improvements in related services, such as water, sewer, and lighting.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9,551	1,462	1,065	1,020	1,074	814	1,080	1,172	17,237
Total:	9,551	1,462	1,065	1,020	1,074	814	1,080	1,172	17,237
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9,551	1,462	1,065	1,020	1,074	814	1,080	1,172	17,237
Total:	9,551	1,462	1,065	1,020	1,074	814	1,080	1,172	17,237

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 443

Substation Transformer Replacements

Project No: MC-CL-YS7776 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: 2136 N 163rd St, Shoreline

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides the review of power transformers at substations and determines dissolved gas concentration, insulation aging, oil leaks, maintenance cost, service stress, and fault interrupting history. The project replaces transformers prioritized by those with the highest risk of failure, or those presenting substation capacity limits. The project enhances system reliability by replacing aging substation transformers before they fail in service.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	13,768	11,664	2,920	2,979	3,423	3,362	6,657	6,773	51,545
Total:	13,768	11,664	2,920	2,979	3,423	3,362	6,657	6,773	51,545
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	13,768	11,664	2,920	2,979	3,423	3,362	6,657	6,773	51,545
Total:	13,768	11,664	2,920	2,979	3,423	3,362	6,657	6,773	51,545

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 444

Substations Demand Driven Improvements

Project No: MC-CL-YS7755 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project enables City Light to perform cooperative work on shared lines and systems periodically requested by other electrical utilities in the region.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	525	5	2	2	2	2	2	1	540
Total:	525	5	2	2	2	2	2	1	540
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	525	5	2	2	2	2	2	1	540
Total:	525	5	2	2	2	2	2	1	540

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 445

Substations Oil Containment

Project No: MC-CL-YS7783 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project brings City Light's Power Substations into compliance with the federal Clean Water Act. By federal law, owners or operators of oil containing equipment, such as our substation transformers, must provide facilities that will prevent spilled oil from reaching any streams or open bodies of water.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	104	154	385	246	250	255	349	356	2,102
Total:	104	154	385	246	250	255	349	356	2,102
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	104	154	385	246	250	255	349	356	2,102
Total:	104	154	385	246	250	255	349	356	2,102

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 446

System Control Center System Map Board Replacement

Project No: MC-CL-ZF9985 BSL Code: BC-CL-Z

Project Type: Discrete BSL Name: Customer Focused - CIP

Project Category: New Investment Location: System Control Center

Current Project Stage: Stage 1 - Pre-Project Development Council District: Multiple

Start/End Date: 2023 - 2025 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$2,500 Urban Village: Not in an Urban Village

This project funds the update to the existing system map board in the System Control Center (SCC). Currently, the SCC has a manual system map board that is no longer supported by the vendor, is outdated, and failing. Replacement parts are no longer available. The current map board was created in 1995 and is well beyond its service life. This equipment is a critical tool for the SCC to monitor the electric transmission and distribution systems while making decisions that impact the safety of our employees, the public, and our infrastructure. The benefits from updating to an electronic map board are substantial and will enable a significant reduction in the potential for human error. A modern map board is updated digitally and provides real-time updates generated from our Energy Management System (EMS).

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	-	500	1,000	1,000	-	-	-	2,500
Total:	-	-	500	1,000	1,000	-	-	-	2,500
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	-	500	1,000	1,000	-	-	-	2,500
Total:	-	-	500	1,000	1,000	-	-	-	2,500

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 447

Tolt Relicensing

Project No: MC-CL-XC6985 BSL Code: BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: Tolt River Dam

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A Urban Village: Not in an Urban Village

This project provides the necessary documentation with the FERC by June 2027 to either acquire a new operating license for the Project or decommission it. South Fork Tolt Hydroelectric Project (the Project) FERC License expires in July 2029. Without a license the Project cannot be legally operated. The FERC relicensing process will require preparing and filing a Notice of Intent (NOi), Preliminary Application Document (PAD), and Preliminary and Final License Applications. The PAD, which is due in 2024, will be a substantial document requiring consultant assistance and additional City Light staff resources. Work began in 2021 to prepare the PAD and start the relicensing process. The main study phase of relicensing will occur in 2025 and 2026, which will require consultant and agency support for studies, reporting, and preparation of the license application which is due in 2027. If City Light were to decide to cease operating the Project instead of relicensing it, a Decommissioning Application would need to be filed, which requires many of the same elements and funding to complete this work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	110	1,596	1,843	1,897	6,147	6,274	3,445	3,661	24,972
Total:	110	1,596	1,843	1,897	6,147	6,274	3,445	3,661	24,972
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	110	1,596	1,843	1,897	6,147	6,274	3,445	3,661	24,972
Total:	110	1,596	1,843	1,897	6,147	6,274	3,445	3,661	24,972

