# Seattle City Light

# Overview

Seattle City Light (SCL) is a municipal electric utility, owned by the residents of Seattle and run by the City's elected officials. The utility serves a population of over 906,000 people living in a 131 squaremile 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 more than 2,000 megawatts;
- 656 miles of high-voltage transmission lines linking these plants to Seattle;
- a distribution system with 15 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; and
- billing and metering technology tracking approximately 461,000 accounts.

City Light's Capital Improvement Program (CIP) is the vehicle for repairing, upgrading, and expanding this infrastructure. With planned spending of \$2.3 billion over the 2021-2026 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.

# **Thematic Priorities**

The foundational goal of SCL's CIP is to support City Light's mission of providing customers with affordable, reliable and environmentally responsible energy services. The CIP also reflects City Light's five organizational values, which were updated in 2020:

- 1. **Customers First.** We believe customer service is everyone's job. We pledge to be approachable, respectful and responsive in providing products and services that our customers want and need.
- 2. **Environmental Stewardship.** We care about the environment and we are dedicated to enhancing, protecting and preserving it for future generations.
- 3. **Equitable Community Connections.** We are proud to be a local, community-owned utility. We are visible and actively involved in the communities we serve. We are rooted in our commitment to racial diversity, social justice and the equitable provision of services to all.
- 4. **Operational and Financial Excellence.** We strive for excellence, are forward-focused, and seek new and innovative solutions to meet the challenges of today and tomorrow. We prioritize our investments and operating choices to build upon our strong financial foundation and solid, reliable infrastructure.
- 5. **Safe and Engaged Employees.** We actively practice our commitment to employee and public safety. We treat each other with kindness and respect, are personally accountable, and work effectively in teams.

Our values take shape in our CIP in the following areas:

# **Preserving Hydroelectric Generation Assets**

Preservation of Seattle's legacy hydroelectric generation facilities through prudent and systematic investments and maintenance. Current 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 including powerhouse systems; plant automation and cyber security investments.

#### Hydroelectric Project Relicensing

Two City Light hydroelectric projects, Skagit and South Fork Tolt, are nearing the end of their license term with the Federal Energy Regulatory Commission (FERC). License renewal applications for these projects will be filed in 2023 and 2027, respectively. For the Boundary project, various protection, mitigation and enhancement activities will fulfill requirements mandated by its 2014 FERC license and settlement agreement.

#### **Transmission & Distribution Infrastructure**

City Light aims to implement industry best practice system improvements through prudent investment and system maintenance. Planned enhancements to improve reliability include incorporating new technologies such as smart grid and advanced grid analytics. This includes implementing metric driven, cost-benefit analysis supported planning for transmission, substation and distribution projects; developing corporate asset data management procedures; and maximizing benefits derived from our asset management capabilities. Major program investments will include upgrades to the downtown network distribution system, replacing failing underground wires and accelerating wood pole replacement across our service territory.

#### **Grid Modernization**

Investments to maintain and upgrade the electric grid will improve resiliency, add flexibility, and maintain reliability while hardening our assets to cyber threats, and facilitating our objective of achieving a zero-carbon city. Developing electric vehicle charging infrastructure, distributed generation (solar, wind, etc.), energy storage, demand side management, and other Distributed Energy Resource (DER) technology will enable a transition away from fossil fuels. These also will be enabled by the smart grid assets described above, as well as investments in foundational technology systems that underpin the progress to grid transformation – from upgrading the Geospatial Information System (GIS) to updating the Outage Management System (OMS) and enhancing it with Distribution Management system capability. Protecting our system from cyberthreats also requires advanced developments in Cybersecurity programs, governance, and operations, which City Light is establishing. Other efforts include relocating wires and other facilities underground to accommodate changes along the downtown waterfront; adding capacity for the expanding University of Washington and new Sound Transit light rail; and previously mentioned network improvements to realize systemwide benefits from the new Denny substation.

#### **Race and Social Justice**

Recent events have made clear the need for all organizations to examine their role in the structures that uphold systemic racism and City Light is no exception. The utility is actively engaged in the Citywide effort to rebuild Seattle as a city that is racially just, equitable, and inclusive. City Light will work to prioritize positive outcomes for communities of Black, Indigenous, and People of Color in strategic decisions related to innovation and building a utility of the future. City Light historically also has taken its lead from the Citywide Race and Social Justice Initiative (RSJI) to end institutionalized racism in City government. Reaffirmed by Mayor Durkan's <u>Executive Order 2017-13</u>, and in partnership with the community, the Initiative works to change the underlying system that creates race-based disparities in our community and to achieve racial equity in City operations, public engagement and service.

# **Project Selection Criteria**

City Light's project planning process is designed to ensure project funding best meets customers' current and future needs. Project ideas to accomplish baseline service delivery come from throughout City Light. Staff members in the operational divisions are responsible for creating official proposals. Members of each of the utility's organizational lines of business (e.g., power supply, transmission and distribution, fleets & facilities, technology and customer service) prioritize capital spending within their divisions and then submit recommended projects through a centralized capital budgeting system.

Discrete Projects are prioritized using a scoring tool with six criteria: Safety, System Reliability, Improved Level of Service, Environmental Stewardship, Financial Cost-Benefit, and Community Interest. Programs with ongoing funding are prioritized using the criteria of Criticality, Need (Urgency), and Safety. The process gives priority to mandatory requirements and projects currently underway before considering future projects and new initiatives. City Light's Capital Planning Team and Capital Asset Review and Evaluation Committee (CARE) review the scored and prioritized list of projects to develop City Light's sixyear CIP.

Utility staff develops business cases for projects with a total project cost over \$1 million to document the project expectations and rationale and provide a cost-benefit analysis of alternatives. Availability of funding and labor resources limits the CIP. City Light management seeks to balance the overall needs of the utility within these constraints and may rescope, reschedule, or defer projects in its six-year CIP.

## 2021-2026 Adopted CIP Highlights

The 2021-2026 Adopted CIP outlines \$2.3 billion in capital spending over six years for power supply, transmission, distribution, external projects, and central utility needs.

| Program/SubProgram         | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    |
|----------------------------|---------|---------|---------|---------|---------|---------|
| Central Utility Projects   | 22,308  | 25,931  | 26,468  | 28,507  | 28,623  | 30,783  |
| CUSTOMER AND BILLING       | 107     | 220     | 56      | 231     | 50      | 250     |
| FINANCE AND IT SYSTEMS     | 1,830   | 1,555   | 1,783   | 1,645   | 1,768   | 2,838   |
| FLEETS AND FACILITIES      | 20,371  | 24,156  | 24,629  | 26,631  | 26,805  | 27,695  |
| Distribution               | 217,421 | 226,643 | 260,167 | 262,739 | 265,267 | 267,015 |
| DISTRIBUTION OTHER         | 21,412  | 18,670  | 20,068  | 16,800  | 17,235  | 18,536  |
| NETWORK                    | 26,713  | 24,772  | 25,373  | 25,939  | 25,258  | 23,488  |
| RADIAL                     | 81,227  | 90,427  | 126,198 | 130,330 | 133,284 | 136,869 |
| SERVICE CONNECTIONS        | 59,549  | 61,965  | 59,958  | 59,525  | 60,584  | 58,793  |
| SUBSTATIONS                | 28,520  | 30,808  | 28,570  | 30,145  | 28,905  | 29,330  |
| External Projects          | 33,076  | 35,995  | 21,983  | 24,510  | 26,311  | 24,754  |
| CUSTOMER OTHER             | -       | -       | -       | -       | -       | -       |
| LOCAL JURISDICTIONS        | 13,314  | 21,487  | 11,414  | 11,302  | 13,561  | 17,882  |
| TRANSPORTATION RELOCATIONS | 19,762  | 14,509  | 10,569  | 13,208  | 12,750  | 6,872   |
| Power Supply               | 72,572  | 78,763  | 79,791  | 57,470  | 58,669  | 55,399  |
| BOUNDARY                   | 41,849  | 40,590  | 56,566  | 31,723  | 26,959  | 24,593  |
| CEDAR FALLS - TOLT         | 6,700   | 3,701   | 3,863   | 4,817   | 8,638   | 8,563   |
| POWER SUPPLY OTHER         | 2,235   | 2,228   | 1,476   | 1,432   | 1,416   | 1,197   |
| SKAGIT                     | 21,787  | 32,244  | 17,886  | 19,498  | 21,656  | 21,046  |
| Transmission               | 16,437  | 33,602  | 26,664  | 6,722   | 3,422   | 4,155   |
| TRANSMISSION               | 16,437  | 33,602  | 26,664  | 6,722   | 3,422   | 4,155   |
| Total                      | 361,815 | 400,934 | 415,073 | 379,947 | 382,292 | 382,106 |

# 2021-2026 Adopted CIP Summary of CIP Project Allocations (in 1,000s)

# 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) and also includes City Light's work on transportation electrification.

For 2021, there is \$22.3 million in funding for 22 Central Utility Projects including \$3,980,000 in new funding for Transportation Electrification MC-CL-XF9239. Highlights (in order of 2021 Adopted Budget funding) include:

• Equipment Fleet Replacement (MC-CL-XF9101): \$6,121,282

This ongoing project replaces, updates, and expands City Light's light and heavy-duty mobile equipment fleet. This project also funds the replacement of light-duty vehicles owned by City Light, including those previously leased from the Fleets & Facilities Department and that are now owned by City Light.

• Transportation Electrification (MC-CL-XF9239): \$3,980,000

This ongoing project develops electrification infrastructure for light-duty, medium-duty, and heavyduty electric vehicles (including transit, commercial, government and non-profit fleets, delivery vehicles, personal vehicles and freight vehicles) as well as ferry and port systems. The portfolio of projects will be developed based on a committed customer engagement effort and is expected to include support for electrified public transit, investments in and support for electric vehicle charging infrastructure, engineering support, installation services and/or construction services and related infrastructure. The project also includes the enabling investments in grid modernization assets including automation and smart grid technology, distributed generation (solar, wind, etc.) and energy storage equipment, and demand side management to better support and align customer energy demands with supply.

# • Safety Modifications (MC-CL-XF9006): \$2,216,311

This ongoing project modifies City Light's facilities and provides equipment to correct imminent and critical safety hazards. 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.

 <u>Building Envelope Upgrades (MC-CL-XF9072): \$1,665,088</u>
 This 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, Linux patching procedures, Dynamic Host Configuration Protocol server, Domain Name System server, internal vulnerability scanning, and physical security cameras and networks.

# • Seismic Mitigation (MC-CL-XF9134): \$1,363,684

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.

# <u>Workplace and Process Improvement (MC-CL-XF9159): \$1,050,273</u> This ongoing project funds alterations that preserve workplace efficiency. The project focuses on adapting exterior workspaces and interior building elements to support business process improvements for work groups. Interior systems improvements include things like flooring replacements, interior remodeling, computer network cabling upgrades, uninterruptible power systems and computer flooring. Exterior system improvements include fencing, security systems, paving and striping, and exterior building components.

**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, and other facilities related to the distribution system.

For 2021, there is \$217.4 million included for 53 projects in Distribution including \$7,200,000 in increased funding for the Accelerated Pole Replacement Program under MC-CL-YR8351. Highlights (in order of 2021 Adopted Budget funding) include:

# • Overhead Equipment Replacements (MC-CL-YR8351): \$24,895,291

This ongoing project replaces older equipment in City Light's distribution system that is 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.

## 2021-2026 Adopted Capital Improvement Program

• Underground Equipment Replacements (MC-CL-YR8353): \$20,665,907

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): \$16,400,756
   This ongoing project provides medium size electric power service connections from Seattle City Light's distribution system to the customer's meter for power requirements of 50 KVA to 2.5 MVA and 26 kV radial services. Most of this related work is billable to the customer. The project allows Seattle City Light to provide service to new customers in a safe, reliable, timely, and cost-effective manner.
- <u>Pole Attachments (MC-CL-YR8452): \$14,717,418</u> This ongoing project funds utility crews and engineers to prepare City Light poles for the attachment of other communication infrastructure. This work generates additional revenues through pole attachment fees and construction costs, which are fully reimbursable.
- <u>Denny Substation Network (MC-CL-YN8404): \$10,772,049</u>
   This ongoing project provides network system design and construction, engineering design at the substation network interface, and underground conversion of the streetlight, traffic signals, and telecom and fiber optic systems.
- <u>Software Replacement Strategy (MC-CL-YD9969): \$10,222,326</u> This project funds the upgrade or replacement of components of the Enterprise Solution Portfolio by the preferred vendor, Oracle, or other vendor deemed more appropriate. This funding will keep enterprise level resources up to date and fully functional to maximize benefits to customers.
- <u>Network Additions and Services: Broad Street Substation (MC-CL-ZS8363): \$9,978,981</u> This ongoing project provides electrical service connections and related improvements in response to customer service requests within the Broad Street 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.
- <u>Network Additions and Services Denny (MC-CL-ZS8405): \$9,929,254</u> 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 tieswitches.
- <u>Substation Breaker Replacements and Reliability Additions (MC-CL-YS7779) \$7,482,063</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 replaces those circuit breakers with the priority given to those with the highest risk of failure.

- Broad Street Substation Networks (MC-CL-YN8203): \$6,656,153
  - 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 the South Lake Union area.
- <u>Substation Equipment Improvements (MC-CL-YS7752): \$6,426,060</u>
   This ongoing project adds, replaces and upgrades substation equipment, particularly the substation electrical and control equipment. The project maintains or improves system reliability, permits compliance with high voltage and environmental regulations, and ensures safe work sites. The project allows remote control and monitoring of substation equipment from the System Control Center, which facilitates faster response time to correct system instability or outages.
- <u>Small Overhead and Underground Services (MC-CL-ZS8367): \$5,718,976</u>
   This ongoing project provides small size electric power service connections from Seattle City Light's distribution system to the customer's meter for power requirements of less than 50 KVA and 26 kV radial services. Most of this related work is billable to the customer. The program allows Seattle City Light to provide service to new customers in a safe, reliable, timely, and cost-effective manner.
- <u>Substation Transformer Replacement (MC-CL-YS7776): \$5,046,939</u>
   This project funds the review of power transformers at substations and evaluates 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.

**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. Allocation changes reflect revised scope and schedule projections provided by the project managers.

For 2021, the CIP includes \$33.1 million in funding for 10 External Projects. Highlights (in order of 2021 Adopted Budget funding) include:

- <u>Alaskan Way Viaduct and Seawall Replacement Utility Relocations (MC-CL-ZT8307): \$11,229,160</u> This project allows the City to comply with its requirements to relocate Seattle City Light's infrastructure associated with the replacement of the Alaskan Way Viaduct and improvements to the Seawall and Central waterfront.
- <u>Transportation Streetlights (MC-CL-ZL8377): \$6,207,108</u> This ongoing project relocates Seattle City Light owned streetlights as required by City of Seattle transportation projects.
- <u>Overhead and Underground Relocations (MC-CL-ZT8369): \$5,283,214</u>
   This ongoing project moves electrical lines to accommodate or take advantage of transportation-related projects, street vacations, or other projects being constructed by non-City Light agencies. This project addresses modifications to the distribution system, including replacement or modifications of old-line segments, poles, and underground facilities, as necessary. Some project

costs are paid by City Light and some are paid by the requesting agencies, depending on the circumstances.

- <u>Waterfront Seattle Streetlights (MC-CL-ZL8481): \$3,927,134</u> This project funds the street lighting associated with the bored tunnel hybrid plan for the Alaskan Way Viaduct replacement which is a project that will result in the City rebuilding Alaskan Way, led by the Office of the Waterfront.
- <u>Sound Transit Lynnwood Link (MC-CL-ZT8471): \$2,817,702</u> This project supports construction of Sound Transit's Lynnwood Link project, which will extend the light rail line from the Northgate Transit Center at 5th Ave NE & NE 100th Street in Seattle to the SCL service area boundary at NE 205th Street, near the I-5 Right of Way in the City of Shoreline. The project will include 100 blocks of distribution relocations.

**Power Supply:** Projects in this program include improvements to City Light's dams, generators, powerhouses, and other related projects. In addition, the program contains projects designed to help City Light comply with federal licensing and environmental mitigation requirements at the utility's dams. City Light sequences work on major power production equipment (i.e., generator rebuilds, transformer replacements, plant system replacements and turbine replacements) to reduce the impact to power generation and to minimize fluctuations in the annual amount of capital spending.

For 2021, the CIP includes \$72.6 million in funding for 39 projects in Power Supply. Highlights (in order of 2021 Adopted Budget funding) include:

Boundary - Licensing Mitigation (MC-CL-XB6987): \$25,386,125

This ongoing project implements Protection, Mitigation and Enhancement measures (PMEs) required by the terms and conditions of the license issued by FERC in 2013. 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.

- <u>Skagit Relicensing (MC-CL-XS6986): \$13,857,919</u> 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 for submission to FERC in May 2023.
- <u>Boundary Powerhouse Unit 54 Generator Rebuild (MC-CL-XB6353): \$4,652,351</u>
   This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 54 generator, which is part of a programmatic series of projects to maintain and extend the useful life of aging generators. The rewind and rehabilitation of the generator includes the stator core, stator bars, rotor poles, etc. Mechanical upgrades such as seal rings and wicket gates may also be installed. This project also provides replacement of the carbon dioxide fire-suppression system with a water sprinkler system to improve worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.
- <u>Cedar Falls Bank 6 Replacement (MC-CL-XC6573): \$4,279,845</u>
   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.

- <u>Boundary Powerhouse Generator Step-up Transformer Replacement (MC-CL-XB6493): \$3,803,792</u> This project replaces six existing step-up transformers at Boundary Dam, which are 50 years old and have exceeded their reliable service life. This project also purchases a spare transformer because normal delivery time for transformers from order to on-site is 18 to 24 months. This project enhances long-term reliability and allows for City Light to avoid a prolonged loss of generation.
- <u>Boundary Powerhouse Unit 52 Generator Rebuild (MC-CL-XB6535): \$3,103,668</u>
   This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 52 generator, which is part of a programmatic series of projects to maintain and extend the useful life of the utility's aging generators. The rewind and rehabilitation of the generator includes the stator core, stator bars, and rotor poles. Mechanical upgrades such as seal rings and wicket gates may also be installed. This project also provides replacement of the carbon dioxide fire-suppression system with a water sprinkler system to improve worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.
- <u>Skagit Facility Minor Improvements Program (MC-CL-XS6405): \$2,175,788</u> This ongoing project provides financial coverage for emergent capital projects related to all Skagit Facilities. In addition, this project funds scheduled, small capital projects that have cost estimates less than \$25,000.

**Transmission:** Projects in this program include transmission capacity and reliability projects to deliver power from City Light's dams to its distribution system and the regional power grid. City Light owns and maintains 656 miles of transmission capacity that connect the Skagit facilities to Seattle. City Light also leases additional transmission capacity to connect to the Boundary, Cedar Falls, and Tolt hydroelectric projects.

For 2021, the CIP budget of \$16.4 million for five projects includes new funding of \$3,177,000 for the Transmission Tower Refurbishment project MC-CL-YT7130. Highlights (in order of 2021 Adopted Budget funding) include:

• Denny Substation Transmission Lines (MC-CL-YT7125): \$6,771,676

This project designs and constructs transmission lines to support the new Denny Substation. These transmission lines are created by dividing the existing Pine to Broad Street transmission line into two transmission lines.

<u>Transmission Line Inductor Installation (MC-CL-YT8461): \$3,994,914</u>
 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.

• Transmission Tower Refurbishment (MC-CL-YT7130): \$3,177,000

This new project funds the costs to refurbish and to extend the life of over 1,700 of steel transmission tower structures. This funding establishes and implements a new, ongoing, systematic approach to repair and refurbish these critical assets for as long as we can before needing to perform a tower replacement project which would cost more than \$2.0 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 <u>Resolution 31187</u>. Revenues from retail electricity sales and wholesale surplus energy sales also fund a large part of City Light's CIP. Other funding comes from direct customer billing (including service connections and other customer requested work) and assorted fees.

## **Summary of Upcoming Budget Issues and Challenges**

## **Budget Issues**

Due to the COVID-19 pandemic and the associated economic slowdown, there is a loss of demand for electricity from both commercial and industrial customers. This loss in sales volume coupled with plans to not increase retail rates in 2021 will reduce revenues available to fund capital work.

## Challenges

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

- <u>New technologies are transforming how people use electricity</u>. 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.
- <u>Declining Retail Energy Consumption and Electrification</u>. Advances in energy efficiency have reduced consumer energy demand. 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 and for the grid investments that will be required to serve this new demand effectively. This changing landscape calls for managing impacts to rates while also understanding and compensating for inequities in access to green, cost-saving technologies.
- <u>Impact of retirements and legacy practices</u>. 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.
- <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.

## Future Projects/What is on the Horizon

- New projects for Transmission Tower Refurbishment and Tolt Relicensing.
- Expanded transportation electrification programs that support the Mayor's Drive Clean Seattle and City Council Green New Deal priorities.
- Grid Modernization Roadmap to develop and implement a strategy to modernize and optimize City Light's grid including both near-term and long-term actions, such as transmission and distribution automation, distributed energy resource development and integration, grid edge and behind-the-meter technology, and other utility technology projects. These efforts are needed to prepare the grid for increased electrification but also to position the utility for emerging business and

operational realities and reshape the grid's architecture to meet our customer-owners' energy needs and choices today and in the future.

• The transition to the new 5G networks will increase requests to attach to City Light poles. The impact of the required fiber optic deployments to support 5G will touch nearly every pole in City Light's distribution system.

## **City Council Changes to the Proposed CIP**

The City Council made not change to the 2021-2026 Proposed CIP.

