

## 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 almost 700,000 people living in a 130 square-mile area, which includes the City of Seattle and several adjoining jurisdictions. To serve these customers, City Light owns, maintains, and operates a multi-billion-dollar physical plant. The physical plant includes:

- A power supply generation system consisting of seven hydroelectric plants on the Pend Oreille (Boundary Dam), Skagit, Cedar, and Tolt rivers with a combined capacity of almost 2,000 megawatts;
- 650 miles of high-voltage transmission lines linking these plants to Seattle;
- A distribution system with 14 major substations and more than 2,500 miles of overhead and underground cable;
- A state-of-the-art System Control Center coordinating these activities; and
- Billing and metering equipment tracking approximately 423,000 accounts.

City Light's Capital Improvement Program (CIP) is the vehicle for repairing, upgrading, and expanding this infrastructure. The CIP funds a variety of safety improvements, mitigation activities, and licensing requirements. The goal of the utility's capital program is to ensure that the facilities required to serve City Light customers with low-cost, reliable power, are in place. Funding for the CIP comes primarily from retail electricity sales, sales of surplus power on the wholesale market, and the sale of revenue bonds.

The City Council adopted an updated Strategic Plan for City Light in June 2014 that established spending priorities and a six-year rate path for the utility. The updated Strategic Plan guided development of City Light's 2016-2021 Proposed CIP budget.

## CIP Revenue Sources

Retail electricity sales and surplus energy sales on the wholesale market 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. City Light also finances a portion of the CIP through the sale of revenue bonds. City Light's policy is to limit debt financing to 60% of any given six-year CIP (Resolution 31187).

## 2016-2021 CIP Highlights

The 2016-2021 Proposed CIP budget outlines \$2.16 billion in capital spending over six years for power supply, transmission, distribution, customer services, and central utility needs. In 2016, approximately \$27.5 million of this spending is in response to external projects, including suburban undergrounding requests, maintenance of the streetlight system, infrastructure relocations due to transportation projects, and other reimbursable customer-requested work.

City Light monitors and refines CIP project spending plans throughout the year and reports progress to the Mayor and City Council quarterly. SCL submits all significant project changes to the Mayor and the Council for approval through the quarterly supplemental budget process.

A more expansive look at significant CIP projects scheduled for 2016-2021 is provided below.

**CIP Expenditures by Major Program**

The 2016-2021 Proposed CIP summarizes spending in five broad programs: Power Supply, Transmission, Distribution, External Projects and Central Utility Projects. The table below displays the projects and associated spending included in each of these programs for the 2016-2021 Proposed CIP. The dollar amounts shown in this document reflect the projects' total costs to be capitalized, and include both direct costs and associated overhead costs.

**2016-2021 Proposed CIP  
Summary of CIP Project Allocations (in \$1,000s)**

	2016	2017	2018	2019	2020	2021	Total
<b>Power Supply</b>	<b>71,996</b>	<b>76,662</b>	<b>67,379</b>	<b>60,583</b>	<b>87,222</b>	<b>95,884</b>	<b>459,726</b>
Boundary	28,295	45,445	41,649	43,507	39,705	59,329	257,930
Skagit	37,614	25,844	19,138	10,102	40,376	28,193	161,267
Cedar Falls - Tolt	1,880	1,603	3,349	3,774	3,866	6,157	20,629
Power Supply Other	4,207	3,770	3,243	3,200	3,275	2,205	19,900
<b>Transmission</b>	<b>19,655</b>	<b>7,767</b>	<b>15,592</b>	<b>5,886</b>	<b>15,814</b>	<b>45,654</b>	<b>110,368</b>
<b>Distribution</b>	<b>248,186</b>	<b>221,594</b>	<b>176,152</b>	<b>147,830</b>	<b>157,386</b>	<b>187,539</b>	<b>1,138,687</b>
Substations	63,761	62,171	47,105	25,083	25,079	26,857	250,056
Network	52,607	20,975	19,757	21,845	30,872	42,188	188,244
Radial	57,625	58,344	52,357	54,553	56,656	62,081	341,616
Service Connections	61,774	70,184	46,567	35,839	35,262	40,274	289,900
Distribution Other	12,419	9,920	10,366	10,510	9,517	16,139	68,871
<b>External Projects</b>	<b>27,527</b>	<b>56,414</b>	<b>45,343</b>	<b>25,691</b>	<b>24,897</b>	<b>25,983</b>	<b>205,855</b>
Local Jurisdictions	15,001	13,099	12,761	13,842	17,029	19,766	91,498
Transportation Relocations	12,171	42,999	32,554	11,832	7,828	6,176	113,560
Customer Other	355	316	28	17	40	41	797
<b>Central Utility Projects</b>	<b>46,363</b>	<b>31,089</b>	<b>22,056</b>	<b>80,986</b>	<b>66,107</b>	<b>26,947</b>	<b>273,548</b>
Customer and Billing	9,255	210	0	0	0	0	9,465
Finance and IT Systems	21,956	13,362	7,300	6,428	6,107	5,375	60,528
Fleets and Facilities	15,152	17,517	14,756	74,558	60,000	21,572	203,555
<b>Grand Total</b>	<b>413,727</b>	<b>393,526</b>	<b>326,522</b>	<b>320,976</b>	<b>351,426</b>	<b>382,007</b>	<b>2,188,184</b>

*A more detailed description and summary of each Program follows.*

## Seattle City Light

**Power Supply:** Projects in this program includes improvements to City Light's dams, generators, powerhouses, and other related projects. In addition, the program contains projects designed to help SCL 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 and runner replacements) to reduce the impact to power generation and level capital spending.

For 2016, the CIP includes \$72 million in funding for 48 projects in Power Supply. **Highlights, ordered by project number, include:**

- Power Production – Network Controls (6385): (\$1,513,000 in 2016)  
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. Also included are features that lead to enhanced data acquisition that meets North American Electric Reliability Corporation (NERC) requirements.
- Diablo Powerhouse - Rebuild Generator Unit 31 (6422): (\$5,101,000 in 2016)  
This project rebuilds generator Unit 31 at Diablo Powerhouse as part of the utility's generator rebuild program.
- Diablo Powerhouse – Rebuild Generator Unit 32 (6423): (\$11,577,000 in 2016)  
The project rebuilds generator Unit 32 at Diablo Powerhouse as part of the utility's generator rebuild program. Unit 31 will be rebuilt the year after Unit 32.
- Boundary Switchyard – Generator Step-Up Transformers (6493): (\$7,156,000 in 2016)  
This project replaces the transformers used to step-up voltage and feed the transmission lines. The transformers are past their useful lifetime. Additionally, efficiency gains can be realized by matching the new transformers to the rebuilt generators.
- Skagit - Facilities Plan (6520): (\$2,265,000 in 2016)  
This project implements a comprehensive facility plan to optimize buildings and structures at two Skagit town sites. The project preserves essential facilities that support City Light'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.
- Diablo - Load Interrupters Replacement (6532): (\$3,126,000 in 2016)  
This project replaces load interrupters at Diablo Banks Generators No. 31 and 32 with Gas Insulated Switchgear. The existing 230 kV load interrupters have reached the end of their useful life.
- Ross Powerhouse – Replace Transformer Banks 42 and 44 (6541): (\$1,501,000 in 2016)  
This project funds the design and installation of two new step-up power transformer banks at Ross Powerhouse. The new transformer banks will replace the existing sixty-year-old units that exceeded their useful life and show signs of failure.□
- Ross - Governors (6562): (\$2,803,000 in 2016)  
This project replaces Governors and Exciters on all four of the Ross Powerhouse generating units.

**Transmission:** Projects in this program include transmission capacity and reliability projects to deliver power from City Light's dams to City Light's distribution system and the regional power grid. City Light owns and maintains 650 miles of transmission capacity that connect the Skagit facilities to Seattle. SCL leases additional transmission capacity to connect to the Boundary, Cedar Falls, and Tolt hydroelectric projects.