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 448

Transmission & Generation Radio Systems

Project No: MC-CL-YD9108 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project builds or replaces communications infrastructure consisting of fiber optic rings, digital microwave, telephone networks, and two-way radio systems. This project provides City Light with command and control capabilities for the operation of the electrical system. This project ensures the safe, reliable, and efficient operation of the system and positions City Light to meet the Federal Energy Regulatory Commission's vital communications systems requirements.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	12,471	1,995	780	730	663	591	832	942	19,004
Total:	12,471	1,995	780	730	663	591	832	942	19,004
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	12,471	1,995	780	730	663	591	832	942	19,004
Total:	12,471	1,995	780	730	663	591	832	942	19,004

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 449

Transmission Capacity

Project No: MC-CL-YT7011 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project upgrades transmission lines, builds new lines, relocates lines, and provides for other system needs related to the transmission system. The project enhances City Light's transmission capacity, which is the available power capacity to meet the load on the transmission system.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	5,215	24	40	17	18	19	24	25	5,382
Total:	5,215	24	40	17	18	19	24	25	5,382
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	5,215	24	40	17	18	19	24	25	5,382
Total:	5,215	24	40	17	18	19	24	25	5,382

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 450

Transmission Inter-Agency

Project No: MC-CL-YT7105 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides demand-driven improvements to City Light's transmission system, including reimbursable transmission work and relocations of transmission equipment to meet customer, other utility, agency, and regulatory requirements. It permits Seattle City Light to meet its duties to relocate facilities at the request of other agencies.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	3,578	567	639	626	641	673	775	-	7,499
Total:	3,578	567	639	626	641	673	775	-	7,499
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	3,578	567	639	626	641	673	775	=	7,499
Total:	3,578	567	639	626	641	673	775	-	7,499

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 451

Transmission Line Inductor Installation

Project No: MC-CL-YT8461 BSL Code: BC-CL-Y

Project Type: Discrete BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: Stage 5 - Construction Council District: Citywide

Start/End Date: 2015 - 2023 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$37,666 **Urban Village:** Not in an Urban Village

This project addresses the issue of increased electric transmission congestion load growth in the Puget Sound Area. The project funds the installation of inductors or phase shifting transformers which curtail the flow of power through the Seattle area, while improving customer and asset strengths and maintaining reliability.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	22,630	15,036	-	-	-	-	-	-	37,666
Total:	22,630	15,036	-	-	-	-	-	-	37,666
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	22,630	15,036	-	-	-	-	-	-	37,666
Total:	22,630	15,036	-	-	-	-	-	-	37,666

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 452

Transmission Reliability

Project No: MC-CL-YT7104 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides replacement and improvement of transmission structures and conductors. This work may include engineering, construction, and related work, as well as minor improvements to overhead or underground transmission system assets to improve reliability.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	32,810	1,667	4,080	2,196	2,100	2,100	2,100	3,477	50,530
Total:	32,810	1,667	4,080	2,196	2,100	2,100	2,100	3,477	50,530
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	32,810	1,667	4,080	2,196	2,100	2,100	2,100	3,477	50,530
Total:	32,810	1,667	4,080	2,196	2,100	2,100	2,100	3,477	50,530

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 453

Transmission Tower Refurbishment

Project No: MC-CL-YT7130 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: Multiple

Current Project Stage: N/A Council District: Outside City of Seattle

Start/End Date: N/A Neighborhood District: Outside City of Seattle

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds programmatic painting and refurbishment of approximately 1,700 steel transmission tower structures. Metal transmission towers have a long life if properly maintained, while replacements are disruptive and can cost more than \$2 million per tower.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	64	2,300	3,795	3,795	3,794	3,795	3,795	3,795	25,134
Total:	64	2,300	3,795	3,795	3,794	3,795	3,795	3,795	25,134
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	64	2,300	3,795	3,795	3,794	3,795	3,795	3,795	25,134
Total:	64	2,300	3,795	3,795	3,794	3,795	3,795	3,795	25,134

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 454

Transportation Electrification

Project No: MC-CL-XF9239 BSL Code: BC-CL-X

Project Type: Ongoing BSL Name: Power Supply - CIP

Project Category: New Investment Location: System Wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Multiple