## **City Council Provisos to the CIP**

There are no Council Provisos.

## **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 - 2021        | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$100,374          | Urban Village:         | Not in an Urban Village        |

This project replaces approximately 400,000 existing 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.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total   |
|---|----------------|-----------------|------|------|------|------|------|------|---------|
| City Light Fund Revenues                          | 90,609         | 9,765           | -    | -    | -    | -    | -    | -    | 100,374 |
| Total:  | 90,609         | 9,765           | -    | -    | -    | -    | -    | -    | 100,374 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total   |
| Light Fund  | 90,609         | 9,765           | -    | -    | -    | -    | -    | -    | 100,374 |
| Total:  | 90,609         | 9,765           | -    | -    | -    | -    | -    | -    | 100,374 |

#### 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 - 2024            | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$257,180              | Urban Village:         | Not in an Urban Village        |

This project allows the City to comply with its requirements to relocate Seattle City Light's infrastructure associated with the replacement of the Alaskan Way Viaduct and improvements to the Seawall and Central waterfront.

|   | LTD            | 2020            |                       |                      |                      |                    |      |      |                      |
|---|----------------|-----------------|-----------------------|----------------------|----------------------|--------------------|------|------|----------------------|
| Resources   | Actuals        | Revised         | 2021                  | 2022                 | 2023                 | 2024               | 2025 | 2026 | Total                |
| City Light Fund Revenues                          | 184,295        | 53,812          | 11,229                | 6,408                | 1,303                | 134                | -    | -    | 257,180              |
| Total:  | 184,295        | 53,812          | 11,229                | 6,408                | 1,303                | 134                | -    | -    | 257,180              |
|   |                |                 |                       |                      |                      |                    |      |      |                      |
| Fund Appropriations /                             | LTD            | 2020            |                       |                      |                      |                    |      |      |                      |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                  | 2022                 | 2023                 | 2024               | 2025 | 2026 | Total                |
|   |                |                 | <b>2021</b><br>11,229 | <b>2022</b><br>6,408 | <b>2023</b><br>1,303 | <b>2024</b><br>134 | 2025 | 2026 | <b>Total</b> 257,180 |

## **Battery Storage Pilot**

| Project No:            | MC-CL-YR8484                  | BSL Code:              | BC-CL-Y                             |
|------------------------|-------------------------------|------------------------|-------------------------------------|
| Project Type:          | Ongoing                       | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | Rehabilitation or Restoration | Location:              | Citywide                            |
| 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 the installation of a grid-connected utility-scale battery. City Light will either work independently or with a partner to develop and demonstrate this new technology. This project gives City Light an opportunity to explore the storage technology and its impact on our local grid.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 49              | -    | -    | -    | -    | -    | -    | 49    |
| Total:  | -              | 49              | -    | -    | -    | -    | -    | -    | 49    |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 49              | -    | _    | -    | -    | -    | -    | 49    |
| Total:  | -              | 49              | -    | -    | -    | -    | -    | -    | 49    |

## **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 |
| Current Project Stage: | Stage 6 - Closeout            | Council District:      | Citywide                     |
| Start/End Date:        | 2013 - 2020                   | Neighborhood District: | Outside City of Seattle      |
| Total Project Cost:    | \$1,201                       | Urban Village:         | Outside City of Seattle      |

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 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 195            | 1,006           | -    | -    | -    | -    | -    | -    | 1,201 |
| Total:  | 195            | 1,006           | -    | -    | -    | -    | -    | -    | 1,201 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 195            | 1,006           | -    | -    | -    | -    | -    | -    | 1,201 |
| Total:  | 195            | 1,006           | -    | -    | -    | -    | -    | -    | 1,201 |

#### **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, & Planning | Council District:      | Outside City of Seattle         |
| Start/End Date:        | 2017 - 2026  | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$7,639  | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024               | 2025                 | 2026              | Total                 |
|--------------------------|----------------|-----------------|------|------|------|--------------------|----------------------|-------------------|-----------------------|
| City Light Fund Revenues | 857            | -               | -    | -    | -    | 574                | 6,174                | 34                | 7,639                 |
| Total:                   | 857            | -               | -    | -    | -    | 574                | 6,174                | 34                | 7,639                 |
| Fund Appropriations /    | LTD            | 2020            |      |      |      |                    |                      |                   |                       |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024               | 2025                 | 2026              | Total                 |
|                          | Actuals<br>857 | Revised         | 2021 | 2022 | 2023 | <b>2024</b><br>574 | <b>2025</b><br>6,174 | <b>2026</b><br>34 | <b>Total</b><br>7,639 |

## **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 - 2024                   | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$3,585                       | Urban Village:         | Outside City of Seattle         |

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

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024              | 2025 | 2026 | Total                 |
|---|----------------|-----------------|--------------------|--------------------|--------------------|-------------------|------|------|-----------------------|
| City Light Fund Revenues                          | 646            | 901             | 713                | 689                | 617                | 18                | -    | -    | 3,585                 |
| Total:  | 646            | 901             | 713                | 689                | 617                | 18                | -    | -    | 3,585                 |
|   |                |                 |                    |                    |                    |                   |      |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024              | 2025 | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>713 | <b>2022</b><br>689 | <b>2023</b><br>617 | <b>2024</b><br>18 | 2025 | 2026 | <b>Total</b><br>3,585 |

#### **Boundary - Entrance Improvements**

| Project No:            | MC-CL-XB6601                  | 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 - 2020                   | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$3,251                       | Urban Village:         | Outside City of Seattle         |

This project provides safety for employees at the security entrance to the Boundary Hydro Project, those working at the site, the security guard, and visitors. This project provides realingment of the access road to the security gate so the guard station is accessed between lanes of incoming and outgoing traffic instead of from the road shoulder. This increases the guardsã€<sup>™</sup> view of approaching traffic and allows traffic more time to slow down when approaching the guard station. This project also provides a permanent building with water service, a restroom, and an electrical room as well as new signage.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 3,207          | 45              | -    | -    | -    | -    | -    | -    | 3,251 |
| Total:  | 3,207          | 45              | -    | -    | -    | -    | -    | -    | 3,251 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|   |                |                 |      | =•== | 2020 |      | =•=• |      |       |
| Light Fund  | 3,207          | 45              |      |      | -    | -    | -    | -    | 3,251 |

#### **Boundary - Level 6 Deck Stabilization**

| Project No:            | MC-CL-XB6604                  | 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 - 2021                   | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$3,071                       | 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. A recent inspection 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total              |
|--------------------------|----------------|-----------------|------|------|------|------|------|------|--------------------|
|                          |                |                 | 2021 | 2022 | 2023 | 2024 | 2023 | 2020 |                    |
| City Light Fund Revenues | 2,308          | 763             | -    | -    | -    | -    | -    | -    | 3,071              |
| Total:                   | 2,308          | 763             | -    | -    | -    | -    | -    | -    | 3,071              |
| Fund Appropriations /    | LTD            | 2020            |      |      |      |      |      |      |                    |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total              |
|                          |                |                 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 3,071 |

#### **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<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025  | 2026   | Total   |
|---|----------------|-----------------|--------|--------|--------|--------|-------|--------|---------|
| City Light Fund Revenues                          | 89,652         | 25,721          | 25,386 | 16,927 | 28,305 | 12,250 | 8,922 | 16,755 | 223,917 |
| Total:  | 89,652         | 25,721          | 25,386 | 16,927 | 28,305 | 12,250 | 8,922 | 16,755 | 223,917 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025  | 2026   | Total   |
| Light Fund  | 89,652         | 25,721          | 25,386 | 16,927 | 28,305 | 12,250 | 8,922 | 16,755 | 223,917 |
| Total:  | 89.652         | 25.721          | 25,386 | 16.927 | 28,305 | 12.250 | 8,922 | 16.755 | 223,917 |

#### **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:    | \$2,235                       | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 1,944          | 243             | 47   | -    | -    | -    | -    | -    | 2,235 |
| Total:  | 1,944          | 243             | 47   | -    | -    | -    | -    | -    | 2,235 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 1,944          | 243             | 47   | _    | -    | -    | -    | -    | 2,235 |
| Total:  | 1,944          | 243             | 47   | -    | -    | -    | -    | -    | 2,235 |

#### **Boundary Control Room Alarm System Replacement**

| Project No:            | MC-CL-XB6637   | 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, & Planning | Council District:      | Outside City of Seattle         |
| Start/End Date:        | 2019 - 2024  | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$963  | 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. The current system of alarms and annunciator panels is not functioning properly, and is outdated. 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, it is assumed that this project will be implemented in phases over four years, starting in 2018.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024        | 2025 | 2026 | Total               |
|--------------------------|----------------|-----------------|--------------------|--------------------|--------------------|-------------|------|------|---------------------|
| City Light Fund Revenues | 67             | 263             | 222                | 211                | 176                | 24          | -    | -    | 963                 |
| Total:                   | 67             | 263             | 222                | 211                | 176                | 24          | -    | -    | 963                 |
| Fund Appropriations /    | LTD            | 2020            |                    |                    |                    |             |      |      |                     |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024        | 2025 | 2026 | Total               |
|                          |                |                 | <b>2021</b><br>222 | <b>2022</b><br>211 | <b>2023</b><br>176 | <b>2024</b> | 2025 | 2026 | <b>Total</b><br>963 |

## **Boundary Crane Improvements**

| Project No:            | MC-CL-XB6620                  | 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 - 2020                   | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$8,080                       | Urban Village:         | Not in an Urban Village         |

This project rehabilitates and modernizes control systems and other components on two bridge cranes at the Boundary Powerhouse. The controls have exceeded their useful life and other systems, such as fall protection, are not up to current safety codes. A comprehensive crane assessment may identify additional systems requiring replacement, rehabilitation, or repair. These cranes are critical to the operation and maintenance of the six hydroelectric generators at Boundary and are directly linked to generator availability. This work supports upcoming rewind projects on Boundary Units 51, 52 and 54.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 7,757          | 323             | -    | -    | -    | -    | -    | -    | 8,080 |
| Total:  | 7,757          | 323             | -    | -    | -    | -    | -    | -    | 8,080 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 7,757          | 323             | -    | -    | -    | -    | -    | -    | 8,080 |
| Total:  | 7,757          | 323             | -    | -    | -    | -    | -    | -    | 8,080 |

## **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 5 - Construction        | Council District:      | Outside City of Seattle         |
| Start/End Date:        | 2017 - 2021                   | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$1,098                       | 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 over the past several years, 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.

|   | LTD            | 2020            |                   |      |      |           |      |      |                       |
|---|----------------|-----------------|-------------------|------|------|-----------|------|------|-----------------------|
| Resources   | Actuals        | Revised         | 2021              | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
| City Light Fund Revenues                          | 836            | 192             | 70                | -    | -    | -         | -    | -    | 1,098                 |
| Total:  | 836            | 192             | 70                | -    | -    | -         | -    | -    | 1,098                 |
|   |                |                 |                   |      |      |           |      |      |                       |
| Fund Appropriations /                             | LTD            | 2020            | 0004              |      |      | 0004      | 0005 |      | <b>T</b> - ( - 1      |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021              | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>70 | 2022 | 2023 | 2024<br>- | 2025 | 2026 | <b>Total</b><br>1,098 |

## **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. A recent 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023  | 2024  | 2025  | 2026 | Total |
|---|----------------|-----------------|------|------|-------|-------|-------|------|-------|
| City Light Fund Revenues                          | -              | -               | 242  | 172  | 1,440 | 2,296 | 1,250 | 821  | 6,221 |
| Total:  | -              | -               | 242  | 172  | 1,440 | 2,296 | 1,250 | 821  | 6,221 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023  | 2024  | 2025  | 2026 | Total |
| Light Fund  | -              | -               | 242  | 172  | 1,440 | 2,296 | 1,250 | 821  | 6,221 |
|   |                |                 |      |      |       |       |       |      |       |

#### **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 financial coverage 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. This project shows increased project allocations in years 2015 to 2017. This increase reflects anticipated baseline CIP spending levels for the Boundary Facility that are in line with Strategic Plan assumptions. These future year allocations will be broken out into specific CIP projects.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues                          | 22,609         | 162             | 1,569                | 2,297                | 5,520                | 5,120                | 4,710                | 5,013                | 47,000                 |
| Total:  | 22,609         | 162             | 1,569                | 2,297                | 5,520                | 5,120                | 4,710                | 5,013                | 47,000                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>1,569 | <b>2022</b><br>2,297 | <b>2023</b><br>5,520 | <b>2024</b><br>5,120 | <b>2025</b><br>4,710 | <b>2026</b><br>5,013 | <b>Total</b><br>47,000 |

## **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:        | 2020 - 2027                       | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$1,048                           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | -    | 379  | 473  | 196  | 1,048 |
| Total:  | -              | -               | -    | -    | -    | 379  | 473  | 196  | 1,048 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | -    | 379  | 473  | 196  | 1,048 |
| Total:  | -              | -               | -    | -    | -    | 379  | 473  | 196  | 1,048 |

#### **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:        | 2023 - 2026                       | Neighborhood District: | Outside City of Seattle         |
| Total Project Cost:    | \$8,204                           | Urban Village:         | Not in an Urban Village         |

This project replaces the control systems on all six Boundary generating units. A recent 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total |
|---|----------------|-----------------|------|------|------|-------|-------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | 153  | 6,054 | 1,997 | -    | 8,204 |
| Total:  | -              | -               | -    | -    | 153  | 6,054 | 1,997 | -    | 8,204 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | 153  | 6.054 | 1.997 | -    | 8.204 |
| 0   |                |                 |      |      |      | 0,001 | .,    |      | - / - |

#### **Boundary Powerhouse - Transformer Bank Rockfall Mitigation**

| Project No:            | MC-CL-XB6485   | 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 2 - Initiation, Project Definition, & Planning | Council District:      | Outside City of Seattle               |
| Start/End Date:        | 2008 - 2020  | Neighborhood District: | Not in a Neighborhood District        |
| Total Project Cost:    | \$502  | Urban Village:         | Not in an Urban Village               |

This project constructs an intermediate switchyard at Boundary, installs new cables routed through tunnels to the surface from the Boundary Dam transformers to the switchyard, and constructs a transmission line from the switchyard to the BPA Switching Station. This project mitigates the likelihood of rock fall damage to a transformer, the bonnet over the transformer, transformer equipment, conductors, or outriggers. It reduces the likelihood of damage from such an incident which could be catastrophic and result in extended outages, personal injury, and death.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 502            | -               | -    | -    | -    | -    | -    | -    | 502   |
| Total:  | 502            | -               | -    | -    | -    | -    | -    | -    | 502   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|   |                |                 |      |      |      |      |      |      |       |
| Light Fund  | 502            | -               | -    | -    | -    | -    | -    | -    | 502   |

#### **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 5 - Construction        | Council District:      | Outside City of Seattle               |
| Start/End Date:        | 2017 - 2024                   | Neighborhood District: | Not in a Neighborhood District        |
| Total Project Cost:    | \$35,462                      | 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. The rewind and rehabilitation of the generator includes the stator core, stator bars, rotor poles, etc. Mechanical upgrades such as seal rings and wicket gates may also be installed. 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 19,058         | 16,162          | 242  | -    | -    | -    | -    | -    | 35,462 |
| Total:  | 19,058         | 16,162          | 242  | -    | -    | -    | -    | -    | 35,462 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 19,058         | 16,162          | 242  | -    | -    | -    | -    | -    | 35,462 |
| Total:  | 19.058         | 16,162          | 242  | -    | -    | -    | -    | -    | 35,462 |

#### **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:    | \$26,102                      | Urban Village:         | Outside City of Seattle         |

This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 52 generator, which is part of a programmatic series of projects to maintain and extend the useful life of the Utility's aging generators. The rewind and rehabilitation of the generator includes the stator core, stator bars, rotor poles, etc. Mechanical upgrades such as seal rings and wicket gates may also be installed. This project also provides replacement of the carbon dioxide fire-suppression system with a water sprinkler system to improve worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|-------|-------|-------|------|------|------|--------|
| City Light Fund Revenues                          | 64             | 11,467          | 3,104 | 5,812 | 5,655 | -    | -    | -    | 26,102 |
| Total:  | 64             | 11,467          | 3,104 | 5,812 | 5,655 | -    | -    | -    | 26,102 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 64             | 11,467          | 3,104 | 5,812 | 5,655 | -    | -    | -    | 26,102 |
| Total:  | 64             | 11,467          | 3,104 | 5,812 | 5,655 |      |      | -    | 26,102 |

#### **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 3 - Design              | Council District:      | Outside City of Seattle               |
| Start/End Date:        | 2018 - 2024                   | Neighborhood District: | Not in a Neighborhood District        |
| Total Project Cost:    | \$27,288                      | Urban Village:         | Not in an Urban Village               |

This project provides rewinding and refurbishing of the Boundary Powerhouse Unit 54 generator, which is part of a programmatic series of projects to maintain and extend the useful life of aging generators. The rewind and rehabilitation of the generator includes the stator core, stator bars, rotor poles, etc. Mechanical upgrades such as seal rings and wicket gates may also be installed. This project also provides replacement of the carbon dioxide fire-suppression system with a water sprinkler system to improve worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|-------|-------|------|------|------|------|--------|
| City Light Fund Revenues                          | 4,958          | 12,538          | 4,652 | 5,140 | -    | -    | -    | -    | 27,288 |
| Total:  | 4,958          | 12,538          | 4,652 | 5,140 | -    | -    | -    | -    | 27,288 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 4,958          | 12,538          | 4,652 | 5,140 | -    | -    | -    | -    | 27,288 |
| Total:  | 4,958          | 12,538          | 4,652 | 5,140 | -    | -    | -    | -    | 27,288 |

#### **Boundary Powerhouse Exhaust system**

| Project No:            | MC-CL-XB6634                      | 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 - 2026                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$348                             | Urban Village:         | Not in an Urban Village         |

This project replaces and improves the existing Boundary powerhouse exhaust system. Boundary powerhouse is located in a rocky cavern and relies on a mechanical exhaust system to maintain air quality in the various levels of the powerhouse.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | _              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |

## 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 3 - Design | Council District:      | Outside City of Seattle               |
| Start/End Date:        | 2010 - 2025      | Neighborhood District: | Not in a Neighborhood District        |
| Total Project Cost:    | \$39,755         | Urban Village:         | Not in an Urban Village               |

This project replaces six existing step-up transformers at Boundary Dam, which are 50 years old and have exceeded their reliable service life. This project also includes a spare transformer as normal delivery time for transformers from order to on-site is 18 to 24 months. This project enhances long term reliability and allows for City Light to avoid a prolonged loss of generation capacity.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026 | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|------|--------|
| City Light Fund Revenues                          | 15,030         | 7,109           | 3,804 | 4,189 | 6,136 | 1,994 | 1,493 | -    | 39,755 |
| Total:  | 15,030         | 7,109           | 3,804 | 4,189 | 6,136 | 1,994 | 1,493 | -    | 39,755 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026 | Total  |
| Light Fund  | 15,030         | 7,109           | 3,804 | 4,189 | 6,136 | 1,994 | 1,493 | -    | 39,755 |
| Total:  | 15,030         | 7.109           | 3,804 | 4,189 | 6,136 | 1,994 | 1.493 |      | 39,755 |

## **Boundary Service Area Paving**

| Project No:            | MC-CL-XB6632                      | 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 - 2026                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$348                             | Urban Village:         | Not in an Urban Village         |

This project provides paving of the Boundary service area roadways and parking areas.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 348  | 348   |

# **Boundary Sluice Gate Walkway Replacement**

| Project No:            | MC-CL-XB6631                      | 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:        | 2020 - 2024                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$529                             | Urban Village:         | Not in an Urban Village         |

This project replaces and improves concrete walkways over the sluicegates in order to improve safety for the crews performing maintenance activities on the gates.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023               | 2024               | 2025 | 2026 | Total               |
|--------------------------|----------------|-----------------|------|------|--------------------|--------------------|------|------|---------------------|
| City Light Fund Revenues | -              | -               | -    | -    | 129                | 400                | -    | -    | 529                 |
| Total:                   | -              | -               | -    | -    | 129                | 400                | -    | -    | 529                 |
| Fund Appropriations /    | LTD            | 2020            |      |      |                    |                    |      |      |                     |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021 | 2022 | 2023               | 2024               | 2025 | 2026 | Total               |
|                          |                |                 | 2021 | 2022 | <b>2023</b><br>129 | <b>2024</b><br>400 | 2025 | 2026 | <b>Total</b><br>529 |

#### **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 - 2025                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$8,456                           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022  | 2023  | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|-------|-------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 10              | 484  | 2,541 | 4,395 | 485  | 541  | -    | 8,456 |
| Total:  | -              | 10              | 484  | 2,541 | 4,395 | 485  | 541  | -    | 8,456 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022  | 2023  | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 10              | 484  | 2,541 | 4,395 | 485  | 541  | -    | 8,456 |
|   |                |                 |      |       |       |      |      |      |       |

# **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 2 - Initiation, Project Definition, & Planning | Council District:      | Outside City of Seattle         |
| Start/End Date:        | 2019 - 2025  | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$1,093  | 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 we rely on a series of sump pumps to keep the powerhouse dry. We have recently completed a project to replace the sump pumps, but now need to replace and modernize the drive systems for each pump. One drive system will be replaced per year, starting in 2020, and the final one will be in service in 2024.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026   | Total |
|---|----------------|-----------------|------|------|------|------|------|--------|-------|
| City Light Fund Revenues                          | -              | 411             | 210  | 150  | 106  | 107  | 108  | -      | 1,093 |
| Total:  | -              | 411             | 210  | 150  | 106  | 107  | 108  | -      | 1,093 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026   | Tetel |
| Allocations                                       | Actuals        | Reviseu         | 2021 | 2022 | 2023 | 2024 | 2025 | 2020   | Total |
| Light Fund  | -              | 411             | 2021 | 150  | 106  | 107  | 108  | - 2026 | 1,093 |