For 2016, a Budget Issue Paper added funding to support Transmission Capacity which proposes to modify spans and re-grade portions of the 90 mile D-Line transmission Right-of-Way from the Skagit

generation projects to the Seattle City Light (SCL) service area.

For 2016, the CIP budget includes \$19.7 million in funding for six projects in Transmission. **Highlights, ordered by project number, include:**

- Transmission Capacity (7011): (\$2,026,000 in 2016)  
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.
- Transmission Reliability (7104): (\$2,785,000 in 2016)  
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.
- Transmission Line Inductor Installation (8461): (\$6,958,000 in 2016)  
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 that curtail the flow of power through the Seattle area, while improving customer and asset strengths and maintaining reliability.
- Transmission Line Re-conductoring (8462): (\$7,072,000 in 2016)  
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 230 kV line to meet area reliability requirements. The project funds the re-conductoring of both the Bothell-SnoKing double circuit 230 kV line and the Delridge-Duwamish 230 kV line to increase capacity and meet regional reliability requirements.

**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 2016, the CIP includes \$248 million in funding for 58 projects in Distribution. **Highlights, ordered by project number, include:**

- Denny Substation Development (7757): (\$41,706,000 in 2016)  
This project designs and builds a 200 MVA substation on Denny Avenue. 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. This project coordinates with build out of the Denny network and construction of transmission lines to the new substation.
- Substation Transformer Replacements (7776): (\$4,558,000 in 2016)  
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 with the highest failure risk, or those presenting substation capacity limits. The project enhances system reliability by replacing aging substation transformers before they fail in service.
- Broad Street Substation – Network (8203): (\$16,754,000 in 2016)  
This ongoing project funds construction 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.
- Overhead Equipment Replacements (8351): (\$21,010,000 in 2016)

## Seattle City Light

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 and requires replacement due to the lack of spare parts. This project enhances distribution system reliability, avoiding unplanned outages or interruption of service due to equipment failure.

- Underground Equipment Replacements (8353): (\$7,681,000 in 2016)  
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 (8366): (\$10,371,000 in 2016)  
This ongoing project provides medium size electric power service connections from City Light's distribution system to customers' 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.
- Small Overhead and Underground Services (8367): (\$6,200,000 in 2016)  
This ongoing project provides small size electric power service connections from City Light's distribution system to customers' 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.
- Denny Substation – Network (8404): (\$24,349,000 in 2016)  
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 within the Denny Substation network area.
- Distribution Automation (8425): (\$3,190,000 in 2016)  
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 will provide the ability to automatically perform outage restoration, shift blocks of load to maximize efficiencies of feeders, and reconfigure the feeder grid.
- Advanced Metering Infrastructure (8426): (\$26,896,000 in 2016)  
This project replaces approximately 400,000 existing meters, residential or commercial, with Smart Meters allowing two-way communication between City Light and its customers. Smart Meters automate meter reading, increase customer service, heighten billing capacity, allow for reduced energy consumption by providing more information on use, improve outage restoration efficiency and support rate structure flexibility. Implementation of the project positions the utility to comply with NERC and FERC programs and requirements.
- Mobile Workforce Implementation (8429): (\$1,491,000 in 2016)  
This project provides mobile communication and computing equipment for City Light field workers. The project improves operational efficiencies for scheduling of crews, provides rapid revision of crew schedules during emergencies, and reduces transit time between job sites.
- Broadband – City Light (8465): (\$2,600,000 in 2016)  
This project provides funding to allow SCL to meet increased customer demand for wireless capabilities.
- Security Improvements (9202): (\$4,641,000 in 2016)  
This ongoing program plans, designs, and implements projects that improve the physical security of City Light critical facilities in order to mitigate unauthorized access and criminal activities that could cause system damage, power outages, and other related disruptions to the electrical system.
- Enterprise Geographic Information System (9957): (\$1,990,000 in 2016)  
This project investigates, evaluates, and provides a recommendation to develop a unified GIS system that meets all of the Utility's needs by replacing the two separate and

incompatible Geographic Information Systems (GIS) that City Light currently maintains which will allow integration with future software systems (such as Mobile Workforce).

**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 transportation project managers.

For 2016, a Budget Issue Paper added funding to support Transportation Streetlights which will be offset by revenue from streetlight fees.

For 2016, the CIP includes \$27.5 million in funding for 17 External Projects. **Highlights, ordered by project number, include:**

- Alaskan Way Viaduct & Seawall Replacement – Utility Relocations (8307): (\$5,964,000 in 2016)  
The project provides for the relocation of utility infrastructure in conjunction with the Washington State Department of Transportation project. This project is experiencing delays due to repairs to Bertha.
- Overhead and Underground Relocations (8369): (\$2,505,000 in 2016)  
This ongoing project relocates Seattle City Light electrical lines as required by transportation projects.
- Transportation Streetlights (8377): (\$2,740,000 in 2016)  
This ongoing project relocates Seattle City Light owned streetlights as required by City of Seattle transportation projects.
- Streetlights: Arterial, Residential and Floodlights (8378): (\$3,364,000 in 2016)  
This ongoing project provides street lighting as requested by various taxing jurisdictions and other customers. Streetlights and floodlights are provided in the public right of way, and on private property, for either public or private benefit.
- Streetlight LED Conversion Program (8441): (\$5,817,000 in 2016)  
This project upgrades streetlights with LED fixtures in order to reduce annual energy consumption and utility maintenance costs. The utility recovers costs for this project through streetlight rates.
- Streetlight Infrastructure Program (8460): (\$3,016,000 in 2016)  
This ongoing project will replace the highest priority streetlights and related underground infrastructure identified in the Streetlight Horizon Plan over the six-year planning horizon. Streetlight infrastructure replacements include poles, fixtures, conduits, hand holes, and wiring. Emphasis will be placed on standardization of fixtures, construction materials, and construction methods. This project will provide the engineering resources needed to prioritize replacements, develop estimates, and manage and track construction.
- Center City Connector Streetcar (8470): (\$401,000 in 2016)  
This SCL will provide power relocations & service for the proposed SDOT Center City Connector Streetcar project. The SDOT project is intended to link the existing North Downtown Streetcar with the First Hill Connector Streetcar.

**Central Utility Projects:** Projects in this program provide for centralized billing and customer service systems, financial and information technology systems that are critical to the utility's operation, and vehicle fleets and facilities that are not part of the power generating plant (e.g., equipment shops, service centers, and maintenance yards).

For 2016, Budget Issue Papers add funding to support Equipment Fleet Replacement, Energy Conservation, Information Technology Infrastructure and New Customer Information System.

For 2016, the CIP includes \$46.4 million in funding for 24 Central Utility Projects. **Highlights, ordered by project number, include:**

- Building Envelope Upgrades (9072): (\$1,501,000 in 2016)  
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.
- Equipment Fleet Replacement (9101): (\$5,388,000 in 2016)  
This ongoing project replaces, updates, and expands City Light's heavy duty mobile equipment fleet. This project also funds the gradual replacement of light-duty vehicles owned by City Light, including those previously leased from the Fleets & Facilities Department and now owned by City Light.
- Energy Conservation (9320): (\$954,000 in 2016)  
This ongoing project installs improvements at City Light 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.
- Information Technology Infrastructure (9915): (\$5,155,000 in 2016)  
This ongoing project funds replacement and improvement of the Utility's information technology infrastructure. Components purchased by this project include servers, network and communications equipment, disk storage, and application and operating system software.
- New Customer Information System (9937): (\$9,255,000 in 2016)  
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 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 will preserve and enhance the City's ability to continue to deliver this critical function into the future.