Total Project Cost: N/A Urban Village: Multiple

This ongoing project develops electrification infrastructure to support light-duty, medium-duty, and heavy-duty electric vehicles as well as ferry and port systems. Improvements will be developed based on feedback from customer engagement. Efforts are expected to support areas including electrified public transit, fleet electrification, and electric vehicle charging.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	32	9,078	5,006	7,856	7,506	6,249	5,250	5,126	46,105
Total:	32	9,078	5,006	7,856	7,506	6,249	5,250	5,126	46,105
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	32	9,078	5,006	7,856	7,506	6,249	5,250	5,126	46,105
Total:	32	9,078	5,006	7,856	7,506	6,249	5,250	5,126	46,105

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 455

CIP Project Page Seattle City Light

Transportation Streetlights

Project No: MC-CL-ZL8377 **BSL Code:** BC-CL-Z

Project Type: BSL Name: Customer Focused - CIP Ongoing

Project Category: Rehabilitation or Restoration Location: System wide

Council District: Current Project Stage: N/A Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds relocation of streetlights that are displaced by City of Seattle transportation projects.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	27,271	7,370	5,458	5,601	5,964	6,134	7,296	7,000	72,095
Total:	27,271	7,370	5,458	5,601	5,964	6,134	7,296	7,000	72,095
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	27,271	7,370	5,458	5,601	5,964	6,134	7,296	7,000	72,095
Total:	27,271	7,370	5,458	5,601	5,964	6,134	7,296	7,000	72,095

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 456

CIP Project Page Seattle City Light

Underground 26kV Conversion

Project No: MC-CL-YR8362 **BSL Code:** BC-CL-Y

Project Type: Ongoing **BSL Name:** Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

N/A **Council District: Current Project Stage:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project replaces the 4 kV electrical equipment remaining in the electrical distribution system with new, efficient and reliable 26 kV distribution equipment. This project increases capacity to deliver power to City Light customers, rebuilds and maintains the backbone of the system, saves energy by reducing transformer and line losses, improves quality and reliability of service to customers, and releases unit substation properties for better neighborhood uses.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	10,207	1,216	1,021	1,000	1,000	1,000	1,000	5,097	21,541
Total:	10,207	1,216	1,021	1,000	1,000	1,000	1,000	5,097	21,541
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	10,207	1,216	1,021	1,000	1,000	1,000	1,000	5,097	21,541
Total:	10,207	1,216	1,021	1,000	1,000	1,000	1,000	5,097	21,541

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 457

Underground Customer Driven Capacity Additions

Project No: MC-CL-YR8360 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides electrical lines from substations to customers' property lines. This project builds new and replaces old underground line segments, and may replace rotten and damaged poles in the distribution system that have underground facilities beneath them. This work is driven by specific customer projects, for their direct benefit, to identify and upgrade feeders that are impacted before the new load from those projects comes online. City Light is reimbursed by the customers for this work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	54,890	8,031	3,321	3,375	3,440	3,498	3,560	3,626	83,741
Total:	54,890	8,031	3,321	3,375	3,440	3,498	3,560	3,626	83,741
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	54,890	8,031	3,321	3,375	3,440	3,498	3,560	3,626	83,741
Total:	54,890	8,031	3,321	3,375	3,440	3,498	3,560	3,626	83,741

O&M Impacts: NA

* Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 458

Underground Equipment Replacements

Project No: MC-CL-YR8353 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project replaces and improves underground electrical system equipment that is failing or approaching the end of its useful life. This project enhances distribution system reliability, avoiding unplanned outages or interruption of service due to equipment failure.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	98,038	17,688	22,777	25,806	24,520	24,424	25,537	25,234	264,025
Total:	98,038	17,688	22,777	25,806	24,520	24,424	25,537	25,234	264,025
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	98,038	17,688	22,777	25,806	24,520	24,424	25,537	25,234	264,025
Total:	98,038	17,688	22,777	25,806	24,520	24,424	25,537	25,234	264,025

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 459

Underground Outage Replacements

Project No: MC-CL-ZS8352 BSL Code: BC-CL-Z

Project Type: Ongoing BSL Name: Customer Focused - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project supports the capitalized portion of work resulting from unplanned, non-emergency, underground outages. These outages result from events, such as storms, accidents, and equipment failures. The project funds permanent storm repairs, and construction of new infrastructure to bypass failing equipment.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	22,648	1,489	1,447	1,473	1,498	1,525	1,554	1,585	33,221
Total:	22,648	1,489	1,447	1,473	1,498	1,525	1,554	1,585	33,221
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	22,648	1,489	1,447	1,473	1,498	1,525	1,554	1,585	33,221
Total:	22,648	1,489	1,447	1,473	1,498	1,525	1,554	1,585	33,221