# **Boundary Tailrace Boat Ramp improvements**

| Project No:            | MC-CL-XB6630                      | 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 - 2021                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$1                               | Urban Village:         | Not in an Urban Village         |

This project replaces and improves the existing boat ramp that provides access to the tailrace for fishery boats, oil spill response equipment and personnel rescue equipment. The exiting ramp is rough and is difficult and time consuming to navigate using a truck and boat trailer.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 1               | -    | -    | -    | -    | -    | -    | 1     |
| Total:  | -              | 1               | -    | -    | -    | -    | -    | -    | 1     |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 1               | -    | -    | -    | -    | -    | -    | 1     |
| Total:  | -              | 1               | -    | -    | -    | -    | -    | -    | 1     |

### **Boundary U55/56 Fire Suppression**

| Project No:            | MC-CL-XB6636                      | 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:        | 2021 - 2024                       | Neighborhood District: | Not in a Neighborhood District  |
| Total Project Cost:    | \$1,547                           | Urban Village:         | Not in an Urban Village         |

This project installs hybrid fire suppression system in Boundary units 53, 55, and 56. City Light Generation has recently determined that we will install hybridtype fire suppression systems on our hydro generators. The system has been installed at Diablo powerhouse and is planned under separate projects for Boundary Units 51,52, and 54 when they undergo rewinds. Boundary Units 53,55 and 56 have already been rewound, but did not have fire suppression installed. The timing of the installations is assumed to be one unit per year beginning in 2023.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022               | 2023                 | 2024               | 2025 | 2026 | Total                 |
|---|----------------|-----------------|------|--------------------|----------------------|--------------------|------|------|-----------------------|
| City Light Fund Revenues                          | -              | -               | -    | 152                | 1,200                | 194                | -    | -    | 1,547                 |
| Total:  | -              | -               | -    | 152                | 1,200                | 194                | -    | -    | 1,547                 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD            | 2020            |      |                    |                      |                    |      |      |                       |
| Allocations                                       | Actuals        | Revised         | 2021 | 2022               | 2023                 | 2024               | 2025 | 2026 | Total                 |
| Light Fund  | Actuals        | Revised         | 2021 | <b>2022</b><br>152 | <b>2023</b><br>1,200 | <b>2024</b><br>194 | 2025 | 2026 | <b>Total</b><br>1,547 |

# **Broad Street Substation - Network**

| Project No:            | MC-CL-YN8203 | BSL Code:              | BC-CL-Y                             |
|------------------------|--------------|------------------------|-------------------------------------|
| Project Type:          | Ongoing      | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | New Facility | Location:              | 319 6th AVE N                       |
| 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|---------|
| City Light Fund Revenues                          | 84,645         | 3,573           | 6,656 | 2,348 | 2,395 | 2,562 | 2,560 | 3,092 | 107,831 |
| Total:  | 84,645         | 3,573           | 6,656 | 2,348 | 2,395 | 2,562 | 2,560 | 3,092 | 107,831 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
| Light Fund  | 84,645         | 3,573           | 6,656 | 2,348 | 2,395 | 2,562 | 2,560 | 3,092 | 107,831 |
| Total:  | 84.645         | 3,573           | 6,656 | 2,348 | 2,395 | 2,562 | 2,560 | 3,092 | 107,831 |

# **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:              | 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023 | 2024 | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|------|------|------|-------|-------|--------|
| City Light Fund Revenues                          | 9,963          | 4,340           | 1,665 | -    | -    | -    | 1,096 | 1,112 | 18,176 |
| Total:  | 9,963          | 4,340           | 1,665 | -    | -    | -    | 1,096 | 1,112 | 18,176 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023 | 2024 | 2025  | 2026  | Total  |
| Light Fund  | 9,963          | 4,340           | 1,665 | -    | -    | -    | 1,096 | 1,112 | 18,176 |
| Total:  | 9,963          | 4,340           | 1,665 | -    | -    | -    | 1,096 | 1,112 | 18,176 |

# **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            | 2020            |                    |                    |                   |                    |                   |                    |                       |
|---|----------------|-----------------|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-----------------------|
| Resources   | Actuals        | Revised         | Revised 2021       | 2022               | 2023              | 3 2024             | 2025              | 2026               | Total                 |
| City Light Fund Revenues                          | 56             | 960             | 107                | 220                | 56                | 231                | 50                | 250                | 1,931                 |
| Total:  | 56             | 960             | 107                | 220                | 56                | 231                | 50                | 250                | 1,931                 |
|   |                |                 |                    |                    |                   |                    |                   |                    |                       |
| Fund Appropriations /                             | LTD            | 2020            |                    |                    |                   |                    |                   |                    |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023              | 2024               | 2025              | 2026               | Total                 |
|   |                |                 | <b>2021</b><br>107 | <b>2022</b><br>220 | <b>2023</b><br>56 | <b>2024</b><br>231 | <b>2025</b><br>50 | <b>2026</b><br>250 | <b>Total</b><br>1,931 |

# Cedar Falls - 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: | Stage 3 - Design              | Council District:      | Outside City of Seattle |
| Start/End Date:        | 2018 - 2022                   | Neighborhood District: | Outside City of Seattle |
| Total Project Cost:    | \$12,442                      | 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.

|  | LTD            | 2020                 |                      |                      |      |      |      |      |                     |
|--|----------------|----------------------|----------------------|----------------------|------|------|------|------|---------------------|
| Resources                              | Actuals        | Revised              | 2021                 | 2022                 | 2023 | 2024 | 2025 | 2026 | Total               |
| City Light Fund Revenues               | 532            | 6,580                | 4,280                | 1,050                | -    | -    | -    | -    | 12,442              |
| Total:                                 | 532            | 6,580                | 4,280                | 1,050                | -    | -    | -    | -    | 12,442              |
| Fund Appropriations /                  | LTD            | 2020                 |                      |                      |      |      |      |      |                     |
| Allocations <sup>1</sup>               | Actuals        | Revised              | 2021                 | 2022                 | 2023 | 2024 | 2025 | 2026 | Total               |
| Allocations <sup>1</sup><br>Light Fund | Actuals<br>532 | <b>Revised</b> 6,580 | <b>2021</b><br>4,280 | <b>2022</b><br>1,050 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 12,442 |

### **Cedar Falls Powerhouse - Penstock Stabilization**

| Project No:            | MC-CL-XC6358                  | 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,<br>WA 98045 |
| Current Project Stage: | Stage 5 - Construction        | Council District:      | Outside City of Seattle                          |
| Start/End Date:        | 2007 - 2021                   | Neighborhood District: | Not in a Neighborhood District                   |
| Total Project Cost:    | \$3,943                       | Urban Village:         | Not in an Urban Village                          |

This project installs a seismic upgrade of penstock bridges, repairs sagging or broken penstock support saddles, and refurbishes the exterior surfaces to extend the life of two 78-inch diameter steel penstocks. It also reduces risks of damage from earthquakes and restores the exterior coating on the pipes in the areas where the penstocks are buried. Any penstock failure will likely damage the environment and Seattle's water supply, and could jeopardize the City's ability to fulfill its obligation to regulate fish flows in the Cedar River.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021              | 2022 | 2023 | 2024 | 2025 | 2026 | Total                 |
|---|----------------|-----------------|-------------------|------|------|------|------|------|-----------------------|
| City Light Fund Revenues                          | 3,086          | 775             | 82                | -    | -    | -    | -    | -    | 3,943                 |
| Total:  | 3,086          | 775             | 82                | -    | -    | -    | -    | -    | 3,943                 |
| Fund Appropriations /                             |                | 2020            |                   |      |      |      |      |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | Revised         | 2021              | 2022 | 2023 | 2024 | 2025 | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>82 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b><br>3,943 |

#### 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,<br>WA 98045 |
| Current Project Stage: | Stage 3 - Design              | Council District:      | Outside City of Seattle                          |
| Start/End Date:        | 2007 - 2022                   | Neighborhood District: | Not in a Neighborhood District                   |
| Total Project Cost:    | \$2,825                       | 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<br>Actuals | 2020<br>Revised | 2021                 | 2022               | 2023 | 2024 | 2025 | 2026 | Total              |
|---|----------------|-----------------|----------------------|--------------------|------|------|------|------|--------------------|
| City Light Fund Revenues                          | 1,038          | 300             | 1,343                | 143                | -    | -    | -    | -    | 2,825              |
| Total:  | 1,038          | 300             | 1,343                | 143                | -    | -    | -    | -    | 2,825              |
| Eurod Appropriations /                            | 1 75           | 2020            |                      |                    |      |      |      |      |                    |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022               | 2023 | 2024 | 2025 | 2026 | Total              |
|   |                |                 | <b>2021</b><br>1,343 | <b>2022</b><br>143 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 2,825 |

### 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,<br>WA 98045 |
| Current Project Stage: | Stage 2 - Initiation, Project Definition, &<br>Planning | Council District:      | Outside City of Seattle                          |
| Start/End Date:        | 2023 - 2024   | Neighborhood District: | Not in a Neighborhood District                   |
| Total Project Cost:    | \$613   | Urban Village:         | Not in an Urban Village                          |

This project provides rehabilitation to the Cedar Falls Valvehouse. The extent of the rehabilitation is yet to be determined, but could include exterior structural improvements, replacement of windows, oil spill prevention, and interior remodeling.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | 106  | 507  | -    | -    | 613   |
| Total:  | -              | -               | -    | -    | 106  | 507  | -    | -    | 613   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | 106  | 507  | -    | -    | 613   |
| Total:  | -              | -               | -    | -    | 106  | 507  | -    | -    | 613   |

# **Cedar Falls Rehabilitation**

| Project No:            | MC-CL-XC6625                  | BSL Code:              | BC-CL-X                        |
|------------------------|-------------------------------|------------------------|--------------------------------|
| Project Type:          | Discrete                      | BSL Name:              | Power Supply - CIP             |
| Project Category:      | Rehabilitation or Restoration | Location:              | Cedar Falls                    |
| Current Project Stage: | Stage 6 - Closeout            | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2017 - 2023                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$2,265                       | 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 safety, employee safety, and environmental stewardship.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024 | 2025 | 2026 | Total              |
|--------------------------|----------------|-----------------|--------------------|--------------------|--------------------|------|------|------|--------------------|
| City Light Fund Revenues | 1,391          | 374             | 150                | 150                | 200                | -    | -    | -    | 2,265              |
| Total:                   | 1,391          | 374             | 150                | 150                | 200                | -    | -    | -    | 2,265              |
| Fund Appropriations /    | LTD            | 2020            |                    |                    |                    |      |      |      |                    |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024 | 2025 | 2026 | Total              |
|                          | Actuals 1,391  | Revised<br>374  | <b>2021</b><br>150 | <b>2022</b><br>150 | <b>2023</b><br>200 | 2024 | 2025 | 2026 | <b>Total</b> 2,265 |

### 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,<br>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 provides financial coverage for 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, by definition, unforeseeable, unscheduled, unpredictable, and occur on a first-come, first serve basis. This project shows increased project allocations in years 2015 to 2018. This increase reflects anticipated baseline CIP spending levels for the Cedar Falls and South Fork Tolt Facility that are in line with Strategic Plan assumptions. These future year allocations will be broken out into specific CIP projects for the next year's CIP.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
|---|----------------|-----------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| City Light Fund Revenues                          | 14,833         | 2,170           | 561                | 917                | 1,785                | 2,689                | 2,194                | 2,150                | 27,300              |
| Total:  | 14,833         | 2,170           | 561                | 917                | 1,785                | 2,689                | 2,194                | 2,150                | 27,300              |
|   |                |                 |                    |                    |                      |                      |                      |                      |                     |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
|   |                |                 | <b>2021</b><br>561 | <b>2022</b><br>917 | <b>2023</b><br>1,785 | <b>2024</b><br>2,689 | <b>2025</b><br>2,194 | <b>2026</b><br>2,150 | <b>Total</b> 27,300 |

#### **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              |
| Current Project Stage: | Stage 3 - Design              | Council District:      | Multiple               |
| Start/End Date:        | 2015 - 2026                   | Neighborhood District: | Multiple               |
| Total Project Cost:    | \$18,211                      | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023    | 2024  | 2025  | 2026 | Total  |
|---|----------------|-----------------|------|------|---------|-------|-------|------|--------|
| City Light Fund Revenues                          | 844            | 123             | 35   | 110  | 1,017   | 5,021 | 5,136 | 926  | 13,211 |
| Total:  | 844            | 123             | 35   | 110  | 1,017   | 5,021 | 5,136 | 926  | 13,211 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023    | 2024  | 2025  | 2026 | Total  |
| Light Fund  | 0.1.1          | 100             | 05   | 110  | 4 0 4 7 | 5 004 | 5 400 | 000  | 40.044 |
| Light Fund  | 844            | 123             | 35   | 110  | 1,017   | 5,021 | 5,136 | 926  | 13,211 |

#### **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 program 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 10,070         | 996             | 772  | 696  | 917  | 569  | 902  | 988  | 15,911 |
| Total:  | 10,070         | 996             | 772  | 696  | 917  | 569  | 902  | 988  | 15,911 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 10,070         | 996             | 772  | 696  | 917  | 569  | 902  | 988  | 15,911 |
| Total:  | 10,070         | 996             | 772  | 696  | 917  | 569  | 902  | 988  | 15,911 |

# **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 - 2021        | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$9,074            | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 8,583          | 491             | -    | -    | -    | -    | -    | -    | 9,074 |
| Total:  | 8,583          | 491             | -    | -    | -    | -    | -    | -    | 9,074 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 8,583          | 491             | -    | -    | -    | -    | -    | -    | 9,074 |
|   |                |                 |      |      |      |      |      |      |       |

# 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 1 - Pre-Project Development | Council District:      | Council District 2                  |
| Start/End Date:        | 2005 - 2026                       | Neighborhood District: | Greater Duwamish                    |
| Total Project Cost:    | \$6,361                           | 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, including Jorgenson Steel, Kenworth Trucking, and a number of Boeing plants.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021             | 2022               | 2023             | 2024               | 2025              | 2026                 | Total              |
|--------------------------|----------------|-----------------|------------------|--------------------|------------------|--------------------|-------------------|----------------------|--------------------|
| City Light Fund Revenues | 503            | 573             | 6                | 206                | 6                | 231                | 35                | 4,801                | 6,361              |
| Total:                   | 503            | 573             | 6                | 206                | 6                | 231                | 35                | 4,801                | 6,361              |
| Fund Appropriations /    | LTD            | 2020            |                  |                    |                  |                    |                   |                      |                    |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021             | 2022               | 2023             | 2024               | 2025              | 2026                 | Total              |
|                          |                |                 | <b>2021</b><br>6 | <b>2022</b><br>206 | <b>2023</b><br>6 | <b>2024</b><br>231 | <b>2025</b><br>35 | <b>2026</b><br>4,801 | <b>Total</b> 6,361 |

# **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                    |
| 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 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. This project funds 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, Boundards, and the appropriate devices, instrumentation, and tools. Activities may include Skagit bulkhead, Boundary new instrumentation, Diablo & Gorge GPS System, Boundary instrumentation, Boundary 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.

|                          | LTD     | 2020    |      |       |       |       |       |       |       |
|--------------------------|---------|---------|------|-------|-------|-------|-------|-------|-------|
| Resources                | Actuals | Revised | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | Total |
| City Light Fund Revenues | 603     | 1,156   | 834  | 1,652 | 1,658 | 1,064 | 1,070 | 1,079 | 9,116 |
| Total:                   | 603     | 1,156   | 834  | 1,652 | 1,658 | 1,064 | 1,070 | 1,079 | 9,116 |
| Fund Appropriations /    | LTD     | 2020    |      |       |       |       |       |       |       |
| Allocations <sup>1</sup> | Actuals | Revised | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | Total |
| Light Fund               | 603     | 1,156   | 834  | 1,652 | 1,658 | 1,064 | 1,070 | 1,079 | 9,116 |
| Total:                   |         |         |      |       |       |       |       |       |       |

# **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 - 2023                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$2,238                       | 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 include a new data mart for City Light for the PeopleSoft Reimplementation, Automated Metering Infrastructure, Mobile Workforce Management, Customer Energy Solutions, and upgrades to systems such as City Light's Work and Asset Management System and the Outage Management System to be implemented during this timeframe and which do not yet have existing data marts. The data marts enable City Light to build reports from any front end business intelligence toll such as Cognos, Oracle OBIEE and OUA, Tableau, or Power BI. This project continues the work started under MC-CL-WF9975.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 1,807           | 143  | 143  | 144  | -    | -    | -    | 2,238 |
| Total:  | -              | 1,807           | 143  | 143  | 144  | -    | -    | -    | 2,238 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | _              | 1,807           | 143  | 143  | 144  | -    | -    | -    | 2,238 |
| Total:  | -              | 1,807           | 143  | 143  | 144  | -    | -    | -    | 2,238 |

### **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 provides network system design and construction, engineering design at the substation network interface, and underground conversion of the streetlight, traffic signals, and telecom and fiber optic systems. This project relates Project 7757, Denny Substation Development and Project 8405, Denny Network Services and Additions whose objective is customer hookups via the network to the new substation.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025   | 2026  | Total   |
|---|----------------|-----------------|--------|--------|--------|--------|--------|-------|---------|
| City Light Fund Revenues                          | 94,180         | 7,557           | 10,772 | 10,701 | 10,935 | 11,189 | 11,335 | 6,498 | 163,166 |
| Total:  | 94,180         | 7,557           | 10,772 | 10,701 | 10,935 | 11,189 | 11,335 | 6,498 | 163,166 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025   | 2026  | Total   |
| Light Fund  | 94,180         | 7,557           | 10,772 | 10,701 | 10,935 | 11,189 | 11,335 | 6,498 | 163,166 |
| Total:  | 94,180         | 7,557           | 10,772 | 10,701 | 10,935 | 11.189 | 11,335 | 6,498 | 163,166 |

### **Denny Substation Development**

| Project No:            | MC-CL-YS7757       | BSL Code:              | BC-CL-Y                             |
|------------------------|--------------------|------------------------|-------------------------------------|
| Project Type:          | Discrete           | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | New Facility       | Location:              | System wide                         |
| Current Project Stage: | Stage 6 - Closeout | Council District:      | Citywide                            |
| Start/End Date:        | 2007 - 2019        | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$231,297          | Urban Village:         | Not in an Urban Village             |

This project designs and builds a 200 MVA substation on Denny Ave. The project funds site acquisition, environmental management and remediation of land, design of the substation, and construction of the substation. It provides capacity to meet load growth, provides the operational flexibility to operate the electrical system to serve new development and existing load, and supports development of an underground network.

|                          | LTD     | 2020    |      |      |      |        |      |      |                         |
|--------------------------|---------|---------|------|------|------|--------|------|------|-------------------------|
| Resources                | Actuals | Revised | 2021 | 2022 | 2023 | 2024   | 2025 | 2026 | Total                   |
| City Light Fund Revenues | 228,671 | 2,626   | -    | -    | -    | -      | -    | -    | 231,297                 |
| Total:                   | 228,671 | 2,626   | -    | -    | -    | -      | -    | -    | 231,297                 |
| Fund Appropriations /    | LTD     | 2020    |      |      |      |        |      |      |                         |
| Allocations <sup>1</sup> | Actuals | Revised | 2021 | 2022 | 2023 | 2024   | 2025 | 2026 | Total                   |
| Light Fund               | 228,671 | 2,626   | 2021 | 2022 | 2023 | - 2024 | 2025 | 2026 | <b>Total</b><br>231,297 |

#### **Denny Substation Tenant Improvements**

| Project No:            | MC-CL-XF9235                  | BSL Code:              | BC-CL-X            |
|------------------------|-------------------------------|------------------------|--------------------|
| Project Type:          | Ongoing                       | BSL Name:              | Power Supply - CIP |
| Project Category:      | Rehabilitation or Restoration | 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 provides program, design, and construction of 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 2,350          | 2,899           | 12   | -    | -    | -    | -    | -    | 5,260 |
| Total:  | 2,350          | 2,899           | 12   | -    | -    | -    | -    | -    | 5,260 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2,350          | 2,899           | 12   | -    | -    | -    | -    | -    | 5,260 |
| Total:  | 2,350          | 2.899           | 12   | -    | -    | -    | -    | -    | 5,260 |

#### **Denny Substation Transmission Lines**

| Project No:            | MC-CL-YT7125   | BSL Code:              | BC-CL-Y                             |
|------------------------|--|------------------------|-------------------------------------|
| Project Type:          | Discrete   | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | New Facility   | Location:              | System wide                         |
| Current Project Stage: | Stage 2 - Initiation, Project Definition, & Planning | Council District:      | Citywide                            |
| Start/End Date:        | 2008 - 2024  | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$82,830   | Urban Village:         | Not in an Urban Village             |

This project designs and constructs transmission lines to support the new Denny Substation. These transmission lines are created by dividing the existing Pine to Broad Street transmission line into two transmission lines. The remaining new lines will come from the Canal and Massachusetts substations. This project also provides for undergrounding the transmission lines.