### Thematic Priorities

The Updated 2015-2020 City Light Strategic Plan is organized around four key objectives:

- **Improve Customer Experience and Rate Predictability** – Seattle's technology-savvy population expects City Light to efficiently manage the energy system and respond quickly to customer concerns and outages, and to be able to predict and budget their utility costs.
- **Increase Workforce Performance and Safety Practices** – The Strategic Plan gives City Light a path to proactively manage an impending wave of retirements and be able to retain highly skilled workers. City Light must also continuously improve its employee safety record that, as of the end of 2013, is ahead of target.
- **Enhance Organizational Performance** – City Light's goal is to be in the top 10% of peer

utilities on measures of efficiency and effectiveness, and to reduce baseline costs by an ongoing \$18 million per year, at a minimum, starting in 2015.

- **Continue Conservation and Environmental Stewardship Leadership** – The Strategic Plan ensures that the utility remains the nation’s greenest utility. City Light invests in research and strategic initiatives such as promoting electric vehicles that will help it adapt to the impacts of climate change. The utility is also looking at ways to strengthen its financial resources in environmentally-responsible ways such as optimizing its ability to sell excess power on the wholesale energy market, among other things.

CIP projects implement these objectives in the following ways:

- **Maintaining existing infrastructure and supporting basic operations** – The majority of CIP projects involve maintaining existing systems and equipment or supporting the ongoing daily operations of the utility. These projects include major maintenance work that extends the life and function of facilities and equipment, scheduled replacements of old and failing equipment, supporting customer connections, and addressing unexpected system outages. Some projects respond to external conditions, such as relocations due to major transportation projects. The CIP also includes projects for renovating streetlights and underground cables.
- **Upgrading capacity and services to provide new functionality** – CIP Projects also increase the utility’s generation and distribution capacity, and provide new functionality for management and customer service systems. The 2016-2021 CIP continues funding for these capacity-related projects, such as the Customer Information System, the Denny Substation, Automated Metering Infrastructure, and the Energy Management System.
- **Addressing licensing, regulatory and safety requirements** – Federal licenses governing the operation of the utility’s dams require a number of environmental, historic preservation, and recreation mitigation measures. In addition, federal regulation of the transmission grid and energy market transactions requires system upgrades and improvements. The CIP includes projects that improve safety, proactively reduce infrastructure risks, and address transmission grid improvements and regulatory compliance.
- **Maintaining the utility’s information technology systems** – The electric utility industry relies heavily on information technology systems. IT systems help SCL provide real time management and automation of operations; design and digitally record utility systems and assets; regulate power across the regional transmission grid; manage financial transactions on the energy market; and increase business efficiencies throughout the organization. The CIP includes projects that maintain the hardware and software necessary to provide these functions, and implements Strategic Plan initiatives that improve cyber security and disaster recovery.

### Project Selection Criteria

Three years ago, City Light completed the most extensive planning process ever undertaken by the utility to serve as a road map for how to best meet customers’ current and future needs. The plan was the product of a process launched by the mayor and City Council in 2010 and overseen by a newly chartered City Light Review Panel representing key customer groups.

This 2016 CIP is based on the 2015 Strategic Plan update. City Light is currently preparing the 2017-



2022 Strategic Plan. The Strategic Plan will be submitted to Mayor and Council for approval in the spring. The new Strategic Plan will be reflected in the 2017-2022 CIP.

Project ideas to implement the Strategic Plan and accomplish baseline service delivery come from throughout SCL. 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, customer service) prioritize capital spending within their divisions and then submit recommended projects to a centralized capital budgeting system.

City Light management compares proposals against criteria that evaluate the projects’ costs, benefits, and risks. The utility gives priority to mandatory requirements and projects currently underway before considering future projects and new initiatives. Utility staff develops business cases to document the project expectations and rationale and provide a cost-benefit analysis of alternatives.

Availability of funding and labor resources constrains 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. City Light intends to revisit the adopted Strategic Plan every two years to maintain transparency and set direction for future CIP development.

**CIP Budget Control Levels in the 2016 Proposed Budget**

The dollar amounts shown in the CIP are total project costs to be capitalized and include both direct costs and associated overhead costs. Overhead costs include a share of the department’s support functions (such as finance, administration, and human resources), employee benefits, and interest incurred during construction.

Because City Light requests budget authority for indirect overhead costs in Operating Budget Control Levels, the total project allocations in the CIP Programs are higher than the corresponding CIP Budget Control Levels in the 2016-2021 Proposed Budget. A table explaining how the 2016-2021 Proposed CIP program totals align with CIP Budget Control Levels in the 2016-2021 Proposed Budget is shown below.

**CIP Programs -- Project Totals for 2016 (\$1,000s)**

**Loadings and Overhead Estimates (appropriated separately in Operating BCLs)**

Direct Costs (in \$1s)		CIP Programs -- Project Totals for 2016					2016 Appropriations
		Power Supply	Transmission	Distribution	External Projects	Central Utility Projects	
<b>CIP Budget Control Levels</b>	Power Supply & Environmental Affairs (SCL 250)	61,226	0	0	0	13,231	74,457
	Transmission and Distribution (SCL360)	0	17,202	145,456	0	0	162,658

## Seattle City Light

Customer Focused -CIP (SCL370)		0	45,201	21,430	6,498	73,129
Financial Services (SCL550)	0	0	0	0	20,302	20,302
<b>Total Direct Costs</b>	<b>61,226</b>	<b>17,202</b>	<b>190,657</b>	<b>21,430</b>	<b>40,031</b>	<b>330,546</b>

### Loadings and Overhead Estimates (appropriated separately in Operating BCLs)

Interest During Construction	1,198	110	3,926	261	569	6,064
Paid Time Off	1,152	265	4,940	511	692	7,561
Fringe Benefits	1,996	460	8,568	886	1,200	13,111
Payroll Tax (FICA)	458	110	2,606	259	264	3,697
Material	5	10	2,626	615	-	3,257
Transportation	123	186	3,838	426	36	4,608
Shop Administrative & General	29	-	307	-	17	352
	5,809	1,312	30,718	3,139	3,554	44,529
<b>Total Overhead</b>	<b>10,770</b>	<b>2,453</b>	<b>57,529</b>	<b>6,097</b>	<b>6,332</b>	<b>83,181</b>
<b>CIP Project Allocations</b>	<b>71,996</b>	<b>19,655</b>	<b>248,186</b>	<b>27,527</b>	<b>46,363</b>	<b>413,727</b>

City Light typically abandons unspent capital appropriation authority in the CIP Budget Control Levels at the end of each year and re-appropriates the necessary capital authority in the following year's budget. In order to manage total spending on certain high-profile projects, the utility manages their total "lifetime" appropriations and carries forward their unspent capital appropriation authority into subsequent years. This allows for careful review of project changes, and easier tracking of total budget and spending on these projects. The 2016-2021 Proposed CIP includes 36 "lifetime" appropriation projects. Examples include:

- Boundary – Licensing Mitigation (6987)
- Alaskan Way Viaduct and Seawall Replacement – Utility Relocations (8307)
- Advanced Metering Infrastructure (8426)
- Mobile Workforce Implementation (8429)
- Technical Training Center Development (9230)
- Enterprise Geographic Information System (9957)

Because unspent “lifetime” budget authority is carried forward from year to year, allocations for these projects can vary significantly from the spending plans shown on the project pages. The spending plans reflect the anticipated scheduled spending on these projects. Other projects may also show variance between budgeted allocations and spending plans because of encumbrances for multi-year contracts.

### Summary of Upcoming Budget Issues and Challenges

City Light faces a series of challenges common to electric utilities:

- Infrastructure constructed in the 50’s and 60’s is now reaching the end of its useful life.
- Retirements of the boomer generation are causing gaps in institutional knowledge and experience.
- Material procurement is becoming more complex due to inflation in commodity prices such as copper and the movement of manufacturing of large electrical equipment overseas.
- The impacts of transportation projects and franchise city undergrounding initiatives are difficult to plan for because the external agencies sponsoring these projects have relatively short planning horizons and sometimes have difficulty staying on schedule.
- Security risks continue to be a challenge and both physical and cyber security are subject to an expanding list of regulatory requirements.
- Requirements for environmental mitigation, permitting, and construction site mitigation are difficult to accurately estimate and involve substantial schedule risk.
- Licensing requirements are key to the continued operation of City Light’s hydro generation assets, and these requirements can change over time.
- One challenge that contains substantial promise of improvement is the movement to digital electrical operations. The technology exists for great efficiency improvements by use of real-time monitoring and control systems.