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 460

Underground System Capacity Additions

Project No: MC-CL-YR8361 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: System wide

Current Project Stage: N/A Council District: Citywide

Start/End Date: N/A Neighborhood District: Not in a Neighborhood District

Total Project Cost: N/A Urban Village: Not in an Urban Village

This ongoing project provides electrical lines from substations to customers' property lines. This project builds new and replaces old underground lines, and may replace rotten and damaged poles in the distribution system with underground facilities beneath them. This work identifies and upgrades the feeders that are impacted by increased loads, as needed, before those load increases come online. City Light customers may pay for a portion of this work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	56,515	3,201	2,739	2,785	2,831	2,881	2,933	2,989	76,874
Total:	56,515	3,201	2,739	2,785	2,831	2,881	2,933	2,989	76,874
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	56,515	3,201	2,739	2,785	2,831	2,881	2,933	2,989	76,874
Total:	56,515	3,201	2,739	2,785	2,831	2,881	2,933	2,989	76,874

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 461

Union Street Substation Networks

Project No: MC-CL-YN8201 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: New Facility Location: 1312 Western AV

Current Project Stage: N/A Council District: Council District 7

Start/End Date: N/A Neighborhood District: Downtown

Total Project Cost: N/A Urban Village: Downtown

This ongoing project increases the Union Street Substation network capacity to provide sufficient and reliable electrical capacity for the growing power needs of our customers. It funds a programmatic approach for the comprehensive management of underground network assets serving customers in the area bounded by Yesler Street, Alaskan Way, Pike Street, 6th Avenue, Union Street, the Freeway, University Street, 3rd Avenue, and the Waterfront area from Denny to Yesler.

	LTD	2022							
Resources	Actuals	Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	25,766	2,758	2,171	2,219	2,198	2,758	2,736	2,691	43,297
Total:	25,766	2,758	2,171	2,219	2,198	2,758	2,736	2,691	43,297
Fund Appropriations /	LTD	2022		0004					
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
		-	2023 2,171	2024 2,219	2025 2,198	2026 2,758	2027 2,736	2028 2,691	Total 43,297

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 462

University of Washington Capacity Additions

Project No: MC-CL-YR8466 **BSL Code:** BC-CL-Y

Transmission and Distribution - CIP **Project Type:** Discrete **BSL Name:**

Project Category: New Investment Location: Multiple

Stage 1 - Pre-Project Development **Current Project Stage: Council District:** Council District 3

Start/End Date: 2022 - 2028 **Neighborhood District:** Northeast

Total Project Cost: \$35,164 **Urban Village:** University District

This project builds the infrastructure required to serve the electrical needs of the University of Washington's campus expansion. This will include engineering design and construction work to build feeder and substation infrastructure to serve 15 MW of new load in the University campus. A portion of this project may be reimbursable by the University of Washington.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	481	1,683	6,000	12,000	10,000	5,000	-	35,164
Total:	-	481	1,683	6,000	12,000	10,000	5,000	-	35,164
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	-	481	1,683	6,000	12,000	10,000	5,000	=	35,164
Total:	-	481	1.683	6.000	12.000	10.000	5.000	-	35.164

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 463

University Substation - Network

Project No: MC-CL-YN8464 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Rehabilitation or Restoration Location: 645 NW 45Th

Current Project Stage: N/A Council District: Council District 4

Start/End Date: N/A Neighborhood District: Northeast

Total Project Cost: N/A Urban Village: University District

This ongoing project funds a programmatic approach for comprehensive management of underground network assets serving customers in the University area. This project funds annual work required, such as feeder balancing, engineering analysis to determine system feeder assignments for new services, and replacement of cables that fail while in service. It reduces the probability of cable failures and long costly customer outages.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	7,873	2,897	400	407	450	458	765	774	14,021
Total:	7,873	2,897	400	407	450	458	765	774	14,021
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	7,873	2,897	400	407	450	458	765	774	14,021
Total:	7,873	2,897	400	407	450	458	765	774	14,021