|                          | LTD            | 2020            |                      |                       |                       |                      |      |      |                        |
|--------------------------|----------------|-----------------|----------------------|-----------------------|-----------------------|----------------------|------|------|------------------------|
| Resources                | Actuals        | Revised         | 2021                 | 2022                  | 2023                  | 2024                 | 2025 | 2026 | Total                  |
| City Light Fund Revenues | 17,356         | 3,515           | 6,772                | 30,054                | 22,104                | 3,031                | -    | -    | 82,830                 |
| Total:                   | 17,356         | 3,515           | 6,772                | 30,054                | 22,104                | 3,031                | -    | -    | 82,830                 |
|                          |                |                 |                      |                       |                       |                      |      |      |                        |
| Fund Appropriations /    | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                  | 2023                  | 2024                 | 2025 | 2026 | Total                  |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021                 | 2022                  | 2023                  | 2024                 | 2025 | 2026 | Total                  |
|                          |                |                 | <b>2021</b><br>6,772 | <b>2022</b><br>30,054 | <b>2023</b><br>22,104 | <b>2024</b><br>3,031 | 2025 | 2026 | <b>Total</b><br>82,830 |

# **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 5 - Construction        | Council District:      | Outside City of Seattle      |
| Start/End Date:        | 2015 - 2020                   | Neighborhood District: | Outside City of Seattle      |
| Total Project Cost:    | \$6,072                       | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 5,506          | 566             | -    | -    | -    | -    | -    | -    | 6,072 |
| Total:  | 5,506          | 566             | -    | -    | -    | -    | -    | -    | 6,072 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 5,506          | 566             | -    | -    | -    | -    | -    | -    | 6,072 |
| Total:  | 5,506          | 566             | -    | -    | -    | -    | -    | -    | 6,072 |

# **Diablo - Replace Bank Transformers**

| Project No:            | MC-CL-XS6589                      | 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 1 - Pre-Project Development | Council District:      | Outside City of Seattle      |
| Start/End Date:        | 2026 - 2029                       | Neighborhood District: | Outside City of Seattle      |
| Total Project Cost:    | \$6,115                           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | -    | -    | -    | 315  | 315   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 315  | 315   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | -    | -    | -    | 315  | 315   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 315  | 315   |

# **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.

|   | LTD            | 2020            |                    |                    |                    |                    |      |      |                       |
|---|----------------|-----------------|--------------------|--------------------|--------------------|--------------------|------|------|-----------------------|
| Resources   | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024               | 2025 | 2026 | Total                 |
| City Light Fund Revenues                          | 1,318          | 204             | 563                | 398                | 377                | 290                | -    | -    | 3,152                 |
| Total:  | 1,318          | 204             | 563                | 398                | 377                | 290                | -    | -    | 3,152                 |
|   |                |                 |                    |                    |                    |                    |      |      |                       |
| Fund Appropriations /                             | LTD            | 2020            |                    |                    |                    |                    |      |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024               | 2025 | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>563 | <b>2022</b><br>398 | <b>2023</b><br>377 | <b>2024</b><br>290 | 2025 | 2026 | <b>Total</b><br>3,152 |

#### **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  |
| Current Project Stage: | Stage 5 - Construction        | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2011 - 2021                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$6,664                       | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
|   | Actuals        | Reviseu         | 2021 | 2022 | 2023 | 2024 | 2025 | 2020 | TOLAI |
| City Light Fund Revenues                          | 5,827          | 759             | 78   | -    | -    | -    | -    | -    | 6,664 |
| Total:  | 5,827          | 759             | 78   | -    | -    | -    | -    | -    | 6,664 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|   |                |                 |      |      |      |      |      |      |       |
| Light Fund  | 5,827          | 759             | 78   | -    | -    | -    | -    | -    | 6,664 |

### **Diablo Powerhouse - Rebuild Generator Unit 32**

| Project No:            | MC-CL-XS6423                  | 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 6 - Closeout            | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2015 - 2019                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$21,571                      | Urban Village:         | Not in an Urban Village        |

This project rebuilds Generator 32 at Diablo Powerhouse, which provides 4.4 percent of the total power Seattle City Light generates. This project is part of the Utility's Generator Rebuild Program, a series of projects to maintain and extend the useful life of the Utility's aging generators. The program rebuilds ten generators, accounting for 70 percent of City Light's generating capability.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total               |
|--------------------------|----------------|-----------------|------|------|------|------|------|------|---------------------|
| City Light Fund Revenues | 20,749         | 822             | -    | -    | -    | -    | -    | -    | 21,571              |
| Total:                   | 20,749         | 822             | -    | -    | -    | -    | -    | -    | 21,571              |
| Fund Appropriations /    | LTD            | 2020            |      |      |      |      |      |      |                     |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total               |
|                          |                |                 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 21,571 |

### **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                            |
| 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 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.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                     |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
| City Light Fund Revenues                          | 23,731         | 3,899           | 2,258                | 2,409                | 2,583                | 1,651                | 2,139                | 2,072                | 40,743              |
| Total:  | 23,731         | 3,899           | 2,258                | 2,409                | 2,583                | 1,651                | 2,139                | 2,072                | 40,743              |
|   |                |                 |                      |                      |                      |                      |                      |                      |                     |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                     |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
|   |                |                 | <b>2021</b><br>2,258 | <b>2022</b><br>2,409 | <b>2023</b><br>2,583 | <b>2024</b><br>1,651 | <b>2025</b><br>2,139 | <b>2026</b><br>2,072 | <b>Total</b> 40,743 |

### **Distribution Automation**

| Project No:            | MC-CL-YR8425                  | BSL Code:              | BC-CL-Y                             |
|------------------------|-------------------------------|------------------------|-------------------------------------|
| Project Type:          | Ongoing                       | BSL Name:              | Transmission and Distribution - 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 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<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
|   |                |                 | _                    | -                    |                      | _                    |                      |                      |                        |
| City Light Fund Revenues                          | 12,719         | 1,465           | 2,507                | 2,998                | 3,210                | 3,092                | 3,141                | 3,200                | 32,331                 |
| Total:  | 12,719         | 1,465           | 2,507                | 2,998                | 3,210                | 3,092                | 3,141                | 3,200                | 32,331                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>2,507 | <b>2022</b><br>2,998 | <b>2023</b><br>3,210 | <b>2024</b><br>3,092 | <b>2025</b><br>3,141 | <b>2026</b><br>3,200 | <b>Total</b><br>32,331 |

# **Document Management System**

| Project No:            | MC-CL-ZF9962                  | 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 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.

|                          | LTD     | 2020    |                    |                    |                    |                    |             |                      |                       |
|--------------------------|---------|---------|--------------------|--------------------|--------------------|--------------------|-------------|----------------------|-----------------------|
| Resources                | Actuals | Revised | 2021               | 2022               | 2023               | 2024               | 2025        | 2026                 | Total                 |
| City Light Fund Revenues | -       | 1,844   | 920                | 660                | 872                | 872                | 1,000       | 1,869                | 8,036                 |
| Total:                   | -       | 1,844   | 920                | 660                | 872                | 872                | 1,000       | 1,869                | 8,036                 |
| Fund Appropriations /    | LTD     | 2020    |                    |                    |                    |                    |             |                      |                       |
| Allocations <sup>1</sup> | Actuals | Revised | 2021               | 2022               | 2023               | 2024               | 2025        | 2026                 | Total                 |
|                          |         |         | <b>2021</b><br>920 | <b>2022</b><br>660 | <b>2023</b><br>872 | <b>2024</b><br>872 | <b>2025</b> | <b>2026</b><br>1,869 | <b>Total</b><br>8,036 |

# **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           |
| 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 the implementation of two charging infrastructure pilot programs in 2017: one focuses on public DC fast chargers and one focuses on residential charging. This project rolls out 10 to 20 public DC fast charging stations for Electric Vehicles within its service territory, at either City-owned property or private sites. City Light owns and installs the public charging infrastructure. Through the residential pilot, City Light installs 200-300 stations in customers' homes that create a service that lowers the initial cost and uncertainty of installing at-home charging. This program model offers customers a manageable monthly cost, while allowing the utility to better understand load managment options like demand response. These programs allow customers access to carbon-neutral electricity that customers are demanding, better utilize current utility assets and contribute to the aggressive goals of the Drive Clean Seattle Initiative.

|   | LTD            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | 2,021          | 2,325           | -    | -    | -    | -    | -    | -    | 4,346 |
| Total:  | 2,021          | 2,325           | -    | -    | -    | -    | -    | -    | 4,346 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2,021          | 2,325           | -    | -    | -    | -    | -    | -    | 4,346 |
|   |                |                 |      |      |      |      |      |      |       |

### **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 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|--------------------------|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues | 13.327         | 2.012           | 1.134 | 1.153 | 1.169 | 1.193 | 1.213 | 1.154 | 22,355 |
| Total:                   | 13.327         | 2,012           | 1.134 | 1,153 | 1.169 | 1.193 | 1,213 | 1.154 | 22,355 |
| Fund Appropriations /    | LTD            | 2020            | -,    | .,    | .,    | .,    | -,    | -,    | ,      |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund               | 13,327         | 2,012           | 1,134 | 1,153 | 1,169 | 1,193 | 1,213 | 1,154 | 22,355 |
| Total:                   | 13.327         | 2,012           | 1,134 | 1.153 | 1.169 | 1,193 | 1,213 | 1,154 | 22,355 |

# **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<br>Actuals | 2020<br>Revised | 2021               | 2022        | 2023               | 2024               | 2025        | 2026 | Total                 |
|---|----------------|-----------------|--------------------|-------------|--------------------|--------------------|-------------|------|-----------------------|
| City Light Fund Revenues                          | 6,531          | 1,356           | 286                | 100         | 100                | 100                | 100         | -    | 8,573                 |
| Total:  | 6,531          | 1,356           | 286                | 100         | 100                | 100                | 100         | -    | 8,573                 |
|   |                |                 |                    |             |                    |                    |             |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022        | 2023               | 2024               | 2025        | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>286 | <b>2022</b> | <b>2023</b><br>100 | <b>2024</b><br>100 | <b>2025</b> | 2026 | <b>Total</b><br>8,573 |

### **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 1 - Pre-Project Development | Council District:      | Citywide                            |
| Start/End Date:        | 2020 - 2021                       | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$1,650                           | Urban Village:         | Not in an Urban Village             |

This funds the upgrade to maintain the SCL 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. In 2020 the EMS software and hardware will be over 5 years old. To maintain optimum support, it is recommended that software upgrades occur every 2-3 years and hardware upgrades every 5 years.

|   | LTD            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | -              | 1,650           | -    | -    | -    | -    | -    | -    | 1,650 |
| Total:  | -              | 1,650           | -    | -    | -    | -    | -    | -    | 1,650 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 1,650           | -    | -    | -    | -    | -    | -    | 1,650 |
| Total:  | -              | 1,650           | -    | -    | -    | -    | -    | -    | 1,650 |

## **Enterprise Geographic Information System**

| 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, & Planning | Council District:      | Citywide                            |
| Start/End Date:        | 2015 - 2024  | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$8,984  | 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).

|                          | LTD     | 2020    |                    |                    |                      |                    |      |      |                       |
|--------------------------|---------|---------|--------------------|--------------------|----------------------|--------------------|------|------|-----------------------|
| Resources                | Actuals | Revised | 2021               | 2022               | 2023                 | 2024               | 2025 | 2026 | Total                 |
| City Light Fund Revenues | 261     | 2,007   | 126                | 790                | 1,252                | 329                | -    | -    | 4,764                 |
| Total:                   | 261     | 2,007   | 126                | 790                | 1,252                | 329                | -    | -    | 4,764                 |
| Fund Appropriations /    | LTD     | 2020    |                    |                    |                      |                    |      |      |                       |
| i unu Appropriations /   | LID     | 2020    |                    |                    |                      |                    |      |      |                       |
| Allocations <sup>1</sup> | Actuals | Revised | 2021               | 2022               | 2023                 | 2024               | 2025 | 2026 | Total                 |
|                          |         |         | <b>2021</b><br>126 | <b>2022</b><br>790 | <b>2023</b><br>1,252 | <b>2024</b><br>329 | 2025 | 2026 | <b>Total</b><br>4,764 |

## **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 upgrades or replaces components of the Enterprise Solution Portfolio for the Utility as prescribed by the preferred vendor, Oracle, or other vendor deemed more appropriate, which will maintain enterprise resources that benefit all customers in the City Light service area.

|   | LTD            | 2020            |                       |                       |                       |                       |                       |                       |                        |
|---|----------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                  |
| City Light Fund Revenues                          | 1,004          | 10,691          | 10,222                | 10,839                | 12,330                | 11,369                | 11,316                | 11,742                | 79,514                 |
| Total:  | 1,004          | 10,691          | 10,222                | 10,839                | 12,330                | 11,369                | 11,316                | 11,742                | 79,514                 |
|   |                |                 |                       |                       |                       |                       |                       |                       |                        |
| Fund Appropriations /                             | LTD            | 2020            |                       |                       |                       |                       |                       |                       |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                  |
|   |                |                 | <b>2021</b><br>10,222 | <b>2022</b><br>10,839 | <b>2023</b><br>12,330 | <b>2024</b><br>11,369 | <b>2025</b><br>11,316 | <b>2026</b><br>11,742 | <b>Total</b><br>79,514 |

## **Environmental Safeguarding and Remediation of Facilities**

| Project No:            | MC-CL-XF9152                  | 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 improvements to prevent air and water pollution at City Light facilities. The project implements cost appropriate solutions for identified environmental programs and provides facilities for meeting environmental and remediation concerns. Typical projects 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.

|   | LTD            | 2020            |                    |                   |                   |                    |                   |                   |                       |
|---|----------------|-----------------|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-----------------------|
| Resources   | Actuals        | Revised         | 2021               | 2022              | 2023              | 2024               | 2025              | 2026              | Total                 |
| City Light Fund Revenues                          | 664            | 115             | 190                | 72                | 66                | 132                | 30                | 32                | 1,302                 |
| Total:  | 664            | 115             | 190                | 72                | 66                | 132                | 30                | 32                | 1,302                 |
|   |                |                 |                    |                   |                   |                    |                   |                   |                       |
| Fund Appropriations /                             | LTD            | 2020            |                    |                   |                   |                    |                   |                   |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022              | 2023              | 2024               | 2025              | 2026              | Total                 |
|   |                |                 | <b>2021</b><br>190 | <b>2022</b><br>72 | <b>2023</b><br>66 | <b>2024</b><br>132 | <b>2025</b><br>30 | <b>2026</b><br>32 | <b>Total</b><br>1,302 |

## **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 replaces, updates, and expands City Light's - light and heavy duty mobile equipment fleet. This project also funds the replacement of lightduty vehicles owned by City Light, including those previously leased from the Fleets & Facilities Department and now owned by City Light.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|---------|
| City Light Fund Revenues                          | 78,958         | 17,621          | 6,121 | 7,715 | 7,557 | 6,690 | 7,190 | 8,648 | 140,501 |
| Total:  | 78,958         | 17,621          | 6,121 | 7,715 | 7,557 | 6,690 | 7,190 | 8,648 | 140,501 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
| Light Fund  | 78,958         | 17,621          | 6,121 | 7,715 | 7,557 | 6,690 | 7,190 | 8,648 | 140,501 |
|   |                |                 |       |       |       |       |       |       |         |

#### **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                    |
| 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 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 4,357          | 134             | -    | -    | -    | -    | -    | -    | 4,491 |
| Total:  | 4,357          | 134             | -    | -    | -    | -    | -    | -    | 4,491 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 4,357          | 134             | -    | -    | -    | -    | -    | -    | 4,491 |
| Total:  | 4,357          | 134             |      |      |      |      |      |      | 4,491 |

## **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:              | 500 Newhalem Creek Rd, Marblemount,<br>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 is for the investigation of contamination and remediation, if necessary, of property that the utility is targeting for disposal

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 2,182          | 2,977           | 340  | 348  | 357  | 365  | 383  | 378  | 7,331 |
| Total:  | 2,182          | 2,977           | 340  | 348  | 357  | 365  | 383  | 378  | 7,331 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2,182          | 2,977           | 340  | 348  | 357  | 365  | 383  | 378  | 7,331 |
| Total:  | 2,182          | 2.977           | 340  | 348  | 357  | 365  | 383  | 378  | 7,331 |

## **First Hill - Network**

| Project No:            | MC-CL-YN8301                  | BSL Code:              | BC-CL-Y                             |
|------------------------|-------------------------------|------------------------|-------------------------------------|
| Project Type:          | Ongoing                       | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | Rehabilitation or Restoration | Location:              | 1100 Madison St                     |
| Current Project Stage: | N/A                           | Council District:      | Council District 3                  |
| 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 16,273         | 1,211           | 1,548 | 3,636 | 3,664 | 3,693 | 2,869 | 3,618 | 36,513 |
| Total:  | 16,273         | 1,211           | 1,548 | 3,636 | 3,664 | 3,693 | 2,869 | 3,618 | 36,513 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 16,273         | 1,211           | 1,548 | 3,636 | 3,664 | 3,693 | 2,869 | 3,618 | 36,513 |
| Total:  |                |                 |       |       | 3,664 | 3,693 | 2.869 | 3,618 | 36,513 |

### **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 - 2021                   | Neighborhood District: | Greater Duwamish                 |
| Total Project Cost:    | \$1,757                       | Urban Village:         | Greater Duwamish                 |

This project provides design and construction of roads and related infrastructure to provide public access to City Light's Georgetown Steamplant. This access will provide visibility of the Steam Plant to the public as a National Historic Site. King County has agreed to pay for most of this project.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 182            | 1,575           | -    | -    | -    | -    | -    | -    | 1,757 |
| Total:  | 182            | 1,575           | -    | -    | -    | -    | -    | -    | 1,757 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 182            | 1,575           | -    | _    | -    | -    | -    | -    | 1,757 |
| Total:  | 182            | 1,575           | -    | -    | -    | -    | -    | -    | 1,757 |

## 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 4 - Procurement/Bid     | Council District:      | Outside City of Seattle      |
| Start/End Date:        | 2017 - 2021                   | Neighborhood District: | Outside City of Seattle      |
| Total Project Cost:    | \$2,230                       | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 1,349          | 744             | 137  | -    | -    | -    | -    | -    | 2,230 |
| Total:  | 1,349          | 744             | 137  | -    | -    | -    | -    | -    | 2,230 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 1,349          | 744             | 137  | -    | -    | -    | -    | -    | 2,230 |
| Total:  | 1,349          | 744             | 137  | -    | -    | -    | -    | -    | 2,230 |

## **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 1 - Pre-Project Development | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2021 - 2024                       | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$5,110                           | 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.

|                          | LTD     | 2020    |      |      |       |      |      |      |       |
|--------------------------|---------|---------|------|------|-------|------|------|------|-------|
| Resources                | Actuals | Revised | 2021 | 2022 | 2023  | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues | -       | -       | 224  | 257  | 4,344 | 285  | -    | -    | 5,110 |
| Total:                   | -       | -       | 224  | 257  | 4,344 | 285  | -    | -    | 5,110 |
| Fund Appropriations /    | LTD     | 2020    |      |      |       |      |      |      |       |
| Allocations <sup>1</sup> | Actuals | Revised | 2021 | 2022 | 2023  | 2024 | 2025 | 2026 | Total |
| Light Fund               | -       | -       | 224  | 257  | 4,344 | 285  | -    | -    | 5,110 |
|                          |         |         |      |      |       |      |      |      |       |

### 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 |
| Current Project Stage: | Stage 1 - Pre-Project Development | Council District:      | Outside City of Seattle       |
| Start/End Date:        | 2023 - 2027                       | Neighborhood District: | Outside City of Seattle       |
| Total Project Cost:    | \$42,227                          | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026   | Total  |
|---|----------------|-----------------|------|------|------|-------|-------|--------|--------|
| City Light Fund Revenues                          | -              | -               | -    | -    | 965  | 3,567 | 8,809 | 10,411 | 23,753 |
| Total:  | -              | -               | -    | -    | 965  | 3,567 | 8,809 | 10,411 | 23,753 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026   | Total  |
| Light Fund  | -              | -               | -    | -    | 965  | 3,567 | 8,809 | 10,411 | 23,753 |
|   |                |                 |      |      |      |       |       |        |        |

# 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 will implement 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 2,508          | 348             | 180  | 50   | -    | -    | -    | -    | 3,086 |
| Total:  | 2,508          | 348             | 180  | 50   | -    | -    | -    | -    | 3,086 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2,508          | 348             | 180  | 50   | -    | -    | -    | -    | 3,086 |
| Total:  | 2,508          | 348             | 180  | 50   | -    | -    | -    | -    | 3,086 |

### **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:        | 2019 - 2026                       | Neighborhood District: | Magnolia/Queen Anne                 |
| Total Project Cost:    | \$1,794                           | 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 SLU district that City Light will be able to serve their needs reliably.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 58              | 193  | 252  | 308  | 315  | 323  | 345  | 1,794 |
| Total:  | -              | 58              | 193  | 252  | 308  | 315  | 323  | 345  | 1,794 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 58              | 193  | 252  | 308  | 315  | 323  | 345  | 1,794 |
| Total:  | -              | 58              | 193  | 252  | 308  | 315  | 323  | 345  | 1,794 |

### **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                    |
| 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 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 1,026           | 100  | 100  | 100  | 100  | 100  | 100  | 1,626 |
| Total:  | -              | 1,026           | 100  | 100  | 100  | 100  | 100  | 100  | 1,626 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 0000 | 0000 | 2024 | 0005 | 2020 | Total |
| Allocations                                       | Actuals        | Reviseu         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | TOLAI |
| Light Fund  | -              | 1,026           | 100  | 100  | 100  | 100  | 100  | 100  | 1,626 |

### **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 SCL locations.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 535             | 666  | 651  | 668  | 673  | 668  | 869  | 4,730 |
| Total:  | -              | 535             | 666  | 651  | 668  | 673  | 668  | 869  | 4,730 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 535             | 666  | 651  | 668  | 673  | 668  | 869  | 4,730 |
| Total:  | -              | 535             | 666  | 651  | 668  | 673  | 668  | 869  | 4,730 |