City Light is well positioned to meet these challenges through implementation of the carefully planned portfolio of programs and projects in the Strategic Plan.

### Future Projects/What is on the Horizon

The updated 2015-2020 Strategic Plan highlights two new initiatives that will provide enhanced services and efficiencies. Brief descriptions of new CIP projects are also listed below. Highlights for existing baseline projects are included in the CIP Highlights section.

#### Distribution automation technology

New technologies are now available to give City Light the ability to actively monitor and manage its distribution system in real time. This initiative will reduce outage duration and frequency, and improve safety and customer service. The system utilizes a network of field equipment and software to actively monitor and respond to system malfunctions. The new system then automatically restores electric service, while also managing demand response and optimizing energy delivery.

#### Service centers master plan

City Light’s service centers are the backbone of its operations, directly impacting its mission to provide reliable, low-cost power to customers. Many essential functions are located in the service centers including line trucks and dispatching; materials and equipment; shipping and receiving; staging of supplies; and shops operations and fabrication. Built in the 1950s and 1920s, respectively, City Light’s North and South Service Centers have exceeded their intended operational lifespans. The following challenges exist at the service centers:

- Building systems are aging and increasingly unreliable.
- Service yard areas are constrained and highly congested, and there is little opportunity to accommodate growth or reconfigure spaces to meet changing needs.

- The South Service Center sits in an area of Seattle that has a high susceptibility to soil liquefaction during an earthquake, which would have significant impacts on the continuity of operations following an earthquake.

This initiative will carry out a site master planning process to evaluate options for making improvements to the current facilities, or potentially consolidate them into one centralized location.

### **Anticipated Operating Expenses Associated with Capital Facilities Projects**

Operations and maintenance costs, where identified, are included in City Light's operating budget. In some projects, City Light identified operations and maintenance costs of zero or did not calculate a number (N/C). In these cases, the operating cost impacts of the project are either insignificant or are offset by cost savings realized by other projects.

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>A1 Power Supply - Boundary</b>					<b>BCL/Program Code:</b>			<b>SCL250-A1</b>	
Boundary - Access Road Stability Improvements (6615)	0	0	519	979	103	0	0	0	1,601
Boundary - DC Battery System & Charge Modernization (6566)	0	3	264	146	0	0	0	0	413
Boundary - Entrance Improvements (6601)	0	256	1,945	0	0	0	0	0	2,201
Boundary - Licensing Mitigation (6987)	16,714	40,043	14,294	23,585	14,487	13,386	13,545	15,135	151,189
Boundary - New Unit - 57 (6533)	0	0	0	97	271	1,177	3,351	13,822	18,718
Boundary - Unit 55 Exciter Replacement (6602)	0	199	228	72	76	0	0	0	575
Boundary - Unit 56 Exciter Replacement (6603)	0	1,250	1,198	95	0	0	0	0	2,543
Boundary Dam - Instrumentation Upgrade and Integration (6343)	9,727	1,093	278	0	0	0	0	0	11,098
Boundary Facility - Minor Improvements Program (6401)	14,958	3,481	1,414	1,358	2,656	2,906	10,191	6,848	43,812
Boundary Powerhouse - Transformer Bank Rockfall Mitigation (6485)	502	54	0	0	0	248	66	12,301	13,171
Boundary Powerhouse - Unit 51 Generator Rebuild (6351)	0	0	838	11,224	4,377	3,916	910	950	22,215
Boundary Powerhouse - Unit 52 Generator Rebuild (6535)	0	0	0	0	1,171	10,979	4,936	2,141	19,227
Boundary Powerhouse - Unit 54 Generator Rebuild (6353)	0	0	0	656	11,423	3,811	471	0	16,361
Boundary Powerhouse - Unit 56 Generator Rebuild (6354)	11,261	14,620	88	0	0	0	0	0	25,969
Boundary Powerhouse - Unit 56 Turbine Runner Replacement (6490)	10,106	3,311	73	0	0	0	0	0	13,490
Boundary Switchyard - Generator Step-up Transformers (6493)	700	5,504	7,156	6,760	6,328	6,512	6,235	8,132	47,327
Landis and Gyr RTU Modernization Boundary, CF, Skagit (6565)	0	0	0	473	757	572	0	0	1,802
<b>A1 Power Supply - Boundary</b>	<b>63,968</b>	<b>69,814</b>	<b>28,295</b>	<b>45,445</b>	<b>41,649</b>	<b>43,507</b>	<b>39,705</b>	<b>59,329</b>	<b>391,712</b>
<b>A2 Power Supply - Skagit</b>					<b>BCL/Program Code:</b>			<b>SCL250-A2</b>	
Diablo - Incline Rehabilitation (6588)	0	0	0	0	110	72	2,315	0	2,497

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### 2016 - 2021 Proposed Capital Improvement Program

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Diablo - Load Interrupters Replacement (6532)	52	0	3,126	184	0	0	0	0	3,362
Diablo - Replace AC Panels (6584)	0	178	528	0	0	0	0	0	706
Diablo - Replace Bank Transformers (6589)	0	0	0	0	0	0	113	922	1,035
Diablo Dam - Spill Gate Trunnion Upgrades (6610)	0	251	120	128	135	143	150	158	1,085
Diablo Facility - Incline Lift Rehabilitation (6457)	0	0	0	0	0	0	30	59	89
Diablo Facility - Lines Protection Upgrades (6483)	3,486	1,658	405	1,404	97	0	0	0	7,050
Diablo Facility - Storage Building (6481)	1,026	1,569	0	0	0	0	0	0	2,595
Diablo Powerhouse - Crane Wheel Replacements (6471)	288	1,263	10	0	0	0	0	0	1,561
Diablo Powerhouse - Rebuild Generator Unit 31 (6422)	71	1	5,101	3,456	370	124	0	0	9,123
Diablo Powerhouse - Rebuild Generator Unit 32 (6423)	648	12,708	11,577	5,892	3,316	125	0	0	34,266
Gorge - 240V AC Station Service Switchgear Replacement (6581)	0	0	629	454	48	51	0	0	1,182
Gorge Powerhouse - Fire Protection Improvements (6326)	0	74	87	310	253	146	156	170	1,196
Newhalem - Generator 20/Support Facility Rebuild (6479)	2,294	1,742	762	0	0	0	0	0	4,798
Ross - 480V AC Station Service Switchgear Replacement (6580)	0	0	0	0	0	110	5,629	0	5,739
Ross - Exciters 41-44 (6564)	0	0	237	3,005	764	385	0	0	4,391
Ross - Governors (6562)	140	1,195	2,803	563	0	0	0	0	4,701
Ross - Powerhouse Rockfall Mitigation (6577)	0	0	0	109	411	54	4,623	0	5,197
Ross - R1 and R2 Relay and Instrumentation Upgrade (6582)	0	0	0	108	114	472	134	0	828
Ross - Rock Slide Area Improvements (6516)	5,260	3,167	317	26	0	0	0	0	8,770
Ross Dam - AC/DC Distribution System Upgrade (6373)	1,820	694	546	2,051	2,285	1,245	0	0	8,641
Ross Dam - New Access Road from SR20 to Dam (6452)	0	0	0	0	0	0	11,847	2,293	14,140

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### 2016 - 2021 Proposed Capital Improvement Program