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 464

Utility Next

Project No: MC-CL-YD9520 BSL Code: BC-CL-Y

Project Type: Ongoing BSL Name: Transmission and Distribution - CIP

Project Category: Improved Facility Location: System Wide

 Current Project Stage:
 N/A
 Council District:
 Multiple

 Start/End Date:
 N/A
 Neighborhood District:
 Multiple

Total Project Cost: N/A Urban Village: Multiple

This project funds grant matching for the Utility Next portfolio, which aims to leverage stimulus and grant funding to augment and accelerate progress in grid modernization, renewable energy, electrification, and workforce development.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	-	1,000	3,300	3,220	5,150	4,390	3,000	3,000	23,060
Total:	-	1,000	3,300	3,220	5,150	4,390	3,000	3,000	23,060
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	_	1,000	3,300	3,220	5,150	4,390	3,000	3,000	23,060
Total:	-	1,000	3,300	3,220	5,150	4,390	3,000	3,000	23,060

O&M Impacts:

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 465

CIP Project Page Seattle City Light

Vegetation Management Compliance System

Project No: MC-CL-YD9978 **BSL Code:** BC-CL-Y

Transmission and Distribution - CIP **Project Type:** Discrete **BSL Name:**

Project Category: Rehabilitation or Restoration Location: System Wide

Council District: Current Project Stage: Stage 5 - Execution (IT Only) Outside City of Seattle

Start/End Date: 2018 - 2022 **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: \$1,950 **Urban Village:** Not in an Urban Village

This project provides funding for a Vegetation Management Compliance System for planning, tracking, and necessary documentation required to meet WECC and NERC Vegetation Management compliance requirements. These requirements are a WECC recommendation from the 2017 WECC Audit. Auditors noted that SCL was the only utility of its size to not automate Vegetation Management compliance work.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	741	1,209	-	-	-	-	=	-	1,950
Total:	741	1,209	-	-	-	-	-	-	1,950
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	741	1,209	-	-	=	-	-	=	1,950
Total:	741	1,209	-	-	-	-	-	-	1,950

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Western Energy Imbalance Market

Project No: MC-CL-XP9976 BSL Code: BC-CL-X

Project Type: Discrete BSL Name: Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System Wide

Current Project Stage: Stage 6 - Closeout Council District: Multiple

Start/End Date: 2017 - 2022 Neighborhood District: Not in a Neighborhood District

Total Project Cost: \$13,304 Urban Village: Not in an Urban Village

This project provides funding to allow City Light to participate in the Western energy imbalance market (EIM) run by the California Independent System Operator (CAISO). City Light will need IT systems, an implementation agreement with CAISO, possible additional staff and training to participate in the market. Participation will allow City Light to more efficiently use generation and transmission assets, buy and sell energy in shorter term increments, and use pricing to match loads and resources across more buyers and sellers than existing markets currently permit. By doing this, City Light will more effectively integrate renewable energy across the West due to its flexible hydro capacity. City Light is planning to begin participating in the market in the spring of 2019.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	13,292	12	-	-	-	-	-	-	13,304
Total:	13,292	12	-	-	-	-	-	-	13,304
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	13,292	12	-	-	-	-	-	-	13,304
Total:	13,292	12	-	-	-	-	-	-	13,304

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 467

CIP Project Page Seattle City Light

Workplace and Process Improvement

Project No: MC-CL-XF9159 **BSL Code:** BC-CL-X

Project Type: Ongoing **BSL Name:** Power Supply - CIP

Project Category: Rehabilitation or Restoration Location: System wide

N/A **Council District: Current Project Stage:** Citywide

Start/End Date: N/A **Neighborhood District:** Not in a Neighborhood District

Total Project Cost: N/A **Urban Village:** Not in an Urban Village

This ongoing project funds alterations that preserve workplace efficiency. The project focuses on adapting exterior work spaces and interior building elements to support business process improvements for occupant work groups. Interior systems improvements could include flooring replacements, interior remodeling, computer network cabling upgrades, uninterruptible power systems and computer flooring. Exterior system improvements could include fencing, security systems, paving and striping, and exterior building components.

Resources	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
City Light Fund Revenues	9,551	1,336	738	736	736	751	958	793	15,599
Total:	9,551	1,336	738	736	736	751	958	793	15,599
Fund Appropriations / Allocations *	LTD Actuals	2022 Revised	2023	2024	2025	2026	2027	2028	Total
Light Fund	9,551	1,336	738	736	736	751	958	793	15,599
Total:	9,551	1,336	738	736	736	751	958	793	15,599

^{*} Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars 468