## Landis and Gyr RTU Modernization Boundary, Cedar Falls and Skagit

| Project No:            | MC-CL-XB6565                      | BSL Code:              | BC-CL-X   |
|------------------------|-----------------------------------|------------------------|---|
| Project Type:          | Discrete                          | BSL Name:              | Power Supply - CIP                                |
| Project Category:      | Rehabilitation or Restoration     | Location:              | Boundary, Skagit and Cedar Falls power facilities |
| Current Project Stage: | Stage 1 - Pre-Project Development | Council District:      | Outside City of Seattle                           |
| Start/End Date:        | 2019 - 2025                       | Neighborhood District: | Outside City of Seattle                           |
| Total Project Cost:    | \$3,186                           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023  | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|-------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 196             | 271  | 658  | 1,076 | 762  | 223  | -    | 3,186 |
| Total:  | -              | 196             | 271  | 658  | 1,076 | 762  | 223  | -    | 3,186 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023  | 2024 | 2025 | 2026 | Total |
|   |                |                 |      |      |       |      |      |      |       |
| Light Fund  | -              | 196             | 271  | 658  | 1,076 | 762  | 223  | -    | 3,186 |

## Large Overhead and Underground Services

| Project No:            | MC-CL-ZS8365 | 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 large size electric power service connections from Seattle 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 Seattle 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.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues                          | 30,398         | 3,001           | 3,170                | 3,221                | 3,273                | 3,327                | 3,381                | 3,462                | 53,233                 |
| Total:  | 30,398         | 3,001           | 3,170                | 3,221                | 3,273                | 3,327                | 3,381                | 3,462                | 53,233                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>3,170 | <b>2022</b><br>3,221 | <b>2023</b><br>3,273 | <b>2024</b><br>3,327 | <b>2025</b><br>3,381 | <b>2026</b><br>3,462 | <b>Total</b><br>53,233 |

## **LRDS Editor Upgrade**

| Project No:            | MC-CL-YD9977                      | BSL Code:              | BC-CL-Y                             |
|------------------------|-----------------------------------|------------------------|-------------------------------------|
| Project Type:          | Discrete                          | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | Rehabilitation or Restoration     | Location:              | Citywide                            |
| Current Project Stage: | Stage 1 - Pre-Project Development | Council District:      | Multiple                            |
| Start/End Date:        | 2018 - 2022                       | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$3,609                           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 5              | 2,449           | 991  | 165  | -    | -    | -    | -    | 3,609 |
| Total:  | 5              | 2,449           | 991  | 165  | -    | -    | -    | -    | 3,609 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 5              | 2,449           | 991  | 165  | -    | -    | -    | -    | 3,609 |
| Total:  | 5              | 2.449           | 991  | 165  | -    | -    | -    | -    | 3,609 |

## **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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 17,408         | 3,273           | 2,952 | 3,003 | 3,054 | 3,107 | 3,161 | 3,139 | 39,097 |
| Total:  | 17,408         | 3,273           | 2,952 | 3,003 | 3,054 | 3,107 | 3,161 | 3,139 | 39,097 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|   |                |                 |       |       |       |       |       |       |        |
| Light Fund  | 17,408         | 3,273           | 2,952 | 3,003 | 3,054 | 3,107 | 3,161 | 3,139 | 39,097 |

#### **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 work required before construction of any civil facilities into which feeders can be relocated from the Alaskan Way Viaduct. 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 40,970         | 1,852           | 2,206 | 3,188 | 3,383 | 3,428 | 3,380 | 4,231 | 62,639 |
| Total:  | 40,970         | 1,852           | 2,206 | 3,188 | 3,383 | 3,428 | 3,380 | 4,231 | 62,639 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 40,970         | 1,852           | 2,206 | 3,188 | 3,383 | 3,428 | 3,380 | 4,231 | 62,639 |
| Total:  | 40,970         | 1.852           | 2,206 | 3.188 | 3,383 | 3.428 | 3,380 | 4,231 | 62,639 |

### 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 medium size electric power service connections from Seattle City Light's distribution system to the customer's meter for power requirements of 50 KVA to 2.5 MVA and 26 kV radial services. Most of this related work is billable to the customer. The project allows Seattle 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.

|   | LTD            | 2020            |                       |                       |                       |                       |                       |                       |                      |
|---|----------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| Resources   | Actuals        | Revised         | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                |
| City Light Fund Revenues                          | 168,566        | 17,588          | 16,401                | 18,701                | 19,008                | 19,322                | 19,643                | 17,030                | 296,259              |
| Total:  | 168,566        | 17,588          | 16,401                | 18,701                | 19,008                | 19,322                | 19,643                | 17,030                | 296,259              |
|   |                |                 |                       |                       |                       |                       |                       |                       |                      |
| Fund Appropriations /                             | LTD            | 2020            |                       |                       |                       |                       |                       |                       |                      |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                |
|   |                |                 | <b>2021</b><br>16,401 | <b>2022</b><br>18,701 | <b>2023</b><br>19,008 | <b>2024</b><br>19,322 | <b>2025</b><br>19,643 | <b>2026</b><br>17,030 | <b>Total</b> 296,259 |

## **Meter Additions**

| Project No:            | MC-CL-ZS8054 | 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 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.

|                          | LTD     | 2020    |       |       |       |       |       |       |        |
|--------------------------|---------|---------|-------|-------|-------|-------|-------|-------|--------|
| Resources                | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues | 47,763  | 4,276   | 3,764 | 3,830 | 3,897 | 3,966 | 4,036 | 4,225 | 75,759 |
| Total:                   | 47,763  | 4,276   | 3,764 | 3,830 | 3,897 | 3,966 | 4,036 | 4,225 | 75,759 |
| Fund Appropriations /    | LTD     | 2020    |       |       |       |       |       |       |        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund               | 47,763  | 4,276   | 3,764 | 3,830 | 3,897 | 3,966 | 4,036 | 4,225 | 75,759 |
| Total:                   |         |         |       |       |       |       |       |       | 75,759 |

### **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 capitalizes on emergent opportunities to make improvements to City Light's buildings and facilities. The project also provides for cost effective asset preservation measures, the need for which had not been previously foreseen. The project protects employees and customers from health and safety hazards and permits SCL to meet safety and health code requirements.

|                          | LTD            | 2020                    |                    |      |      |      |      |      |                        |
|--------------------------|----------------|-------------------------|--------------------|------|------|------|------|------|------------------------|
| Resources                | Actuals        | Revised                 | 2021               | 2022 | 2023 | 2024 | 2025 | 2026 | Total                  |
| City Light Fund Revenues | 10,736         | 3,145                   | 534                | -    | -    | -    | -    | -    | 14,414                 |
| Total:                   | 10,736         | 3,145                   | 534                | -    | -    | -    | -    | -    | 14,414                 |
| Fund Appropriations /    | LTD            | 2020                    |                    |      |      |      |      |      |                        |
| Allocations <sup>1</sup> | Actuals        | Revised                 | 2021               | 2022 | 2023 | 2024 | 2025 | 2026 | Total                  |
|                          | Actuals 10,736 | <b>Revised</b><br>3,145 | <b>2021</b><br>534 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b><br>14,414 |

## **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 - Construction | Council District:      | Citywide                            |
| Start/End Date:        | 2017 - 2027            | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$10,098               | Urban Village:         | Not in an Urban Village             |

This project provides mobile communication and computing equipment for Seattle 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total  |
|---|----------------|-----------------|------|------|------|-------|-------|------|--------|
| City Light Fund Revenues                          | 411            | 4,232           | -    | -    | -    | 2,208 | 2,263 | 985  | 10,098 |
| Total:  | 411            | 4,232           | -    | -    | -    | 2,208 | 2,263 | 985  | 10,098 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total  |
| Light Fund  | 411            | 4,232           | -    | -    | -    | 2,208 | 2,263 | 985  | 10,098 |
| Total:  | 411            | 4,232           | -    | -    | -    | 2,208 | 2,263 | 985  | 10,098 |

## **Network Additions and Services - Denny**

| Project No:            | MC-CL-ZS8405 | BSL Code:              | BC-CL-Z                |
|------------------------|--------------|------------------------|------------------------|
| Project Type:          | Ongoing      | BSL Name:              | Customer Focused - CIP |
| Project Category:      | New Facility | Location:              | Valley Street          |
| Current Project Stage: | N/A          | Council District:      | TBD                    |
| 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 ties switches.

|                          | LTD     | 2020            |                      |                      |                      |                      |                      |                      |                        |
|--------------------------|---------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources                | Actuals | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues | 13,910  | 4,968           | 9,929                | 8,858                | 5,857                | 5,940                | 6,024                | 5,865                | 61,351                 |
| Total:                   | 13,910  | 4,968           | 9,929                | 8,858                | 5,857                | 5,940                | 6,024                | 5,865                | 61,351                 |
| Fund Anneopriations /    |         |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /    | LTD     | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Allocations <sup>1</sup> | Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|                          |         |                 | <b>2021</b><br>9,929 | <b>2022</b><br>8,858 | <b>2023</b><br>5,857 | <b>2024</b><br>5,940 | <b>2025</b><br>6,024 | <b>2026</b><br>5,865 | <b>Total</b><br>61,351 |

### 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 and related improvements in response to customer service requests within the Broad Street 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.

|   | LTD            | 2020            |                      |                       |                       |                       |                       |                       |                      |
|---|----------------|-----------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                |
| City Light Fund Revenues                          | 98,919         | 6,996           | 9,979                | 10,932                | 11,025                | 10,079                | 10,290                | 10,857                | 169,076              |
| Total:  | 98,919         | 6,996           | 9,979                | 10,932                | 11,025                | 10,079                | 10,290                | 10,857                | 169,076              |
|   |                |                 |                      |                       |                       |                       |                       |                       |                      |
| Fund Appropriations /                             | LTD            | 2020            |                      |                       |                       |                       |                       |                       |                      |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                |
|   |                |                 | <b>2021</b><br>9,979 | <b>2022</b><br>10,932 | <b>2023</b><br>11,025 | <b>2024</b><br>10,079 | <b>2025</b><br>10,290 | <b>2026</b><br>10,857 | <b>Total</b> 169,076 |

#### 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.

|                          | LTD     | 2020    |       |       |       |       |       |       |        |
|--------------------------|---------|---------|-------|-------|-------|-------|-------|-------|--------|
| Resources                | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues | 56,754  | 7,107   | 4,030 | 3,948 | 4,220 | 4,007 | 4,110 | 4,206 | 88,382 |
| Total:                   | 56,754  | 7,107   | 4,030 | 3,948 | 4,220 | 4,007 | 4,110 | 4,206 | 88,382 |
| Fund Appropriations /    | LTD     | 2020    |       |       |       |       |       |       |        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|                          |         |         |       |       |       |       |       |       |        |
| Light Fund               | 56,754  | 7,107   | 4,030 | 3,948 | 4,220 | 4,007 | 4,110 | 4,206 | 88,382 |

## **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 Hazeltine system. The project provides remote monitoring of network transformers, protectors, vaults, and supports daily utility operations. The project enhances the network monitoring capability by allowing an alarm to be sent to the System Control Center within 30 seconds of an abnormal electrical component or environmental condition occurrence.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 7,036          | 600             | 531  | 543  | 552  | 550  | 553  | 682  | 11,045 |
| Total:  | 7,036          | 600             | 531  | 543  | 552  | 550  | 553  | 682  | 11,045 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 7,036          | 600             | 531  | 543  | 552  | 550  | 553  | 682  | 11,045 |
| Total:  | 7,036          | 600             | 531  | 543  | 552  | 550  | 553  | 682  | 11,045 |

### **Network Maintenance Hole and Vault Rebuild**

| Project No:            | MC-CL-YN8130                  | 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 38,209         | 2,373           | 2,536 | 1,864 | 1,850 | 1,874 | 1,898 | 2,364 | 52,968 |
| Total:  | 38,209         | 2,373           | 2,536 | 1,864 | 1,850 | 1,874 | 1,898 | 2,364 | 52,968 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 38,209         | 2,373           | 2,536 | 1,864 | 1,850 | 1,874 | 1,898 | 2,364 | 52,968 |
| Total:  | 38,209         | 2,373           | 2,536 | 1,864 | 1,850 | 1,874 | 1,898 | 2,364 | 52,968 |

### **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 6 - Closeout            | Council District:      | Council District 3     |
| Start/End Date:        | 2015 - 2021                   | Neighborhood District: | Downtown               |
| Total Project Cost:    | \$63,741                      | Urban Village:         | Downtown               |

This project replaces the existing Consolidated Customer Service System (CCSS) application with a more current and viable technology solution. The CCSS provides Customer Information System (CIS) processing and support for Seattle City Light, Seattle Public Utilities, the City's Utility Call Center, and other customer service staff. The existing system does not support the current business model and direction of the City of Seattle's utilities, and is no longer supported by the vendor. The project preserves and enhances the City's ability to continue to deliver this critical function into the future.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 58,636         | 5,105           | -    | -    | -    | -    | -    | -    | 63,741 |
| Total:  | 58,636         | 5,105           | -    | -    | -    | -    | -    | -    | 63,741 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 58,636         | 5,105           | -    | -    | -    | -    | -    | -    | 63,741 |
| Total:  | 58,636         | 5,105           | -    | -    | -    | -    | -    | -    | 63,741 |

## 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,<br>WA 98267 |
| Current Project Stage: | Stage 2 - Initiation, Project Definition, & Planning | Council District:      | Outside City of Seattle                         |
| Start/End Date:        | 2011 - 2027  | Neighborhood District: | Not in a Neighborhood District                  |
| Total Project Cost:    | \$8,545  | Urban Village:         | Not in an Urban Village                         |

This project rehabilitates 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.

|   | LTD            | 2020            |                    |                   |                   |                    |                    |                    |                       |
|---|----------------|-----------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-----------------------|
| Resources   | Actuals        | Revised         | 2021               | 2022              | 2023              | 2024               | 2025               | 2026               | Total                 |
| City Light Fund Revenues                          | 6,096          | -               | 378                | 50                | 50                | 337                | 340                | 326                | 7,577                 |
| Total:  | 6,096          | -               | 378                | 50                | 50                | 337                | 340                | 326                | 7,577                 |
|   |                |                 |                    |                   |                   |                    |                    |                    |                       |
| Fund Appropriations /                             | LTD            | 2020            |                    |                   |                   |                    |                    |                    |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022              | 2023              | 2024               | 2025               | 2026               | Total                 |
|   |                |                 | <b>2021</b><br>378 | <b>2022</b><br>50 | <b>2023</b><br>50 | <b>2024</b><br>337 | <b>2025</b><br>340 | <b>2026</b><br>326 | <b>Total</b><br>7,577 |

## **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.

|   | LTD            | 2020            |                    |                    |                    |                    |                    |                    |                     |
|---|----------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Resources   | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024               | 2025               | 2026               | Total               |
| City Light Fund Revenues                          | 16,193         | 504             | 931                | 947                | 963                | 980                | 997                | 995                | 22,511              |
| Total:  | 16,193         | 504             | 931                | 947                | 963                | 980                | 997                | 995                | 22,511              |
|   |                |                 |                    |                    |                    |                    |                    |                    |                     |
| Fund Appropriations /                             | LTD            | 2020            |                    |                    |                    |                    |                    |                    |                     |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024               | 2025               | 2026               | Total               |
|   |                |                 | <b>2021</b><br>931 | <b>2022</b><br>947 | <b>2023</b><br>963 | <b>2024</b><br>980 | <b>2025</b><br>997 | <b>2026</b><br>995 | <b>Total</b> 22,511 |

## North and South Service Center 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 improves office, shop, and storage areas in the North and South Service Centers. The project increases efficiency, productivity, safety improvements and optimal use of space.

|   | LTD            | 2020            |                      |                      |                    |                    |                    |                    |                     |
|---|----------------|-----------------|----------------------|----------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023               | 2024               | 2025               | 2026               | Total               |
| City Light Fund Revenues                          | 13,794         | 1,328           | 1,560                | 6,186                | 100                | 200                | 200                | 205                | 23,572              |
| Total:  | 13,794         | 1,328           | 1,560                | 6,186                | 100                | 200                | 200                | 205                | 23,572              |
|   |                |                 |                      |                      |                    |                    |                    |                    |                     |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                    |                    |                    |                    |                     |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023               | 2024               | 2025               | 2026               | Total               |
|   |                |                 | <b>2021</b><br>1,560 | <b>2022</b><br>6,186 | <b>2023</b><br>100 | <b>2024</b><br>200 | <b>2025</b><br>200 | <b>2026</b><br>205 | <b>Total</b> 23,572 |

### **NSC Expansion**

| Project No:            | MC-CL-XF9220                  | BSL Code:              | BC-CL-X                        |
|------------------------|-------------------------------|------------------------|--------------------------------|
| Project Type:          | Discrete                      | BSL Name:              | Power Supply - CIP             |
| Project Category:      | Rehabilitation or Restoration | Location:              | Multiple                       |
| Current Project Stage: | Stage 6 - Closeout            | Council District:      |                                |
| Start/End Date:        | 2013 - 2020                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$692                         | Urban Village:         | Wallingford                    |

This project creates a master plan for the development of City Light's North Service Center (NSC) properties, buildings and workspaces. The plan includes acquiring property, abutting the Service Center that is being offered for sale by the University of Washington and will provide improvements to make this property usable for City Light operations. Additional properties will be acquired, if available, between Stone Way and Aurora Ave to allow further development of the NSC, to the west. The plan also looks at potential vacation of streets and alleys to combine the space into a campus setting that can be better secured for SCL security and safety purposes. The plan could also include the addition of parking, warehouse space, engineering and shop space, a customer service center, and improved access and egress for the NSC.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 212            | 479             | -    | -    | -    | -    | -    | -    | 692   |
| Total:  | 212            | 479             | -    | -    | -    | -    | -    | -    | 692   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 212            | 479             | -    | -    | -    | -    | -    | -    | 692   |
| Total:  | 212            | 479             |      |      |      |      |      |      | 692   |

## **Office Furniture and Equipment Purchase**

| 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 office equipment and furniture costing more than \$5,000 each. This project furnishes newly created or modified space under the Workplace and Process Improvement program, and replaces aging office furnishings with modular office workstations, conference room ensemble furniture, and major office machines. This project enhances worker safety and morale by purchasing ergonomic furniture and providing modern workspaces.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 2,311          | 1,399           | 465  | 306  | 464  | 400  | 750  | 750  | 6,845 |
| Total:  | 2,311          | 1,399           | 465  | 306  | 464  | 400  | 750  | 750  | 6,845 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2,311          | 1,399           | 465  | 306  | 464  | 400  | 750  | 750  | 6,845 |
|   |                |                 |      |      |      |      |      |      |       |

### **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: | Stage 2 - Initiation, Project Definition, & Planning | Council District:      | Multiple                            |
| Start/End Date:        | 2017 - 2021  | Neighborhood District: | Multiple                            |
| Total Project Cost:    | \$6,195  | Urban Village:         | Multiple                            |

This project funds City Light's Outage Management System (OMS) upgraded in order to maintain its availability as it 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.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022   | 2023 | 2024 | 2025 | 2026 | Total                 |
|---|----------------|-----------------|----------------------|--------|------|------|------|------|-----------------------|
| City Light Fund Revenues                          | -              | 5,095           | 1,100                | -      | -    | -    | -    | -    | 6,195                 |
| Total:  | -              | 5,095           | 1,100                | -      | -    | -    | -    | -    | 6,195                 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD            | 2020            |                      |        |      |      |      |      |                       |
| Allocations                                       | Actuals        | Revised         | 2021                 | 2022   | 2023 | 2024 | 2025 | 2026 | Total                 |
| Light Fund  | Actuals        | 5,095           | <b>2021</b><br>1,100 | - 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b><br>6,195 |

# **Overhead 26kV Conversion**

| Project No:            | MC-CL-YR8358                  | 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: | 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 18,038         | 12              | 1,777 | 2,311 | 2,347 | 2,383 | 2,407 | 1,681 | 30,955 |
| Total:  | 18,038         | 12              | 1,777 | 2,311 | 2,347 | 2,383 | 2,407 | 1,681 | 30,955 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 18,038         | 12              | 1,777 | 2,311 | 2,347 | 2,383 | 2,407 | 1,681 | 30,955 |
| Total:  | 18,038         | 12              | 1,777 | 2,311 | 2,347 | 2,383 | 2,407 | 1,681 | 30,955 |

## **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 moves electrical lines to accommodate or take advantage of transportation-related projects, street vacations, or other projects being constructed by non-City Light agencies. This project addresses modifications to the distribution system, including replacement or modifications of old line segments, poles, and underground facilities, as necessary. Some project costs are paid by City Light and some are paid by the requesting agencies, depending on the circumstances.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues                          | 23,323         | 3,935           | 5,283                | 6,250                | 7,597                | 7,475                | 7,517                | 5,733                | 67,114                 |
| Total:  | 23,323         | 3,935           | 5,283                | 6,250                | 7,597                | 7,475                | 7,517                | 5,733                | 67,114                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>5,283 | <b>2022</b><br>6,250 | <b>2023</b><br>7,597 | <b>2024</b><br>7,475 | <b>2025</b><br>7,517 | <b>2026</b><br>5,733 | <b>Total</b><br>67,114 |