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Ross Powerhouse - Programmable Language Controller Upgrade (6376)	0	175	283	561	0	0	0	0	1,019
Ross Powerhouse - Replace Transformer Banks 42 and 44 (6541)	255	12,713	1,501	841	0	0	0	0	15,310
Skagit - Babcock Creek Crossing (6514)	32	390	646	95	39	41	43	45	1,331
Skagit - Boat Facility Improvements (6540)	0	380	1,236	520	0	0	0	0	2,136
Skagit - DC Battery System & Charge Modernization (6583)	0	260	117	17	0	0	0	0	394
Skagit - Facilities Energy Conservation Program (6515)	4,931	3,430	1,075	0	0	0	0	0	9,436
Skagit - Facilities Plan (6520)	2,679	466	2,265	1,870	1,087	0	0	0	8,367
Skagit - Relicensing (6986)	0	0	0	403	1,835	3,528	4,736	9,747	20,249
Skagit - Sewer System Rehabilitation (6232)	787	5,004	730	80	1,266	0	0	0	7,867
Skagit Facility - Minor Improvements Program (6405)	18,796	3,551	2,410	2,276	5,580	2,266	9,166	13,704	57,749
Skagit Licensing Mitigation (6991)	36,126	1,067	249	69	70	129	118	134	37,962
Skagit Powerhouses - Install Protection Relays (6415)	4,101	435	854	1,422	1,358	1,211	1,316	961	11,658
<b>A2 Power Supply - Skagit</b>	<b>82,792</b>	<b>52,371</b>	<b>37,614</b>	<b>25,844</b>	<b>19,138</b>	<b>10,102</b>	<b>40,376</b>	<b>28,193</b>	<b>296,430</b>
<b>A3 Power Supply - Cedar Falls - Tolt</b>									
						<b>BCL/Program Code:</b>		<b>SCL250-A3</b>	
Cedar Falls - Bank 6 Replacement (6573)	0	0	0	0	1,420	2,281	861	0	4,562
Cedar Falls - DC Battery System and Charge Modernization (6572)	0	107	28	24	0	0	0	0	159
Cedar Falls - Masonry Dam Stream Flow System Retrofit (6534)	0	141	61	0	0	0	0	0	202
Cedar Falls - New Generator 5/6 Exciters (6531)	0	210	0	0	213	112	0	0	535
Cedar Falls Powerhouse - Penstock Stabilization (6358)	2,084	0	0	318	542	186	0	0	3,130
Cedar Falls Powerhouse - Unit 5/6 Generator Protective Relay (6450)	1,025	454	532	0	0	0	0	0	2,011
Cedar Falls Powerhouse - Valvehouse Rehabilitation (6324)	0	0	0	0	0	0	659	3,184	3,843

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### 2016 - 2021 Proposed Capital Improvement Program

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Cedar Falls/South Fork Tolt - Minor Improvements Program (6406)	6,037	751	1,231	1,237	1,174	1,195	2,346	2,973	16,944
South Fork Tolt - DC Battery System & Charge Modernization (6570)	0	7	28	24	0	0	0	0	59
<b>A3 Power Supply - Cedar Falls - Tolt</b>	9,146	1,670	1,880	1,603	3,349	3,774	3,866	6,157	31,445
<b>A4 Power Supply - Power Supply Other</b>						<b>BCL/Program Code:</b>		<b>SCL250-A4</b>	
Endangered Species Act Mitigation (6990)	13,491	2,213	1,064	1,076	1,097	1,118	1,147	1,167	22,373
Generation Federal Reliability Standards Improvements (6470)	9,518	32	10	10	11	11	11	0	9,603
Hydro Project Spill Containment (6530)	528	986	668	799	631	642	653	0	4,907
NWPP Market Coordination (9971)	0	10	11	11	0	0	0	0	32
Power Production - Network Controls (6385)	3,454	1,006	1,513	683	69	0	0	0	6,725
SMT AutoLab (6600)	0	0	0	262	484	0	0	0	746
Special Work Equipment - Generation Plant (6102)	11,302	1,836	941	929	951	1,429	1,464	1,038	19,890
<b>A4 Power Supply - Power Supply Other</b>	38,293	6,083	4,207	3,770	3,243	3,200	3,275	2,205	64,276
<b>B1 Transmission - Transmission</b>						<b>BCL/Program Code:</b>		<b>SCL360-B1</b>	
Denny Substation Transmission Lines (7125)	618	1,701	257	246	6,814	2,195	12,070	42,354	66,255
Transmission Capacity (7011)	10,736	22	2,026	23	23	24	24	11	12,889
Transmission Inter-Agency (7105)	2,061	542	557	566	580	594	605	613	6,118
Transmission Line Inductor Installation (8461)	688	3,531	6,958	2,681	4,698	27	0	0	18,583
Transmission Line Reconductoring (8462)	178	745	7,072	1,356	507	0	0	0	9,858
Transmission Reliability (7104)	19,365	3,071	2,785	2,895	2,970	3,046	3,115	2,676	39,923
<b>B1 Transmission - Transmission</b>	33,646	9,612	19,655	7,767	15,592	5,886	15,814	45,654	153,626
<b>C1 Distribution - Substations</b>						<b>BCL/Program Code:</b>		<b>SCL360-C1</b>	
Denny Substation Development (7757)	74,243	25,572	41,706	42,577	25,402	0	0	0	209,500
East Pine Substation - Transformer Replacements (7811)	107	4,900	48	0	0	0	0	0	5,055

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## 2016 - 2021 Proposed Capital Improvement Program



## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Interbay Substation - Development (7756)	2,489	0	0	0	0	74	78	390	3,031
Relaying Improvements (7753)	24,533	4,914	4,413	3,927	4,526	5,484	4,495	4,929	57,221
Replace Breakers BPA Covington and Maple Valley Substations (7121)	546	13	13	14	14	14	14	11	639
Substation Automation (8424)	4,458	987	756	952	993	1,037	1,054	637	10,874
Substation Breaker Replacements and Reliability Additions (7779)	21,585	6,153	5,025	6,155	4,798	5,564	5,152	5,987	60,419
Substation Capacity Additions (7751)	8,651	2,371	1,568	1,802	1,966	2,201	2,608	2,059	23,226
Substation Equipment Improvements (7752)	52,756	7,593	4,522	5,139	5,950	6,723	6,727	6,458	95,868
Substation Plant Improvements (7750)	7,919	848	867	909	927	946	921	1,177	14,514
Substation Transformer Replacements (7776)	3,987	2,175	4,558	359	2,185	2,701	3,683	4,986	24,634
Substations Demand Driven Improvements (7755)	5,810	5	5	5	5	5	6	6	5,847
Substations Oil Containment (7783)	4	291	280	332	339	334	341	217	2,138
<b>C1 Distribution - Substations</b>	<b>207,088</b>	<b>55,822</b>	<b>63,761</b>	<b>62,171</b>	<b>47,105</b>	<b>25,083</b>	<b>25,079</b>	<b>26,857</b>	<b>512,966</b>
<b>C2 Distribution - Network</b>						<b>BCL/Program Code:</b>		<b>SCL360-C2</b>	
Broad Street Substation - Network (8203)	68,374	10,918	16,754	2,883	2,390	3,653	4,523	8,872	118,367
Denny Substation - Network (8404)	2,447	20,718	24,349	4,789	3,813	3,498	10,878	12,402	82,894
First Hill - Network (8301)	12,371	2,172	2,446	2,574	2,621	2,670	2,692	1,960	29,506
First Hill - Network Load Transfer (8407)	0	0	0	0	0	911	915	8,060	9,886
Massachusetts Street Substation - Networks (8202)	29,639	2,927	3,116	3,971	4,039	4,105	4,439	3,173	55,409
Network Hazeltine Upgrade (8129)	5,990	599	631	527	535	543	761	714	10,300
Network Maintenance Hole and Vault Rebuild (8130)	51,648	2,003	2,439	3,379	3,436	3,491	3,493	3,634	73,523
Union Street Substation Networks (8201)	25,784	1,429	2,415	2,481	2,546	2,591	2,704	2,894	42,844
University Substation - Network (8464)	1,294	1,035	457	371	377	383	467	479	4,863
<b>C2 Distribution - Network</b>	<b>197,547</b>	<b>41,801</b>	<b>52,607</b>	<b>20,975</b>	<b>19,757</b>	<b>21,845</b>	<b>30,872</b>	<b>42,188</b>	<b>427,592</b>