# **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 replaces 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.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues                          | 47,052         | 3,603           | 2,826                | 2,872                | 2,918                | 2,966                | 3,014                | 1,006                | 66,257                 |
| Total:  | 47,052         | 3,603           | 2,826                | 2,872                | 2,918                | 2,966                | 3,014                | 1,006                | 66,257                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>2,826 | <b>2022</b><br>2,872 | <b>2023</b><br>2,918 | <b>2024</b><br>2,966 | <b>2025</b><br>3,014 | <b>2026</b><br>1,006 | <b>Total</b><br>66,257 |

# **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 older equipment in City Light's distribution system that is nearing the end of its usable life; is overloaded or is of an outdated design, which requires replacement due to the lack of spare parts. These items include, but are not limited to, poles, cross-arms, transformers, and open-wire secondaries.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025   | 2026   | Total   |
|---|----------------|-----------------|--------|--------|--------|--------|--------|--------|---------|
| City Light Fund Revenues                          | 138,263        | 34,651          | 24,895 | 32,925 | 43,966 | 40,011 | 40,763 | 41,500 | 396,974 |
| Total:  | 138,263        | 34,651          | 24,895 | 32,925 | 43,966 | 40,011 | 40,763 | 41,500 | 396,974 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023   | 2024   | 2025   | 2026   | Total   |
| Light Fund  | 138,263        | 34,651          | 24,895 | 32,925 | 43,966 | 40,011 | 40,763 | 41,500 | 396,974 |
| Total:  | 138,263        | 34,651          | 24,895 | 32,925 | 43,966 | 40.011 | 40,763 | 41,500 | 396,974 |

#### **Overhead Outage Replacements**

| Project No:            | MC-CL-ZS8350                  | 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, 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 3,734          | 181             | 1,035 | 1,052 | 1,069 | 1,087 | 1,105 | 1,102 | 10,365 |
| Total:  | 3,734          | 181             | 1,035 | 1,052 | 1,069 | 1,087 | 1,105 | 1,102 | 10,365 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 3,734          | 181             | 1,035 | 1,052 | 1,069 | 1,087 | 1,105 | 1,102 | 10,365 |
|   |                |                 |       |       |       |       |       |       |        |

## **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 pay for some of this work.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| City Light Fund Revenues                          | 45,263         | 810             | 3,570                | 3,608                | 3,384                | 3,441                | 3,499                | 3,526                | 67,103                 |
| Total:  | 45,263         | 810             | 3,570                | 3,608                | 3,384                | 3,441                | 3,499                | 3,526                | 67,103                 |
|   |                |                 |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|   |                |                 | <b>2021</b><br>3,570 | <b>2022</b><br>3,608 | <b>2023</b><br>3,384 | <b>2024</b><br>3,441 | <b>2025</b><br>3,499 | <b>2026</b><br>3,526 | <b>Total</b><br>67,103 |

## 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<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023 | 2024   | 2025   | 2026 | Total        |
|---|----------------|-----------------|--------------------|--------------------|------|--------|--------|------|--------------|
| City Light Fund Revenues                          | -              | 258             | 300                | 300                | -    | -      | -      | -    | 858          |
| Total:  | -              | 258             | 300                | 300                | -    | -      | -      | -    | 858          |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD            | 2020            |                    |                    |      |        |        |      |              |
| Allocations                                       | Actuals        | Revised         | 2021               | 2022               | 2023 | 2024   | 2025   | 2026 | Total        |
| Light Fund  | Actuals        | 258             | <b>2021</b><br>300 | <b>2022</b><br>300 | 2023 | - 2024 | - 2025 | 2026 | Total<br>858 |

# **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 utility crews and engineers to prepare City Light poles for the attachment of other communication infrastructure. This work generates additional revenues through pole attachment fees and construction costs, which are fully reimbursable.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021      | 2022  | 2023  | 2024  | 2025  | 2026    | Total   |
|---|----------------|-----------------|-----------|-------|-------|-------|-------|---------|---------|
| City Light Fund Revenues                          | 47,306         | 20,233          | 14,717    | 7,959 | 7,307 | 7,279 | 7,457 | 7,830   | 120,088 |
| Total:  | 47,306         | 20,233          | 14,717    | 7,959 | 7,307 | 7,279 | 7,457 | 7,830   | 120,088 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021      | 2022  | 2023  | 2024  | 2025  | 2026    | Total   |
| Light Fund  | 47.000         | 00.000          | 4 4 7 4 7 | 7 050 | 7 007 | 7 070 | 7 457 | 7 0 0 0 | 400.000 |
| Light Fund  | 47,306         | 20,233          | 14,717    | 7,959 | 7,307 | 7,279 | 7,457 | 7,830   | 120,088 |

## **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,<br>WA 98267 |
| Current Project Stage: | N/A          | Council District:      | Outside City of Seattle                         |
| Start/End Date:        | 2007 - 2023  | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 8,486          | 154             | -    | 103  | 307  | 240  | 203  | 43   | 9,537 |
| Total:  | 8,486          | 154             | -    | 103  | 307  | 240  | 203  | 43   | 9,537 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 8,486          | 154             | -    | 103  | 307  | 240  | 203  | 43   | 9,537 |
| Total:  | 8,486          | 154             |      | 103  | 307  | 240  | 203  | 43   | 9,537 |

## **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 1 - Pre-Project Development | Council District:      | Multiple                            |
| Start/End Date:        | 2020 - 2021                       | 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            | 2020            |                   |      |      |           |      |      |                       |
|---|----------------|-----------------|-------------------|------|------|-----------|------|------|-----------------------|
| Resources   | Actuals        | Revised         | 2021              | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
| City Light Fund Revenues                          | -              | 2,280           | 2,280             | -    | -    | -         | -    | -    | 4,560                 |
| Total:  | -              | 2,280           | 2,280             | -    | -    | -         | -    | -    | 4,560                 |
|   |                |                 |                   |      |      |           |      |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021              | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
|   |                |                 | <b>2021</b> 2,280 | 2022 | 2023 | 2024<br>- | 2025 | 2026 | <b>Total</b><br>4,560 |

#### **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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 45,670         | 4,320           | 4,629 | 5,125 | 5,553 | 5,638 | 5,387 | 5,034 | 81,356 |
| Total:  | 45,670         | 4,320           | 4,629 | 5,125 | 5,553 | 5,638 | 5,387 | 5,034 | 81,356 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 45,670         | 4,320           | 4,629 | 5,125 | 5,553 | 5,638 | 5,387 | 5,034 | 81,356 |
| Total:  | 45,670         | 4,320           | 4,629 | 5,125 | 5,553 | 5,638 | 5,387 | 5,034 | 81,356 |

## **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:      | TBD                                 |
| 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<br>Actuals | 2020<br>Revised | 2021              | 2022              | 2023              | 2024              | 2025        | 2026              | Total               |
|--|----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------|-------------------|---------------------|
| City Light Fund Revenues               | 546            | 33              | 11                | 12                | 12                | 12                | 12          | 12                | 649                 |
| Total:                                 | 546            | 33              | 11                | 12                | 12                | 12                | 12          | 12                | 649                 |
| Fund Appropriations /                  | LTD            | 2020            |                   |                   |                   |                   |             |                   |                     |
| Allocations <sup>1</sup>               | Actuals        | Revised         | 2021              | 2022              | 2023              | 2024              | 2025        | 2026              | Total               |
| Allocations <sup>1</sup><br>Light Fund | Actuals<br>546 | Revised<br>33   | <b>2021</b><br>11 | <b>2022</b><br>12 | <b>2023</b><br>12 | <b>2024</b><br>12 | <b>2025</b> | <b>2026</b><br>12 | <b>Total</b><br>649 |

#### **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             |
| Project Category:      | Improved Facility | Location:              | Ross Powerhouse                |
| Current Project Stage: | N/A               | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2020 - 2024       | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | N/A               | Urban Village:         | Outside City of Seattle        |

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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 6              | 1               | -    | 20   | 306  | 398  | -    | -    | 732   |
| Total:  | 6              | 1               | -    | 20   | 306  | 398  | -    | -    | 732   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 6              | 1               | -    | 20   | 306  | 398  | -    | -    | 732   |
| Total:  | 6              | 1               | -    | 20   | 306  | 398  | -    | -    | 732   |

#### 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, &<br>Planning | Council District:      | Outside City of Seattle |
| Start/End Date:        | 2018 - 2026   | Neighborhood District: | Outside City of Seattle |
| Total Project Cost:    | \$4,569   | Urban Village:         | Outside City of Seattle |

This project replaces the excitation systems for the four Ross generating units.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 3              | 2,643           | -    | -    | 357  | 822  | 633  | 111  | 4,569 |
| Total:  | 3              | 2,643           | -    | -    | 357  | 822  | 633  | 111  | 4,569 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 3              | 2,643           | -    | -    | 357  | 822  | 633  | 111  | 4,569 |
| Total:  | 3              | 2,643           | -    | -    | 357  | 822  | 633  | 111  | 4,569 |

## **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 4 - Procurement/Bid     | Council District:      | Outside City of Seattle |
| Start/End Date:        | 2015 - 2022                   | Neighborhood District: | Outside City of Seattle |
| Total Project Cost:    | \$4,329                       | Urban Village:         | Outside City of Seattle |

This project replaces governor controls on all four of the Ross Powerhouse generating units.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 596            | 3,347           | 350  | 36   | -    | -    | -    | -    | 4,329 |
| Total:  | 596            | 3,347           | 350  | 36   | -    | -    | -    | -    | 4,329 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 596            | 3,347           | 350  | 36   | -    | -    | -    | -    | 4,329 |
|   |                |                 |      |      |      |      |      |      |       |

## **Ross - Powerhouse Rockfall Mitigation**

| Project No:            | MC-CL-XS6577                      | 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 1 - Pre-Project Development | Council District:      | Outside City of Seattle |
| Start/End Date:        | 2026 - 2028                       | Neighborhood District: | Outside City of Seattle |
| Total Project Cost:    | \$3,139                           | Urban Village:         | Outside City of Seattle |

This project mitigates risks to the powerhouse by installing rock fall protection measures above the Ross Powerhouse. Specific measure to be implemented will be determined during design but could include rock bolting, rock fencing, rock scaling or other measures.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | -               | -    | -    | -    | -    | -    | 105  | 105   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 105  | 105   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | -    | -    | -    | -    | -    | 105  | 105   |
| Total:  | -              | -               | -    | -    | -    | -    | -    | 105  | 105   |

#### 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  |
| Current Project Stage: | Stage 3 - Design              | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2005 - 2026                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$13,336                      | 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.

|  | LTD     | 2020    |                      |                      |                      |                      |                    |                   |                     |
|--|---------|---------|----------------------|----------------------|----------------------|----------------------|--------------------|-------------------|---------------------|
| Resources                              | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025               | 2026              | Total               |
| City Light Fund Revenues               | 3,428   | 963     | 1,898                | 1,151                | 1,042                | 1,006                | 892                | 56                | 10,436              |
| Total:                                 | 3,428   | 963     | 1,898                | 1,151                | 1,042                | 1,006                | 892                | 56                | 10,436              |
| Fund Appropriations /                  | LTD     | 2020    |                      |                      |                      |                      |                    |                   |                     |
| · ···································· |         | 2020    |                      |                      |                      |                      |                    |                   |                     |
| Allocations <sup>1</sup>               | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025               | 2026              | Total               |
|  |         |         | <b>2021</b><br>1,898 | <b>2022</b><br>1,151 | <b>2023</b><br>1,042 | <b>2024</b><br>1,006 | <b>2025</b><br>892 | <b>2026</b><br>56 | <b>Total</b> 10,436 |

#### 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 2 - Initiation, Project Definition, & Planning | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2008 - 2025  | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$1,802  | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 95             | 7               | -    | 901  | 739  | 59   | -    | -    | 1,802 |
| Total:  | 95             | 7               | -    | 901  | 739  | 59   | -    | -    | 1,802 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|   |                |                 |      |      |      |      |      |      |       |
| Light Fund  | 95             | 7               | -    | 901  | 739  | 59   | -    | -    | 1,802 |

# **Safety Modifications**

| Project No:            | MC-CL-XF9006                  | 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 modifies City Light's facilities and provides equipment to correct imminent and critical safety hazards. The project includes upgrades and revisions to systems, equipment and operations, properties and facilities, as needed to comply with safety regulations and best practices for a safe, efficient, and secure work environment.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|-------|-------|------|------|------|------|--------|
| City Light Fund Revenues                          | 4,645          | 1,826           | 2,216 | 1,694 | 701  | 701  | 701  | 713  | 13,198 |
| Total:  | 4,645          | 1,826           | 2,216 | 1,694 | 701  | 701  | 701  | 713  | 13,198 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 4,645          | 1,826           | 2,216 | 1,694 | 701  | 701  | 701  | 713  | 13,198 |
| Total:  | 4,645          | 1,826           | 2,216 | 1,694 | 701  | 701  | 701  | 713  | 13,198 |

## 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 4 - Procurement/Bid     | Council District:      | Council District 7             |
| Start/End Date:        | 2017 - 2022                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$16,744                      | Urban Village:         | Not in an Urban Village        |

This project funds the street lighting associated with the bored tunnel hybrid plan for the Alaskan Way Viaduct replacement which is a project that will result in the City rebuilding Alaskan Way, led by the Office of the Waterfront.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023 | 2024      | 2025 | 2026 | Total                  |
|---|----------------|-----------------|----------------------|----------------------|------|-----------|------|------|------------------------|
| City Light Fund Revenues                          | 1,107          | 1,785           | 3,927                | 6,385                | -    | -         | -    | -    | 13,204                 |
| Total:  | 1,107          | 1,785           | 3,927                | 6,385                | -    | -         | -    | -    | 13,204                 |
|   |                |                 |                      |                      |      |           |      |      |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023 | 2024      | 2025 | 2026 | Total                  |
|   |                |                 | <b>2021</b><br>3,927 | <b>2022</b><br>6,385 | 2023 | 2024<br>- | 2025 | 2026 | <b>Total</b><br>13,204 |

#### 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 program 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, adopted May 2, 2006, to improve security at critical facilities that house command and control systems. It enhances reliability of the power system in the Pacific Northwest, 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            | 2020            |       |       |       |       |       |       |        |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| Resources   | Actuals        | Revised         | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues                          | 28,720         | 8,591           | 2,211 | 2,326 | 1,414 | 1,406 | 1,406 | 2,019 | 48,094 |
| Total:  | 28,720         | 8,591           | 2,211 | 2,326 | 1,414 | 1,406 | 1,406 | 2,019 | 48,094 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 28,720         | 8,591           | 2,211 | 2,326 | 1,414 | 1,406 | 1,406 | 2,019 | 48,094 |
|   |                |                 |       |       |       |       |       |       |        |

# **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<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023  | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|-------|------|-------|------|------|------|--------|
| City Light Fund Revenues                          | 1,185          | 9,433           | 1,364 | -    | 1,002 | 902  | 862  | 906  | 15,652 |
| Total:  | 1,185          | 9,433           | 1,364 | -    | 1,002 | 902  | 862  | 906  | 15,652 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023  | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 1,185          | 9,433           | 1,364 | -    | 1,002 | 902  | 862  | 906  | 15,652 |
| Total:  | 1,185          | 9,433           | 1,364 | -    | 1,002 | 902  | 862  | 906  | 15,652 |

# 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 Restoration | Location:              | Newhalem Creek Rd, Marblemount, WA<br>98267 |
| Current Project Stage: | Stage 3 - Design              | Council District:      | Outside City of Seattle                     |
| Start/End Date:        | 2015 - 2026                   | Neighborhood District: | Outside City of Seattle                     |
| Total Project Cost:    | \$382                         | Urban Village:         | Outside City of Seattle                     |

This project will construct 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024   | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|--------|------|------|-------|
| City Light Fund Revenues                          | 263            | 1               | -    | -    | -    | -      | -    | 118  | 382   |
| Total:  | 263            | 1               | -    | -    | -    | -      | -    | 118  | 382   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024   | 2025 | 2026 | Total |
|   | Autuais        | Reviseu         | 2021 | 2022 | 2023 | 2024   | 2025 | 2020 | TOLAI |
| Light Fund  | 263            | 1               | -    | -    |      | - 2024 |      | 118  | 382   |

#### **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<br>98267 |
| Current Project Stage: | N/A                           | Council District:      | Outside City of Seattle                     |
| Start/End Date:        | 2015 - 2021                   | 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.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 3,269          | 265             | 899  | -    | -    | -    | -    | -    | 4,433 |
| Total:  | 3,269          | 265             | 899  | -    | -    | -    | -    | -    | 4,433 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|   |                |                 | 2021 | LULL | LULU | 2024 | LOLO | LOLO | Total |
| Light Fund  | 3,269          | 265             | 899  | -    | -    | -    | -    | -    | 4,433 |

# Skagit - DC Battery System

| Project No:            | MC-CL-XS6583                  | 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 3 - Design              | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2015 - 2025                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$5,769                       | Urban Village:         | Not in an Urban Village        |

This project will replace/upgrade the existing DC battery banks at the Skagit project.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024                 | 2025               | 2026 | Total              |
|---|----------------|-----------------|--------------------|--------------------|--------------------|----------------------|--------------------|------|--------------------|
| City Light Fund Revenues                          | 2,480          | 724             | 288                | 186                | 663                | 1,067                | 361                | -    | 5,769              |
| Total:  | 2,480          | 724             | 288                | 186                | 663                | 1,067                | 361                | -    | 5,769              |
|   |                |                 |                    |                    |                    |                      |                    |      |                    |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024                 | 2025               | 2026 | Total              |
|   |                |                 | <b>2021</b><br>288 | <b>2022</b><br>186 | <b>2023</b><br>663 | <b>2024</b><br>1,067 | <b>2025</b><br>361 | 2026 | <b>Total</b> 5,769 |

### **Skagit - Relicensing**

| Project No:            | MC-CL-XS6986   | BSL Code:              | BC-CL-X                                     |
|------------------------|----------------|------------------------|---|
| Project Type:          | Ongoing        | BSL Name:              | Power Supply - CIP                          |
| Project Category:      | New Investment | Location:              | Newhalem Creek Rd, Marblemount, WA<br>98267 |
| 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<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|--------|--------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 4,877          | 9,018           | 13,858 | 26,724 | 5,345 | 2,500 | 2,500 | 1,000 | 65,822 |
| Total:  | 4,877          | 9,018           | 13,858 | 26,724 | 5,345 | 2,500 | 2,500 | 1,000 | 65,822 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021   | 2022   | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 4,877          | 9,018           | 13,858 | 26,724 | 5,345 | 2,500 | 2,500 | 1,000 | 65,822 |
| Total:  | 4,877          | 9,018           | 13,858 | 26,724 | 5,345 | 2,500 | 2,500 | 1,000 | 65,822 |

#### **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 1 - Pre-Project Development | Council District:      | Outside City of Seattle        |
| Start/End Date:        | 2015 - 2026                       | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$5,669                           | Urban Village:         | Not in an Urban Village        |

This project replaces or repairs 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.

|                          | LTD     | 2020    |      |      |      |      |      |      |       |
|--------------------------|---------|---------|------|------|------|------|------|------|-------|
| Resources                | Actuals | Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues | 4,979   | -       | -    | -    | -    | 400  | -    | 290  | 5,669 |
| Total:                   | 4,979   | -       | -    | -    | -    | 400  | -    | 290  | 5,669 |
| Fund Appropriations /    | LTD     | 2020    |      |      |      |      |      |      |       |
| Allocations <sup>1</sup> | Actuals | Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund               | 4,979   | -       | -    | -    | -    | 400  | -    | 290  | 5,669 |
| Total:                   | 4,979   |         |      |      |      | 400  |      | 290  | 5,669 |

#### **Skagit Facilities Plan**

| Project No:            | MC-CL-XS6520                  | BSL Code:              | BC-CL-X                                     |
|------------------------|-------------------------------|------------------------|---|
| Project Type:          | Ongoing                       | BSL Name:              | Power Supply - CIP                          |
| Project Category:      | Rehabilitation or Restoration | Location:              | Newhalem Creek Rd, Marblemount, WA<br>98267 |
| Current Project Stage: | N/A                           | Council District:      | Outside City of Seattle                     |
| Start/End Date:        | 2010 - 2021                   | 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<br>Actuals | 2020<br>Revised | 2021               | 2022 | 2023 | 2024 | 2025 | 2026 | Total                 |
|--------------------------|----------------|-----------------|--------------------|------|------|------|------|------|-----------------------|
| City Light Fund Revenues | 4,111          | 860             | 526                | -    | -    | -    | -    | -    | 5,497                 |
| Total:                   | 4,111          | 860             | 526                | -    | -    | -    | -    | -    | 5,497                 |
| Fund Appropriations /    | LTD            | 2020            |                    |      |      |      |      |      |                       |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021               | 2022 | 2023 | 2024 | 2025 | 2026 | Total                 |
|                          |                |                 | <b>2021</b><br>526 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b><br>5,497 |

# **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:        | 2019 - 2026                   | 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.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total |
|---|----------------|-----------------|------|------|------|-------|-------|------|-------|
| City Light Fund Revenues                          | 33             | 118             | 67   | 121  | 417  | 1,125 | 1,000 | 459  | 3,340 |
| Total:  | 33             | 118             | 67   | 121  | 417  | 1,125 | 1,000 | 459  | 3,340 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024  | 2025  | 2026 | Total |
| Light Fund  | 33             | 118             | 67   | 121  | 417  | 1,125 | 1,000 | 459  | 3,340 |
|   |                |                 |      |      |      |       |       |      |       |

## **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,<br>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 provides financial coverage for emergent capital projects related to all Skagit Facilities, which are by definition, unforeseeable, unscheduled, unpredictable, and occur on a first-come, first serve basis. In addition, it funds scheduled, small capital projects that have cost estimates less than \$25,000.

| Resources                              | LTD<br>Actuals | 2020<br>Revised      | 2021                 | 2022                 | 2023                 | 2024              | 2025                 | 2026              | Total               |
|--|----------------|----------------------|----------------------|----------------------|----------------------|-------------------|----------------------|-------------------|---------------------|
| City Light Fund Revenues               | 30,561         | 4,856                | 2,176                | 2,300                | 3,146                | 6,647             | 5,360                | 6,710             | 61,755              |
| Total:                                 | 30,561         | 4,856                | 2,176                | 2,300                | 3,146                | 6,647             | 5,360                | 6,710             | 61,755              |
| Fund Appropriations /                  | LTD            | 2020                 |                      |                      |                      |                   |                      |                   |                     |
| Allocations <sup>1</sup>               | Actuals        | Revised              | 2021                 | 2022                 | 2023                 | 2024              | 2025                 | 2026              | Total               |
| Allocations <sup>1</sup><br>Light Fund | Actuals 30,561 | <b>Revised</b> 4,856 | <b>2021</b><br>2,176 | <b>2022</b><br>2,300 | <b>2023</b><br>3,146 | <b>2024</b> 6,647 | <b>2025</b><br>5,360 | <b>2026</b> 6,710 | <b>Total</b> 61,755 |

# **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<br>98267 |
| 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 571            | 1,696           | 259  | 16   | 50   | 409  | 270  | 2    | 3,274 |
| Total:  | 571            | 1,696           | 259  | 16   | 50   | 409  | 270  | 2    | 3,274 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 571            | 1,696           | 259  | 16   | 50   | 409  | 270  | 2    | 3,274 |
| Total:  |                |                 |      |      | 50   |      | 270  |      | 3,274 |

# **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<br>Actuals   | 2020<br>Revised | 2021              | 2022              | 2023              | 2024               | 2025           | 2026              | Total              |
|--------------------------|------------------|-----------------|-------------------|-------------------|-------------------|--------------------|----------------|-------------------|--------------------|
| City Light Fund Revenues | 4,052            | 525             | 86                | 82                | 84                | 131                | 64             | 64                | 5,088              |
| Total:                   | 4,052            | 525             | 86                | 82                | 84                | 131                | 64             | 64                | 5,088              |
| Fund Appropriations /    | LTD              | 2020            |                   |                   |                   |                    |                |                   |                    |
| Allocations <sup>1</sup> | Actuals          | Revised         | 2021              | 2022              | 2023              | 2024               | 2025           | 2026              | Total              |
|                          | Actuals<br>4,052 | Revised<br>525  | <b>2021</b><br>86 | <b>2022</b><br>82 | <b>2023</b><br>84 | <b>2024</b><br>131 | <b>2025</b> 64 | <b>2026</b><br>64 | <b>Total</b> 5,088 |

## **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,<br>WA 98267 |
| Current Project Stage: | N/A                           | Council District:      | Outside City of Seattle                         |
| Start/End Date:        | 2005 - 2026                   | Neighborhood District: | Not in a Neighborhood District                  |
| Total Project Cost:    | \$10,179                      | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025  | 2026  | Total  |
|---|----------------|-----------------|------|------|------|------|-------|-------|--------|
| City Light Fund Revenues                          | 7,884          | 887             | -    | -    | -    | 455  | 1,427 | 1,078 | 11,730 |
| Total:  | 7,884          | 887             | -    | -    | -    | 455  | 1,427 | 1,078 | 11,730 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025  | 2026  | Total  |
| Light Fund  | 7,884          | 887             | -    | -    | -    | 455  | 1,427 | 1,078 | 11,730 |
| Total:  | 7,884          | 887             | -    | -    | -    | 455  | 1,427 | 1,078 | 11,730 |

## **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 small size electric power service connections from Seattle City Light's distribution system to the customer's meter for power requirements of less than 50 KVA and 26 kV radial services. Most of this related work is billable to the customer. The project allows Seattle 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.

|   | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                      |
|---|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Resources   | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                |
| City Light Fund Revenues                          | 80,269         | 5,770           | 5,719                | 5,807                | 5,897                | 5,988                | 6,082                | 6,167                | 121,700              |
| Total:  | 80,269         | 5,770           | 5,719                | 5,807                | 5,897                | 5,988                | 6,082                | 6,167                | 121,700              |
|   |                |                 |                      |                      |                      |                      |                      |                      |                      |
| Fund Appropriations /                             | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                      |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                |
|   |                |                 | <b>2021</b><br>5,719 | <b>2022</b><br>5,807 | <b>2023</b><br>5,897 | <b>2024</b><br>5,988 | <b>2025</b><br>6,082 | <b>2026</b><br>6,167 | <b>Total</b> 121,700 |

#### **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 2 - Initiation, Project Definition, & Planning | Council District:      | TBD                            |
| Start/End Date:        | 2016 - 2021  | 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. Smart microgrids improve resiliency and reliability, minimize carbon footprints, and reduce costs. This project positions City Light as one of the utilities in the forefront of an innovative application of microgrids and serve as a testbed for testing and operating not just the microgrid, but the solar and battery energy storage system equipment as well. The Washington State Dept. of Commerce will grant the utility approximately half of the funding to cover the costs for this project.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 1,682          | 3,465           | -    | -    | -    | -    | -    | -    | 5,148 |
| Total:  | 1,682          | 3,465           | -    | -    | -    | -    | -    | -    | 5,148 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 1,682          | 3,465           | -    | -    | -    | -    | -    | -    | 5,148 |
| Total:  | 1,682          | 3,465           | -    | -    | -    | -    | -    | -    | 5,148 |

#### 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              |
| Current Project Stage: | Stage 3 - Design  | Council District:      | Multiple               |
| Start/End Date:        | 2017 - 2021       | Neighborhood District: | Multiple               |
| Total Project Cost:    | \$1,075           | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 75             | 1,001           | -    | -    | -    | -    | -    | -    | 1,075 |
| Total:  | 75             | 1,001           | -    | -    | -    | -    | -    | -    | 1,075 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 75             | 1,001           | -    | -    | -    | -    | -    | -    | 1,075 |
| Total:  | 75             | 1,001           |      |      |      |      |      |      | 1,075 |

## 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 funds 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<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024               | 2025              | 2026               | Total              |
|--------------------------|----------------|-----------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| City Light Fund Revenues | -              | 707             | 376                | 530                | 572                | 577                | 97                | 213                | 3,073              |
| Total:                   | -              | 707             | 376                | 530                | 572                | 577                | 97                | 213                | 3,073              |
| Fund Appropriations /    | LTD            | 2020            |                    |                    |                    |                    |                   |                    |                    |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024               | 2025              | 2026               | Total              |
|                          |                |                 | <b>2021</b><br>376 | <b>2022</b><br>530 | <b>2023</b><br>572 | <b>2024</b><br>577 | <b>2025</b><br>97 | <b>2026</b><br>213 | <b>Total</b> 3,073 |

# Sound Transit Light Rail East Link - City Light

| Project No:            | MC-CL-ZT8450       | BSL Code:              | BC-CL-Z                 |
|------------------------|--------------------|------------------------|-------------------------|
| Project Type:          | Discrete           | BSL Name:              | Customer Focused - CIP  |
| Project Category:      | New Facility       | Location:              | I-90                    |
| Current Project Stage: | Stage 6 - Closeout | Council District:      | Outside City of Seattle |
| Start/End Date:        | 2011 - 2021        | Neighborhood District: | Central                 |
| Total Project Cost:    | \$2,169            | Urban Village:         | Not in an Urban Village |

This project plans for and relocates City Light's electrical facilities, as required by state law, enabling Sound Transit's construction of the East LINK light rail line from Seattle's International District Station to the Bellevue Redmond area. The department also plans to work with Sound Transit on a memorandum of agreement regarding cost reimbursement for its work, which is expected to be 100% reimbursable in keeping with past work with Sound Transit.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total              |
|--------------------------|----------------|-----------------|------|------|------|------|------|------|--------------------|
| City Light Fund Revenues | 1,706          | 462             | -    | -    | -    | -    | -    | -    | 2,169              |
| Total:                   | 1,706          | 462             | -    | -    | -    | -    | -    | -    | 2,169              |
| Fund Appropriations /    | LTD            | 2020            |      |      |      |      |      |      |                    |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total              |
|                          |                |                 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 2,169 |

# 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 - 2023                   | Neighborhood District: | Outside City of Seattle |
| Total Project Cost:    | \$12,932                      | 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, ?business as usual.?

|   | LTD            | 2020            |         |       |      |      |      |      |        |       |
|---|----------------|-----------------|---------|-------|------|------|------|------|--------|-------|
| Resources   | Actuals        | Actuals         | Revised | 2021  | 2022 | 2023 | 2024 | 2025 | 2026   | Total |
| City Light Fund Revenues                          | 4,858          | 2,732           | 2,818   | 1,069 | 33   | -    | -    | -    | 11,510 |       |
| Total:  | 4,858          | 2,732           | 2,818   | 1,069 | 33   | -    | -    | -    | 11,510 |       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021    | 2022  | 2023 | 2024 | 2025 | 2026 | Total  |       |
|   |                |                 |         |       |      |      |      |      |        |       |
| Light Fund  | 4,858          | 2,732           | 2,818   | 1,069 | 33   | -    | -    | -    | 11,510 |       |

## **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 provides for the purchase of machinery and tools, and special work equipment to be used for operations activities of the Generation Branch, which include 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.

|   | LTD            | 2020            |      |      |      |      |      |      |        |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| City Light Fund Revenues                          | 8,765          | 1,262           | 922  | 922  | -    | -    | -    | -    | 11,870 |
| Total:  | 8,765          | 1,262           | 922  | 922  | -    | -    | -    | -    | 11,870 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 8,765          | 1,262           | 922  | 922  | -    | -    | -    | -    | 11,870 |
| Total:  | 8,765          | 1,262           | 922  | 922  | -    | -    | -    | -    | 11,870 |

## **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 10,684         | 1,643           | 794  | 787  | 780  | 774  | 769  | 765  | 16,996 |
| Total:  | 10,684         | 1,643           | 794  | 787  | 780  | 774  | 769  | 765  | 16,996 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 10,684         | 1,643           | 794  | 787  | 780  | 774  | 769  | 765  | 16,996 |
| Total:  | 10,684         | 1,643           | 794  | 787  | 780  | 774  | 769  | 765  | 16,996 |

# **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 1,648          | 921             | 292  | 292  | 323  | 333  | 342  | 350  | 4,501 |
| Total:  | 1,648          | 921             | 292  | 292  | 323  | 333  | 342  | 350  | 4,501 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 1,648          | 921             | 292  | 292  | 323  | 333  | 342  | 350  | 4,501 |
| Total:  | 1.648          | 921             | 292  | 292  | 323  | 333  | 342  | 350  | 4,501 |

# **Special Work Equipment - Tech Metering**

| Project No:            | MC-CL-YN8485                  | 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 ongoing project provides new work equipment to replace old or broken tools (that cost more than \$5000) for Tech Metering. The project supports the Department's goals of safety, productivity and employee morale.

|   | LTD            | 2020            |                    |                    |                    |                    |                    |      |                       |
|---|----------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|------|-----------------------|
| Resources   | Actuals        | Revised         | 2021               | 2022               | 2023               | 2024               | 2025               | 2026 | Total                 |
| City Light Fund Revenues                          | -              | 402             | 100                | 100                | 200                | 200                | 200                | -    | 1,202                 |
| Total:  | -              | 402             | 100                | 100                | 200                | 200                | 200                | -    | 1,202                 |
|   |                |                 |                    |                    |                    |                    |                    |      |                       |
| Fund Appropriations /                             | LTD            | 2020            |                    |                    |                    |                    |                    |      |                       |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021               | 2022               | 2023               | 2024               | 2025               | 2026 | Total                 |
|   |                |                 | <b>2021</b><br>100 | <b>2022</b><br>100 | <b>2023</b><br>200 | <b>2024</b><br>200 | <b>2025</b><br>200 | 2026 | <b>Total</b><br>1,202 |

# 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:    | \$807              | 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 Washingtoh Station, as part of the design and construction agreements made between the City of Seattle and Sound Transit.

|   | LTD            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | 387            | 420             | -    | -    | -    | -    | -    | -    | 807   |
| Total:  | 387            | 420             | -    | -    | -    | -    | -    | -    | 807   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 387            | 420             | -    | -    | -    | -    | -    | -    | 807   |
| Total:  | 387            | 420             | -    | -    | -    | -    | -    | -    | 807   |

# 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:    | \$1,155                       | Urban Village:         | Not in an Urban Village        |

This project relocates electrical infrastructure to support WSDOT's replacement of the State Route 520 Bridge from Montlake to I-5. This project is projected to be fully reimbursable to SCL from WSDOT.

| Resources                | LTD<br>Actuals | 2020<br>Revised | 2021              | 2022               | 2023              | 2024 | 2025 | 2026 | Total                 |
|--------------------------|----------------|-----------------|-------------------|--------------------|-------------------|------|------|------|-----------------------|
| City Light Fund Revenues | 214            | 731             | 22                | 141                | 46                | -    | -    | -    | 1,155                 |
| Total:                   | 214            | 731             | 22                | 141                | 46                | -    | -    | -    | 1,155                 |
| Fund Appropriations /    | LTD            | 2020            |                   |                    |                   |      |      |      |                       |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021              | 2022               | 2023              | 2024 | 2025 | 2026 | Total                 |
|                          |                |                 | <b>2021</b><br>22 | <b>2022</b><br>141 | <b>2023</b><br>46 | 2024 | 2025 | 2026 | <b>Total</b><br>1,155 |

# **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:        | 2017 - 2020                   | 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.

| _   | LTD            | 2020              |      |      |      |           |      |      |                       |
|---|----------------|-------------------|------|------|------|-----------|------|------|-----------------------|
| Resources   | Actuals        | Revised           | 2021 | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
| City Light Fund Revenues                          | 226            | 785               | -    | -    | -    | -         | -    | -    | 1,011                 |
| Total:  | 226            | 785               | -    | -    | -    | -         | -    | -    | 1,011                 |
|   |                |                   |      |      |      |           |      |      |                       |
| Fund Appropriations /                             |                | 2020<br>Dev/jaced | 2024 | 2022 | 2022 | 2024      | 2025 | 2026 | Total                 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised   | 2021 | 2022 | 2023 | 2024      | 2025 | 2026 | Total                 |
|   |                |                   | 2021 | 2022 | 2023 | 2024<br>- | 2025 | 2026 | <b>Total</b><br>1,011 |

## 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               |
| 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 upgrades streetlights with LED fixtures, which will reduce annual energy consumption by 40% (for those lights replaced), provide Greenhouse Gas avoidance of 5,446 metric tons of carbon per year, and reduce maintenance cost of the Utility's streetlight system. With a total system conversion, it is estimated that annual operating costs will be reduced \$3.7 Million per year. The savings in energy and maintenance costs will pay for the initial investment within the life of the new system.

|                          | LTD     | 2020    |       |       |       |       |       |       |        |
|--------------------------|---------|---------|-------|-------|-------|-------|-------|-------|--------|
| Resources                | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues | 39,355  | 6,135   | 1,611 | 2,983 | 1,960 | 2,016 | 3,355 | 6,163 | 63,578 |
| Total:                   | 39,355  | 6,135   | 1,611 | 2,983 | 1,960 | 2,016 | 3,355 | 6,163 | 63,578 |
| Fund Appropriations /    | LTD     | 2020    |       |       |       |       |       |       |        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|                          |         |         |       |       |       |       |       |       |        |
| Light Fund               | 39,355  | 6,135   | 1,611 | 2,983 | 1,960 | 2,016 | 3,355 | 6,163 | 63,578 |

## 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 provides street lighting as requested by various taxing jurisdictions and other customers. Streetlights and floodlights are provided in public right of way, and on private property, for either public or private benefit.

| _                        | LTD     | 2020    |       |       |       |       |       |       |        |
|--------------------------|---------|---------|-------|-------|-------|-------|-------|-------|--------|
| Resources                | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues | 36,625  | 6,745   | 1,568 | 4,334 | 2,967 | 2,658 | 3,214 | 4,573 | 62,684 |
| Total:                   | 36,625  | 6,745   | 1,568 | 4,334 | 2,967 | 2,658 | 3,214 | 4,573 | 62,684 |
| Fund Appropriations /    | LTD     | 2020    |       |       |       |       |       |       |        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|                          |         |         |       |       |       |       |       |       |        |
| Light Fund               | 36,625  | 6,745   | 1,568 | 4,334 | 2,967 | 2,658 | 3,214 | 4,573 | 62,684 |

### **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.

|   | LTD            | 2020            |       |       |       |       |       |       |        |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| Resources   | Actuals        | Revised         | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| City Light Fund Revenues                          | 9,351          | 559             | 1,260 | 1,280 | 1,317 | 1,337 | 1,359 | 1,549 | 18,012 |
| Total:  | 9,351          | 559             | 1,260 | 1,280 | 1,317 | 1,337 | 1,359 | 1,549 | 18,012 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 9,351          | 559             | 1,260 | 1,280 | 1,317 | 1,337 | 1,359 | 1,549 | 18,012 |
| Total:  | 9,351          | 559             | 1.260 | 1,280 | 1,317 | 1,337 | 1,359 | 1,549 | 18,012 |

## Substation Breaker Replacements and Reliability Additions

| Project No:            | MC-CL-YS7779                  | 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 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 replaces those circuit breakers with the priority given to those with the highest risk of failure.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|---------|
| City Light Fund Revenues                          | 46,282         | 6,533           | 7,482 | 8,970 | 8,098 | 8,100 | 7,003 | 7,635 | 100,103 |
| Total:  | 46,282         | 6,533           | 7,482 | 8,970 | 8,098 | 8,100 | 7,003 | 7,635 | 100,103 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total   |
| Light Fund  | 46,282         | 6,533           | 7,482 | 8,970 | 8,098 | 8,100 | 7,003 | 7,635 | 100,103 |
|   |                |                 |       |       |       |       |       |       |         |

# **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<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
|--------------------------|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| City Light Fund Revenues | 13,957         | 593             | 2,203                | 2,212                | 2,804                | 2,408                | 2,303                | 2,383                | 28,862              |
| Total:                   | 13,957         | 593             | 2,203                | 2,212                | 2,804                | 2,408                | 2,303                | 2,383                | 28,862              |
| Fund Appropriations /    | LTD            | 2020            |                      |                      |                      |                      |                      |                      |                     |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total               |
|                          |                |                 | <b>2021</b><br>2,203 | <b>2022</b><br>2,212 | <b>2023</b><br>2,804 | <b>2024</b><br>2,408 | <b>2025</b><br>2,303 | <b>2026</b><br>2,383 | <b>Total</b> 28,862 |

## **Substation Comprehensive Improvements**

| Project No:            | MC-CL-XF9161 | 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 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<br>Actuals | 2020<br>Revised | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 3,319          | 295             | 295  | 1,311 | 3,344 | 3,345 | 2,038 | 2,704 | 16,652 |
| Total:  | 3,319          | 295             | 295  | 1,311 | 3,344 | 3,345 | 2,038 | 2,704 | 16,652 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 3,319          | 295             | 295  | 1,311 | 3,344 | 3,345 | 2,038 | 2,704 | 16,652 |
| Total:  | 3,319          | 295             | 295  | 1,311 | 3,344 | 3,345 | 2,038 | 2,704 | 16,652 |

### **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                         |
| 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, replaces and upgrades substation equipment, particularly the substation electrical and control equipment. The project maintains or improves system reliability, permits compliance with high voltage and environmental regulations, and ensures safe work sites. The project allows remote control and monitoring of substation equipment from the System Control Center, which facilitates faster response time to correct system instability or outages.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 54,585         | 4,418           | 6,426 | 6,165 | 6,529 | 7,813 | 6,227 | 6,297 | 98,461 |
| Total:  | 54,585         | 4,418           | 6,426 | 6,165 | 6,529 | 7,813 | 6,227 | 6,297 | 98,461 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 54,585         | 4,418           | 6,426 | 6,165 | 6,529 | 7,813 | 6,227 | 6,297 | 98,461 |
| Total:  | 54.585         | 4,418           | 6,426 | 6,165 | 6,529 | 7.813 | 6.227 | 6.297 | 98,461 |

# **Substation Plant Improvements**

| Project No:            | MC-CL-YS7750                  | 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024  | 2025  | 2026 | Total  |
|---|----------------|-----------------|-------|-------|------|-------|-------|------|--------|
| City Light Fund Revenues                          | 8,393          | 1,512           | 1,046 | 1,118 | 941  | 1,035 | 1,056 | 851  | 15,952 |
| Total:  | 8,393          | 1,512           | 1,046 | 1,118 | 941  | 1,035 | 1,056 | 851  | 15,952 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023 | 2024  | 2025  | 2026 | Total  |
| Light Fund  | 8,393          | 1,512           | 1,046 | 1,118 | 941  | 1,035 | 1,056 | 851  | 15,952 |
| Total:  | 8,393          | 1,512           | 1,046 | 1,118 | 941  | 1,035 | 1,056 | 851  | 15,952 |

## **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 funds 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 13,379         | 5,414           | 5,047 | 5,115 | 2,629 | 3,099 | 4,844 | 4,989 | 44,516 |
| Total:  | 13,379         | 5,414           | 5,047 | 5,115 | 2,629 | 3,099 | 4,844 | 4,989 | 44,516 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 13,379         | 5,414           | 5,047 | 5,115 | 2,629 | 3,099 | 4,844 | 4,989 | 44,516 |
| Total:  | 13,379         | 5,414           | 5,047 | 5,115 | 2,629 | 3,099 | 4,844 | 4,989 | 44,516 |