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### 2016 - 2021 Proposed Capital Improvement Program

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>C3 Distribution - Radial</b>					<b>BCL/Program Code:</b>			<b>SCL360-C3</b>	
Automated Utility Design Implementation (9950)	2,595	2,740	644	732	750	0	0	0	7,461
Broadband - City Light (8465)	499	2,529	2,600	2,762	2,716	2,766	3,148	3,161	20,181
Dallas Ave. 26 kV Crossing (8322)	816	1,583	459	1	145	13	1	1	3,019
Distribution Automation (8425)	271	2,460	3,190	4,370	2,167	2,768	2,882	2,951	21,059
Laurelhurst - Underground Rebuild (8373)	6,318	2,788	857	0	0	0	0	0	9,963
Mobile Workforce Implementation (8429)	0	2,543	1,491	1,910	1,082	0	0	0	7,026
Overhead 26kV Conversion (8358)	12,216	1,997	2,097	1,705	1,720	1,713	1,735	1,750	24,933
Overhead Customer Driven Capacity Additions (8355)	31,172	3,222	3,521	3,772	3,829	4,855	5,681	4,005	60,057
Overhead Equipment Replacements (8351)	62,673	21,227	21,010	23,689	21,033	22,501	22,990	23,439	218,562
Overhead System Capacity Additions (8356)	27,485	2,585	2,515	2,626	2,556	2,471	2,601	3,291	46,130
PCB Transformer Replacement (8463)	0	683	805	733	738	741	749	201	4,650
Pole Attachment Requests Preparation Work (8452)	5,480	2,991	3,489	3,515	3,592	3,638	4,035	4,552	31,292
Underground 26kV Conversion (8362)	4,859	1,631	1,633	1,666	2,006	2,492	2,524	2,496	19,307
Underground Customer Driven Capacity Additions (8360)	24,291	3,013	2,918	2,139	2,169	2,330	2,221	2,214	41,295
Underground Equipment Replacements (8353)	25,437	13,166	7,681	5,898	4,990	5,317	5,705	9,764	77,958
Underground System Capacity Additions (8361)	25,946	2,791	2,715	2,826	2,864	2,948	2,384	4,256	46,730
<b>C3 Distribution - Radial</b>	<b>230,058</b>	<b>67,949</b>	<b>57,625</b>	<b>58,344</b>	<b>52,357</b>	<b>54,553</b>	<b>56,656</b>	<b>62,081</b>	<b>639,623</b>
<b>C4 Distribution - Service Connections</b>					<b>BCL/Program Code:</b>			<b>SCL370-C4</b>	
Advanced Metering Infrastructure (8426)	0	14,002	26,896	33,640	10,791	0	0	0	85,329
Large Overhead and Underground Services (8365)	17,536	3,638	2,947	2,857	2,966	4,114	3,172	4,998	42,228
Major Emergency (8380)	2,144	107	256	259	263	266	270	1,375	4,940
Medium Overhead and Underground Services (8366)	81,966	10,754	10,371	9,879	9,756	9,256	9,044	9,301	150,327
Meter Additions (8054)	62,335	2,919	2,246	2,229	1,934	1,589	1,371	1,570	76,193

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### 2016 - 2021 Proposed Capital Improvement Program





## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>D3 External Projects - Customer Other</b>					<b>BCL/Program Code:</b>			<b>SCL370-D3</b>	
Creston-Nelson to Intergate East Feeder Installation (8430)	5,923	243	339	299	11	0	0	0	6,815
Neighborhood Voluntary Undergrounding Program (8383)	277	458	16	17	17	17	40	41	883
<b>D3 External Projects - Customer Other</b>	6,200	701	355	316	28	17	40	41	7,698
<b>E1 Central Utility Projects - Customer and Billing</b>					<b>BCL/Program Code:</b>			<b>SCL370-E1</b>	
New Customer Information System (9937)	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>E1 Central Utility Projects - Customer and Billing</b>	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>E2 Central Utility Projects - Finance and IT Systems</b>					<b>BCL/Program Code:</b>			<b>SCL550-E2</b>	
Enterprise Document Management System (9962)	1,938	3,001	1,033	1,783	1,814	1,813	1,399	1,181	13,962
Enterprise Performance Management (9933)	4,504	865	684	0	0	0	0	0	6,053
Information Technology Infrastructure (9915)	44,556	4,379	5,155	3,342	3,409	3,478	3,547	3,618	71,484
IT Security Upgrades (9960)	1,185	1,426	600	560	1,114	1,137	1,161	576	7,759
PeopleSoft Reimplementation - City Light (9970)	0	3,000	14,484	7,677	963	0	0	0	26,124
<b>E2 Central Utility Projects - Finance and IT Systems</b>	52,183	12,671	21,956	13,362	7,300	6,428	6,107	5,375	125,382
<b>E3 Central Utility Projects - Fleets and Facilities</b>					<b>BCL/Program Code:</b>			<b>SCL250-E3</b>	
Bothell Substation Environmental Remediation (9231)	608	985	467	0	0	0	0	0	2,060
Building Envelope Upgrades (9072)	6,902	1,822	1,501	1,512	1,412	1,245	1,258	1,288	16,940
Denny Substation Tenant Improvements (9235)	0	3,100	201	1,994	121	0	0	0	5,416
Energy Conservation (9320)	2,016	703	954	315	323	110	113	116	4,650
Environmental Safeguarding and Remediation of Facilities (9152)	1,197	48	49	54	55	56	57	57	1,573
Equipment Fleet Replacement (9101)	80,680	8,589	5,388	7,519	7,694	7,202	7,207	7,214	131,493
Facilities Infrastructure Improvements (9156)	2,391	369	371	379	388	63	63	64	4,088
Facilities Regulatory Compliance (9151)	838	700	381	337	345	348	356	365	3,670
Georgetown Steamplant Access Road (9233)	0	0	12	0	0	0	0	0	12

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## 2016 - 2021 Proposed Capital Improvement Program

## Project Summary

<b>BCL/Program Name</b>									
<b>Project Title &amp; ID</b>	<b>LTD Actuals</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Miscellaneous Building Improvements (9007)	10,138	1,183	1,119	1,159	1,186	1,324	2,748	2,814	21,671
North and South Service Center Improvements (9107)	33,610	793	313	265	271	813	3,929	5,320	45,314
Office Furniture and Equipment Purchase (9103)	18,878	686	524	683	699	1,102	1,128	1,155	24,855
Safety Modifications (9006)	3,514	1,279	1,290	1,300	1,329	1,359	1,351	1,381	12,803
Seismic Mitigation (9134)	5,350	65	31	87	45	93	95	95	5,861
Service Center Development Project (9232)	0	0	0	0	0	59,733	40,349	0	100,082
Special Work Equipment - Shops (8389)	1,160	292	293	300	307	0	0	0	2,352
Substation Comprehensive Improvements (9161)	3,703	199	198	236	236	258	263	267	5,360
Technical Training Center Development (9230)	1,567	11,179	902	307	85	0	0	0	14,040
Workplace and Process Improvement (9159)	4,398	1,335	1,158	1,070	260	852	1,083	1,436	11,592
<b>E3 Central Utility Projects - Fleets and Facilities</b>	176,950	33,327	15,152	17,517	14,756	74,558	60,000	21,572	413,832
<b>Department Total*:</b>	1,704,069	549,970	413,727	393,526	326,522	320,976	351,426	382,007	4,442,223

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

**2016 - 2021 Proposed Capital Improvement Program**

Seattle City Light

Fund Summary

Fund Name & Code	LTD Actuals	2015	2016	2017	2018	2019	2020	2021	Total
City Light Fund (41000)	1,704,069	549,970	413,727	393,526	326,522	320,976	351,426	382,007	4,442,223
<b>Department Total*:</b>	1,704,069	549,970	413,727	393,526	326,522	320,976	351,426	382,007	4,442,223

\*Amounts in thousands of dollars

# Seattle City Light

## Advanced Metering Infrastructure

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8426	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	14,002	26,896	33,640	10,791	0	0	0	85,329
<b>Total:</b>	0	14,002	26,896	33,640	10,791	0	0	0	85,329
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	14,002	26,896	33,640	10,791	0	0	0	85,329
<b>Total*:</b>	0	14,002	26,896	33,640	10,791	0	0	0	85,329
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		5,120	22,896	30,640	20,291	3,500	0	0	82,447
<b>Total:</b>		5,120	22,896	30,640	20,291	3,500	0	0	82,447

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Alaskan Way Viaduct and Seawall Replacement - Utility Relocs

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2002
<b>Project ID:</b>	8307	<b>End Date:</b>	Q4/2021
<b>Location:</b>	SR 99 / Battery St		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	7
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	82,393	52,634	5,964	36,171	24,338	4,648	2,486	1,319	209,953
<b>Total:</b>	82,393	52,634	5,964	36,171	24,338	4,648	2,486	1,319	209,953
<b>Fund Appropriations/Allocations</b>									
City Light Fund	82,393	52,634	5,964	36,171	24,338	4,648	2,486	1,319	209,953
<b>Total*:</b>	82,393	52,634	5,964	36,171	24,338	4,648	2,486	1,319	209,953
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		13,873	23,163	36,171	24,338	4,648	2,486	1,319	105,998
<b>Total:</b>		13,873	23,163	36,171	24,338	4,648	2,486	1,319	105,998

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Asset Investment and Optimization

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	New Investment	<b>Start Date:</b>	Q1/2021
<b>Project ID:</b>	9968	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This project provides development and deployment of a software tool that will enable City Light to perform analytics on its electrical assets; predicting end of life, and performing risk analysis and investment planning to minimize risk for the utility. This project also provides a software tool with the ability to run multiple funding scenarios and sensitivity analyses to create a consistent and long-term approach that can be easily modified when parameters change.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	0	3,374	3,374
<b>Total:</b>	0	0	0	0	0	0	0	3,374	3,374
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	0	3,374	3,374
<b>Total*:</b>	0	0	0	0	0	0	0	3,374	3,374

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Automated Utility Design Implementation

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	9950	<b>End Date:</b>	Q4/2018
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project purchases and installs Automatic Utility Design, a new engineering design software tool to replace outdated drafting software, which is no longer supported by the vendor. The AUD software will provide significant design and production efficiencies at a time when the engineering work load is increasing because of a shift to the engineers of production tasks. Additionally, the AUD software will enforce common North and South Service Center engineering practices and procedures and provide an essential interface with WAMS (Work and Asset Management System) and OMS (Outage Management System).

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,595	2,740	644	732	750	0	0	0	7,461
<b>Total:</b>	2,595	2,740	644	732	750	0	0	0	7,461
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,595	2,740	644	732	750	0	0	0	7,461
<b>Total*:</b>	2,595	2,740	644	732	750	0	0	0	7,461
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		430	644	1,032	1,050	0	0	0	3,156
<b>Total:</b>		430	644	1,032	1,050	0	0	0	3,156

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Bothell Substation Environmental Remediation

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9231	<b>End Date:</b>	Q4/2016
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	608	985	467	0	0	0	0	0	2,060
<b>Total:</b>	608	985	467	0	0	0	0	0	2,060
<b>Fund Appropriations/Allocations</b>									
City Light Fund	608	985	467	0	0	0	0	0	2,060
<b>Total*:</b>	608	985	467	0	0	0	0	0	2,060
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		943	467	0	0	0	0	0	1,410
<b>Total:</b>		943	467	0	0	0	0	0	1,410

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary - Access Road Stability Improvements

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6615	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project provides construction of a substantial slope stabilization (design tbd, pending geotechnical report) in the area of the cut to limit maintenance inputs, insure continued access to the powerhouse and downstream areas, 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. This causes a maintenance issue for the crews as cleaning behind the existing containment line of ecology blocks at either road edge is difficult. There is also believed to be a risk that the slope could fail in a more conclusive fashion and block access to the downstream area and powerhouse. Additionally the upslope interceptor ditch (a concrete channel) has suffered undermining erosion causing the concrete to subside and not perform well at channelizing and conveying sheet flow away from the slope face.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	519	979	103	0	0	0	1,601
<b>Total:</b>	0	0	519	979	103	0	0	0	1,601
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	519	979	103	0	0	0	1,601
<b>Total*:</b>	0	0	519	979	103	0	0	0	1,601
<b>Spending Plan by Fund</b>									
City Light Fund		18	519	979	103	0	0	0	1,619
<b>Total:</b>		18	519	979	103	0	0	0	1,619

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary - DC Battery System & Charge Modernization

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6566	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will replace the existing DC battery system at Boundary.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	3	264	146	0	0	0	0	413
<b>Total:</b>	0	3	264	146	0	0	0	0	413
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	3	264	146	0	0	0	0	413
<b>Total*:</b>	0	3	264	146	0	0	0	0	413
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	264	146	0	0	0	0	410
<b>Total:</b>		0	264	146	0	0	0	0	410

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Boundary - Entrance Improvements

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6601	<b>End Date:</b>	Q4/2016
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will make the security entrance to the Boundary Hydro Project safer for employees, working at the site, for the security guard, and for visitors. The access road to the security gate will be realigned so the guard station can be accessed between lanes of incoming and outgoing traffic instead of from the road shoulder. This will increase the guards' view of approaching traffic and will also allow traffic more time to slow down when approaching the guard station. A permanent building will be installed with water service, a restroom, and an electrical room. New signage will also be installed.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	256	1,945	0	0	0	0	0	2,201
<b>Total:</b>	0	256	1,945	0	0	0	0	0	2,201
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	256	1,945	0	0	0	0	0	2,201
<b>Total*:</b>	0	256	1,945	0	0	0	0	0	2,201
<b>Spending Plan by Fund</b>									
City Light Fund		174	1,945	0	0	0	0	0	2,119
<b>Total:</b>		174	1,945	0	0	0	0	0	2,119

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary - Licensing Mitigation

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	New Investment	<b>Start Date:</b>	Q1/2009
<b>Project ID:</b>	6987	<b>End Date:</b>	Q4/2025
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	16,714	40,043	14,294	23,585	14,487	13,386	13,545	15,135	151,189
<b>Total:</b>	16,714	40,043	14,294	23,585	14,487	13,386	13,545	15,135	151,189
<b>Fund Appropriations/Allocations</b>									
City Light Fund	16,714	40,043	14,294	23,585	14,487	13,386	13,545	15,135	151,189
<b>Total*:</b>	16,714	40,043	14,294	23,585	14,487	13,386	13,545	15,135	151,189
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		822	24,742	29,105	19,882	16,396	14,055	15,135	120,137
<b>Total:</b>		822	24,742	29,105	19,882	16,396	14,055	15,135	120,137

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Boundary - New Unit - 57

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6533	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will build a new hydro-generator unit (Unit 57) at Boundary Dam. The new unit will be used for exclusive load balancing, reducing the wear and tear on the existing units 51-56 which allows for steady state operation minimizing Total Dissolved Gas values in certain spill conditions. Instead of wasting water resources to spill, this new unit will provide more power production.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	97	271	1,177	3,351	13,822	18,718
<b>Total:</b>	0	0	0	97	271	1,177	3,351	13,822	18,718
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	97	271	1,177	3,351	13,822	18,718
<b>Total*:</b>	0	0	0	97	271	1,177	3,351	13,822	18,718
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Boundary - Unit 55 Exciter Replacement