## **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 that other electrical utilities in the region periodically ask City Light to do.

|                          | LTD            | 2020    |                  |                  |               |                  |             |             |                     |
|--------------------------|----------------|---------|------------------|------------------|---------------|------------------|-------------|-------------|---------------------|
| Resources                | Actuals        | Revised | 2021             | 2022             | 2023          | 2024             | 2025        | 2026        | Total               |
| City Light Fund Revenues | 525            | 16      | 5                | 6                | 6             | 6                | 6           | 6           | 575                 |
| Total:                   | 525            | 16      | 5                | 6                | 6             | 6                | 6           | 6           | 575                 |
| Fund Appropriations /    | LTD            | 2020    |                  |                  |               |                  |             |             |                     |
| Allocations              | Actuals        | Revised | 2021             | 2022             | 2023          | 2024             | 2025        | 2026        | Total               |
|                          | Actuals<br>525 |         | <b>2021</b><br>5 | <b>2022</b><br>6 | <b>2023</b> 6 | <b>2024</b><br>6 | <b>2025</b> | <b>2026</b> | <b>Total</b><br>575 |

# **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 50             | 95              | 217  | 554  | 375  | 380  | 386  | 228  | 2,285 |
| Total:  | 50             | 95              | 217  | 554  | 375  | 380  | 386  | 228  | 2,285 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 50             | 95              | 217  | 554  | 375  | 380  | 386  | 228  | 2,285 |
| Total:  | 50             | 95              | 217  | 554  | 375  | 380  | 386  | 228  | 2,285 |

# **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 funds 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 will need to begin 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.

|                          | LTD     | 2020      |                    |                      |                   |                      |                      |                      |                        |
|--------------------------|---------|-----------|--------------------|----------------------|-------------------|----------------------|----------------------|----------------------|------------------------|
| Resources                | Actuals | Revised   | 2021               | 2022                 | 2023              | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues | -       | -         | 285                | 1,441                | 1,772             | 1,621                | 6,443                | 6,413                | 17,975                 |
| Total:                   | -       | -         | 285                | 1,441                | 1,772             | 1,621                | 6,443                | 6,413                | 17,975                 |
| Fund Appropriations /    | LTD     | 2020      |                    |                      |                   |                      |                      |                      |                        |
|                          |         |           |                    |                      |                   |                      |                      |                      |                        |
| Allocations <sup>1</sup> | Actuals | Revised   | 2021               | 2022                 | 2023              | 2024                 | 2025                 | 2026                 | Total                  |
| Light Fund               | Actuals | Revised - | <b>2021</b><br>285 | <b>2022</b><br>1,441 | <b>2023</b> 1,772 | <b>2024</b><br>1,621 | <b>2025</b><br>6,443 | <b>2026</b><br>6,413 | <b>Total</b><br>17,975 |

**O&M Impacts:** 

### **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 10,454         | 1,524           | 658  | 657  | 791  | 702  | 703  | 950  | 16,440 |
| Total:  | 10,454         | 1,524           | 658  | 657  | 791  | 702  | 703  | 950  | 16,440 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 10,454         | 1,524           | 658  | 657  | 791  | 702  | 703  | 950  | 16,440 |
| Total:  | 10.454         | 1.524           | 658  | 657  | 791  | 702  | 703  | 950  | 16,440 |

# **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            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | 5,215          | -               | 24   | 24   | 38   | 15   | 16   | 17   | 5,349 |
| Total:  | 5,215          | -               | 24   | 24   | 38   | 15   | 16   | 17   | 5,349 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 5.215          | -               | 24   | 24   | 38   | 15   | 16   | 17   | 5,349 |
|   | -, -           |                 |      |      |      |      |      |      |       |

# **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 2,911          | 108             | 606  | 568  | 599  | 584  | 586  | 626  | 6,587 |
| Total:  | 2,911          | 108             | 606  | 568  | 599  | 584  | 586  | 626  | 6,587 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 2.911          | 108             | 606  | 568  | 599  | 584  | 586  | 626  | 6,587 |
| 5   | _,             |                 |      |      |      |      |      |      |       |

## **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 - 2021                   | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$37,405                      | 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<br>Actuals | 2020<br>Revised          | 2021                 | 2022 | 2023 | 2024 | 2025 | 2026 | Total               |
|--|----------------|--------------------------|----------------------|------|------|------|------|------|---------------------|
| City Light Fund Revenues               | 17,487         | 15,922                   | 3,995                | -    | -    | -    | -    | -    | 37,405              |
| Total:                                 | 17,487         | 15,922                   | 3,995                | -    | -    | -    | -    | -    | 37,405              |
| Fund Appropriations /                  | LTD            | 2020                     |                      |      |      |      |      |      |                     |
| Allocations <sup>1</sup>               | Actuals        | Revised                  | 2021                 | 2022 | 2023 | 2024 | 2025 | 2026 | Total               |
| Allocations <sup>1</sup><br>Light Fund | Actuals 17,487 | <b>Revised</b><br>15,922 | <b>2021</b><br>3,995 | 2022 | 2023 | 2024 | 2025 | 2026 | <b>Total</b> 37,405 |

# **Transmission Line Reconductoring**

| Project No:            | MC-CL-YT8462                  | 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 6 - Closeout            | Council District:      | Citywide                            |
| Start/End Date:        | 2015 - 2019                   | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$5,106                       | Urban Village:         | Not in an Urban Village             |

This project addresses the issue of increased electric transmission congestion load growth in the Puget Sound Area by increasing the capacity of the Bothell-SnoKing double circuit 230kv line to meet area reliability requirements. The project funds the re-conductoring of both the Bothell-SnoKing double circuit 230kV line and the Delridge-Duwamish 230kV line to increase capacity and meet regional reliability requirements.

|   | LTD            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | 5,043          | 63              | -    | -    | -    | -    | -    | -    | 5,106 |
| Total:  | 5,043          | 63              | -    | -    | -    | -    | -    | -    | 5,106 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 5,043          | 63              | -    | -    | -    | -    | -    | -    | 5,106 |
| Total:  |                |                 |      |      |      |      |      |      |       |

# **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 replaces the worst one percent of City Light's transmission structures and conductors each year. This project also provides engineering, construction, and related work; improving and maintaining the reliability of the overhead or underground transmission system.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 30,422         | 1,626           | 1,864 | 2,956 | 3,923 | 3,093 | 2,820 | 3,512 | 50,216 |
| Total:  | 30,422         | 1,626           | 1,864 | 2,956 | 3,923 | 3,093 | 2,820 | 3,512 | 50,216 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 30.422         | 1.626           | 1.864 | 2.956 | 3,923 | 3,093 | 2.820 | 3.512 | 50.216 |
| Eight i ana                                       | 50,422         | 1,020           | 1,004 | 2,000 | 0,020 | 0,000 | 2,020 | 0,012 | 00,210 |

# **Transmission Tower Refurbishment**

| Project No:            | MC-CL-YT7130                      | BSL Code:              | BC-CL-Y                             |
|------------------------|-----------------------------------|------------------------|-------------------------------------|
| Project Type:          | Discrete                          | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | Rehabilitation or Restoration     | Location:              | Multiple                            |
| Current Project Stage: | Stage 1 - Pre-Project Development | Council District:      | Outside City of Seattle             |
| Start/End Date:        | 2021 - 2022                       | Neighborhood District: | Outside City of Seattle             |
| Total Project Cost:    | \$3,177                           | Urban Village:         | Not in an Urban Village             |

This new project funds the costs to refurbish and to extend the life of over 1,700 of steel transmission tower structures. This funding establishes and implements a new, ongoing, systematic approach to repair and refurbish these critical assets for as long as we can before needing to perform a tower replacement project which would cost more than \$2.0 million per tower.

|   | LTD            | 2020            |       |      |      |      |      |      |       |
|---|----------------|-----------------|-------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021  | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | -              | -               | 3,177 | -    | -    | -    | -    | -    | 3,177 |
| Total:  | -              | -               | 3,177 | -    | -    | -    | -    | -    | 3,177 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | -               | 3,177 | -    | -    | -    | -    | -    | 3,177 |
|   |                |                 |       |      |      |      |      |      |       |

**O&M Impacts:** 

### **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 for light-duty, medium-duty, and heavy-duty electric vehicles (including transit, commercial, government and non-profit fleets, delivery vehicles, personal vehicles and freight vehicles) as well as ferry and port systems. The portfolio of projects will be developed based on a committed customer engagement effort and is expected to include support for electrified public transit, investments in and support for electric vehicle charging infrastructure, engineering support, installation services and/or construction services and related infrastructure. The project also includes the enabling investments in grid modernization assets including automation and smart grid technology, distributed generation (solar, wind, etc.) and energy storage equipment, and demand side management to better support and align customer energy demands with supply.

|                          | LTD     | 2020    |                      |                      |                      |                       |                       |                       |                        |
|--------------------------|---------|---------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Resources                | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                  | 2025                  | 2026                  | Total                  |
| City Light Fund Revenues | -       | 2,000   | 3,980                | 5,680                | 9,880                | 12,730                | 12,380                | 11,150                | 57,800                 |
| Total:                   | -       | 2,000   | 3,980                | 5,680                | 9,880                | 12,730                | 12,380                | 11,150                | 57,800                 |
| Fund Appropriations /    |         | 2020    |                      |                      |                      |                       |                       |                       |                        |
| Fully Appropriations /   | LTD     | 2020    |                      |                      |                      |                       |                       |                       |                        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                  | 2025                  | 2026                  | Total                  |
|                          |         |         | <b>2021</b><br>3,980 | <b>2022</b><br>5,680 | <b>2023</b><br>9,880 | <b>2024</b><br>12,730 | <b>2025</b><br>12,380 | <b>2026</b><br>11,150 | <b>Total</b><br>57,800 |

# **Transportation Streetlights**

| Project No:            | MC-CL-ZL8377                  | 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 relocates Seattle City Light owned streetlights as required by City of Seattle transportation projects.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 17,321         | 6,742           | 6,207 | 7,784 | 6,487 | 6,629 | 6,992 | 7,146 | 65,308 |
| Total:  | 17,321         | 6,742           | 6,207 | 7,784 | 6,487 | 6,629 | 6,992 | 7,146 | 65,308 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 17,321         | 6,742           | 6,207 | 7,784 | 6,487 | 6,629 | 6,992 | 7,146 | 65,308 |
|   |                |                 |       |       |       |       |       |       |        |

### **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                         |
| 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 8,504          | 892             | 3,046 | 3,057 | 2,904 | 4,711 | 4,756 | 4,787 | 32,656 |
| Total:  | 8,504          | 892             | 3,046 | 3,057 | 2,904 | 4,711 | 4,756 | 4,787 | 32,656 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|   |                |                 |       | LULL  | 2020  |       |       | 2020  |        |
| Light Fund  | 8,504          | 892             | 3,046 | 3,057 | 2,904 | 4,711 | 4,756 | 4,787 | 32,656 |

### **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.

|                          | LTD     | 2020    |                      |                      |                      |                      |                      |                      |                        |
|--------------------------|---------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources                | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
| City Light Fund Revenues | 44,350  | 5,261   | 4,231                | 4,299                | 4,368                | 4,438                | 4,510                | 4,530                | 75,987                 |
| Total:                   | 44,350  | 5,261   | 4,231                | 4,299                | 4,368                | 4,438                | 4,510                | 4,530                | 75,987                 |
| Fund Appropriations /    | LTD     | 2020    |                      |                      |                      |                      |                      |                      |                        |
| i uliu Appiopilations /  | LID     | 2020    |                      |                      |                      |                      |                      |                      |                        |
| Allocations <sup>1</sup> | Actuals | Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|                          |         |         | <b>2021</b><br>4,231 | <b>2022</b><br>4,299 | <b>2023</b><br>4,368 | <b>2024</b><br>4,438 | <b>2025</b><br>4,510 | <b>2026</b><br>4,530 | <b>Total</b><br>75,987 |

## **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.

|                          | LTD            | 2020            |                       |                       |                       |                       |                       |                       |                         |
|--------------------------|----------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| Resources                | Actuals        | Revised         | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                   |
| City Light Fund Revenues | 74,330         | 10,685          | 20,666                | 25,165                | 42,516                | 44,752                | 46,570                | 50,153                | 314,836                 |
| Total:                   | 74,330         | 10,685          | 20,666                | 25,165                | 42,516                | 44,752                | 46,570                | 50,153                | 314,836                 |
|                          |                |                 |                       |                       |                       |                       |                       |                       |                         |
| Fund Appropriations /    | LTD<br>Actuals | 2020<br>Revised | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                   |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021                  | 2022                  | 2023                  | 2024                  | 2025                  | 2026                  | Total                   |
|                          |                |                 | <b>2021</b><br>20,666 | <b>2022</b><br>25,165 | <b>2023</b><br>42,516 | <b>2024</b><br>44,752 | <b>2025</b><br>46,570 | <b>2026</b><br>50,153 | <b>Total</b><br>314,836 |

# **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<br>Actuals | 2020<br>Revised | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|--------------------------|----------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Resources                | Actuals        | Reviseu         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2020                 | TOLAI                  |
| City Light Fund Revenues | 20,694         | 457             | 1,637                | 1,665                | 1,694                | 1,723                | 1,753                | 1,743                | 31,366                 |
| Total:                   | 20,694         | 457             | 1,637                | 1,665                | 1,694                | 1,723                | 1,753                | 1,743                | 31,366                 |
| Fund Appropriations /    | LTD            | 0000            |                      |                      |                      |                      |                      |                      |                        |
| Fund Appropriations /    | LID            | 2020            |                      |                      |                      |                      |                      |                      |                        |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021                 | 2022                 | 2023                 | 2024                 | 2025                 | 2026                 | Total                  |
|                          |                |                 | <b>2021</b><br>1,637 | <b>2022</b><br>1,665 | <b>2023</b><br>1,694 | <b>2024</b><br>1,723 | <b>2025</b><br>1,753 | <b>2026</b><br>1,743 | <b>Total</b><br>31,366 |

# **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 pay for a portion of this work.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 51,154         | 2,326           | 2,685 | 2,729 | 2,774 | 2,820 | 2,867 | 2,871 | 70,224 |
| Total:  | 51,154         | 2,326           | 2,685 | 2,729 | 2,774 | 2,820 | 2,867 | 2,871 | 70,224 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 51,154         | 2,326           | 2,685 | 2,729 | 2,774 | 2,820 | 2,867 | 2,871 | 70,224 |
| Total:  | 51.154         | 2,326           | 2,685 | 2,729 | 2,774 | 2,820 | 2,867 | 2,871 | 70,224 |

# **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.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
|---|----------------|-----------------|-------|-------|-------|-------|-------|-------|--------|
| City Light Fund Revenues                          | 20,048         | 3,460           | 2,002 | 2,024 | 2,025 | 2,067 | 2,046 | 2,576 | 36,248 |
| Total:  | 20,048         | 3,460           | 2,002 | 2,024 | 2,025 | 2,067 | 2,046 | 2,576 | 36,248 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  | Total  |
| Light Fund  | 20,048         | 3,460           | 2,002 | 2,024 | 2,025 | 2,067 | 2,046 | 2,576 | 36,248 |
| Total:  | 20,048         | 3,460           | 2,002 | 2,024 | 2,025 | 2.067 | 2,046 | 2,576 | 36,248 |

# **University of Washington Capacity Additions**

| Project No:            | MC-CL-YR8466                      | BSL Code:              | BC-CL-Y                             |
|------------------------|-----------------------------------|------------------------|-------------------------------------|
| Project Type:          | Discrete                          | BSL Name:              | Transmission and Distribution - CIP |
| Project Category:      | New Investment                    | Location:              | Multiple                            |
| Current Project Stage: | Stage 1 - Pre-Project Development | Council District:      | Council District 3                  |
| Start/End Date:        | 2022 - 2026                       | Neighborhood District: | Northeast                           |
| Total Project Cost:    | \$46,502                          | Urban Village:         | University District                 |

This project is to build the infrastructure needed 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.

|   | LTD            | 2020            |           |                      |                       |                       |                       |                       |                        |
|---|----------------|-----------------|-----------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Resources   | Actuals        | Revised         | 2021      | 2022                 | 2023                  | 2024                  | 2025                  | 2026                  | Total                  |
| City Light Fund Revenues                          | -              | -               | -         | 2,000                | 10,500                | 12,000                | 12,002                | 10,000                | 46,502                 |
| Total:  | -              | -               | -         | 2,000                | 10,500                | 12,000                | 12,002                | 10,000                | 46,502                 |
|   |                |                 |           |                      |                       |                       |                       |                       |                        |
| Fund Appropriations /                             | LTD            | 2020            |           |                      |                       |                       |                       |                       |                        |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021      | 2022                 | 2023                  | 2024                  | 2025                  | 2026                  | Total                  |
|   |                |                 | 2021<br>- | <b>2022</b><br>2,000 | <b>2023</b><br>10,500 | <b>2024</b><br>12,000 | <b>2025</b><br>12,002 | <b>2026</b><br>10,000 | <b>Total</b><br>46,502 |

## **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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | 5,899          | 942             | 363  | 369  | 370  | 376  | 416  | 427  | 9,162 |
| Total:  | 5,899          | 942             | 363  | 369  | 370  | 376  | 416  | 427  | 9,162 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | 5,899          | 942             | 363  | 369  | 370  | 376  | 416  | 427  | 9,162 |
| Total:  | 5,899          | 942             | 363  | 369  | 370  | 376  | 416  | 427  | 9,162 |

### **Utility Program and Customer Tracking System**

| Project No:            | MC-CL-ZF9928                  | BSL Code:              | BC-CL-Z                        |
|------------------------|-------------------------------|------------------------|--------------------------------|
| Project Type:          | Discrete                      | BSL Name:              | Customer Focused - CIP         |
| Project Category:      | New Investment                | Location:              | System Wide                    |
| Current Project Stage: | Stage 5 - Execution (IT Only) | Council District:      | Citywide                       |
| Start/End Date:        | 2019 - 2021                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$959                         | Urban Village:         | Not in an Urban Village        |

This project implements a new system for the Customer Energy Solutions (CES) Division that will centrally manage and facilitate its resource acquisition, smallscale renewables, electric transportation, and value-added programs and services. This system will assist managing programs and service offerings in a more efficient manner and to manage customer engagement in a more robust manner. This system will expedite business workflow, application processing, document storage, savings and incentive calculations, customer touchpoint preservation, and reporting. The system is a combination of software modules that is built on top of a Salesforce platform. The system is also being designed to have some integration capability with City Light's Customer Care and Billing system and PeopleSoft 9.2. As such, the tool has potential to be leveraged more widely by the utility and the City as a whole and is being built to be scalable and extensible. This potential will be explored and incorporated into future phases of development to broaden the reach of this system or its components. Implementing this Utility Program and Customer Tracking System was identified as a mission critical strategic priority for CES. This project continues the work started under MC-CL-WF9928.

| Resources   | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| City Light Fund Revenues                          | -              | 959             | -    | -    | -    | -    | -    | -    | 959   |
| Total:  | -              | 959             | -    | -    | -    | -    | -    | -    | 959   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 959             | -    | -    | -    | -    | -    | -    | 959   |
| Total:  | -              | 959             | -    | -    | -    | -    | -    | -    | 959   |

**O&M Impacts:** 

### **Vegetation Management Compliance System**

| Project No:            | MC-CL-YD9978                  | 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:      | Outside City of Seattle             |
| Start/End Date:        | 2018 - 2021                   | Neighborhood District: | Not in a Neighborhood District      |
| Total Project Cost:    | \$850                         | 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.

|   | LTD            | 2020            |      |      |      |      |      |      |       |
|---|----------------|-----------------|------|------|------|------|------|------|-------|
| Resources   | Actuals        | Revised         | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| City Light Fund Revenues                          | -              | 850             | -    | -    | -    | -    | -    | -    | 850   |
| Total:  | -              | 850             | -    | -    | -    | -    | -    | -    | 850   |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total |
| Light Fund  | -              | 850             | -    | -    | -    | -    | -    | -    | 850   |
|   |                |                 |      |      |      |      |      |      |       |

### 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 - 2021                   | Neighborhood District: | Not in a Neighborhood District |
| Total Project Cost:    | \$13,993                      | 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<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|---|----------------|-----------------|------|------|------|------|------|------|--------|
| City Light Fund Revenues                          | 9,553          | 4,440           | -    | -    | -    | -    | -    | -    | 13,993 |
| Total:  | 9,553          | 4,440           | -    | -    | -    | -    | -    | -    | 13,993 |
| Fund Appropriations /<br>Allocations <sup>1</sup> | LTD<br>Actuals | 2020<br>Revised | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
| Light Fund  | 9,553          | 4,440           | -    | -    | -    | -    | -    | -    | 13,993 |
| Total:  | 9,553          | 4,440           | -    | -    | -    | -    | -    | -    | 13,993 |

### **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                    |
| 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 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<br>Actuals | 2020<br>Revised | 2021  | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|--------------------------|----------------|-----------------|-------|------|------|------|------|------|--------|
|                          |                |                 |       |      |      |      |      |      |        |
| Total:                   | 7,109          | 3,086           | 1,050 | 451  | 734  | 732  | 732  | 747  | 14,642 |
| Fund Appropriations /    | LTD            | 2020            |       |      |      |      |      |      |        |
| Allocations <sup>1</sup> | Actuals        | Revised         | 2021  | 2022 | 2023 | 2024 | 2025 | 2026 | Total  |
|                          | Autuals        | Reviseu         | 2021  | 2022 | 2023 | 2024 | 2025 | 2020 | TULAI  |
| Light Fund               | 7,109          | 3,086           | 1,050 | 451  | 734  | 732  | 732  | 747  | 14,642 |