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6602	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project installs a new electrical exciter for the Boundary Powerhouse Unit 55 Generator. A recent rewind has increased the generating capacity of the unit, and an upgraded exciter is required to reliably realize the increased capacity.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		0	199	228	72	76	0	0	0	575
<b>Total:</b>		0	199	228	72	76	0	0	0	575
<b>Fund Appropriations/Allocations</b>										
City Light Fund		0	199	228	72	76	0	0	0	575
<b>Total*:</b>		0	199	228	72	76	0	0	0	575
<b>Spending Plan by Fund</b>										
City Light Fund			1,389	228	72	76	0	0	0	1,765
<b>Total:</b>			1,389	228	72	76	0	0	0	1,765

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Boundary - Unit 56 Exciter Replacement

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6603	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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, ioncreasing 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.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		0	1,250	1,198	95	0	0	0	0	2,543
<b>Total:</b>		0	1,250	1,198	95	0	0	0	0	2,543
<b>Fund Appropriations/Allocations</b>										
City Light Fund		0	1,250	1,198	95	0	0	0	0	2,543
<b>Total*:</b>		0	1,250	1,198	95	0	0	0	0	2,543
<b>Spending Plan by Fund</b>										
City Light Fund			111	1,198	95	0	0	0	0	1,404
<b>Total:</b>			111	1,198	95	0	0	0	0	1,404

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Boundary Dam - Instrumentation Upgrade and Integration

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2006
<b>Project ID:</b>	6343	<b>End Date:</b>	Q4/2016
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project funds a purchase and installation contract with an electrical contractor or supplier to upgrade or replace Unit 51-56 unit control boards, to enhance and permit a full interface with a new network-based control system. Full interface is required for long-term goal of complete plant automation.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	9,727	1,093	278	0	0	0	0	0	11,098
<b>Total:</b>	<b>9,727</b>	<b>1,093</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,098</b>
<b>Fund Appropriations/Allocations</b>									
City Light Fund	9,727	1,093	278	0	0	0	0	0	11,098
<b>Total*:</b>	<b>9,727</b>	<b>1,093</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,098</b>
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		595	278	0	0	0	0	0	873
<b>Total:</b>		<b>595</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>873</b>

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary Facility - Minor Improvements Program

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1989
<b>Project ID:</b>	6401	<b>End Date:</b>	Q4/2022
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	<b>LTD Actuals</b>	<b>2015 Rev</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Revenue Sources</b>									
City Light Fund Revenues	14,958	3,481	1,414	1,358	2,656	2,906	10,191	6,848	43,812
<b>Total:</b>	14,958	3,481	1,414	1,358	2,656	2,906	10,191	6,848	43,812
<b>Fund Appropriations/Allocations</b>									
City Light Fund	14,958	3,481	1,414	1,358	2,656	2,906	10,191	6,848	43,812
<b>Total*:</b>	14,958	3,481	1,414	1,358	2,656	2,906	10,191	6,848	43,812
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,643	1,414	1,358	2,656	2,906	10,191	6,848	28,016
<b>Total:</b>		2,643	1,414	1,358	2,656	2,906	10,191	6,848	28,016

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Boundary Powerhouse - Transformer Bank Rockfall Mitigation

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	6485	<b>End Date:</b>	Q4/2022
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		502	54	0	0	0	248	66	12,301	13,171
<b>Total:</b>		502	54	0	0	0	248	66	12,301	13,171
<b>Fund Appropriations/Allocations</b>										
City Light Fund		502	54	0	0	0	248	66	12,301	13,171
<b>Total*:</b>		502	54	0	0	0	248	66	12,301	13,171
<b>O &amp; M Costs (Savings)</b>				0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>										
City Light Fund			0	0	0	0	248	66	12,301	12,615
<b>Total:</b>			0	0	0	0	248	66	12,301	12,615

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary Powerhouse - Unit 51 Generator Rebuild

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6351	<b>End Date:</b>	Q4/2021
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

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

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	838	11,224	4,377	3,916	910	950	22,215
<b>Total:</b>	0	0	838	11,224	4,377	3,916	910	950	22,215
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	838	11,224	4,377	3,916	910	950	22,215
<b>Total*:</b>	0	0	838	11,224	4,377	3,916	910	950	22,215
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	838	1,224	9,377	8,916	910	950	22,215
<b>Total:</b>		0	838	1,224	9,377	8,916	910	950	22,215

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary Powerhouse - Unit 52 Generator Rebuild

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2018
<b>Project ID:</b>	6535	<b>End Date:</b>	Q4/2021
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project provides the rebuilding of Generator Unit 52 at the Boundary Powerhouse, as the current unit has reached the end of its normal service life. 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	1,171	10,979	4,936	2,141	19,227
<b>Total:</b>	0	0	0	0	1,171	10,979	4,936	2,141	19,227
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	1,171	10,979	4,936	2,141	19,227
<b>Total*:</b>	0	0	0	0	1,171	10,979	4,936	2,141	19,227
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Boundary Powerhouse - Unit 54 Generator Rebuild

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6353	<b>End Date:</b>	Q4/2020
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 the Utility's aging generators. 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	656	11,423	3,811	471	0	16,361
<b>Total:</b>	0	0	0	656	11,423	3,811	471	0	16,361
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	656	11,423	3,811	471	0	16,361
<b>Total*:</b>	0	0	0	656	11,423	3,811	471	0	16,361
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Boundary Powerhouse - Unit 56 Generator Rebuild

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	6354	<b>End Date:</b>	Q4/2016
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project funds the rewinding and refurbishing of the Unit 56 generator, which is part of a programmatic series of projects to maintain and extend the useful life of the Utility's aging generators. This project also replaces the carbon dioxide fire-suppression system with a water sprinkler system, to improve worker safety, and may also include a rotor-mounted scanner or other diagnostic equipment as part of the rebuild.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	11,261	14,620	88	0	0	0	0	0	25,969
<b>Total:</b>	11,261	14,620	88	0	0	0	0	0	25,969
<b>Fund Appropriations/Allocations</b>									
City Light Fund	11,261	14,620	88	0	0	0	0	0	25,969
<b>Total*:</b>	11,261	14,620	88	0	0	0	0	0	25,969
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		7,029	1,088	0	0	0	0	0	8,117
<b>Total:</b>		7,029	1,088	0	0	0	0	0	8,117

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary Powerhouse - Unit 56 Turbine Runner Replacement

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	6490	<b>End Date:</b>	Q4/2016
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	TBD
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces the Boundary Unit 56 turbine runner, to enhance Unit efficiency.

	<b>LTD Actuals</b>	<b>2015 Rev</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Revenue Sources</b>									
City Light Fund Revenues	10,106	3,311	73	0	0	0	0	0	13,490
<b>Total:</b>	10,106	3,311	73	0	0	0	0	0	13,490
<b>Fund Appropriations/Allocations</b>									
City Light Fund	10,106	3,311	73	0	0	0	0	0	13,490
<b>Total*:</b>	10,106	3,311	73	0	0	0	0	0	13,490
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		742	73	0	0	0	0	0	815
<b>Total:</b>		742	73	0	0	0	0	0	815

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Boundary Switchyard - BPA Reliability Improvements

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	
<b>Project ID:</b>	6611	<b>End Date:</b>	
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
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*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### **2016 - 2021 Proposed Capital Improvement Program**

# Seattle City Light

## Boundary Switchyard - Generator Step-up Transformers

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	6493	<b>End Date:</b>	Q4/2021
<b>Location:</b>	10382 Boundary Rd, Metaline, WA 99153		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project replaces 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	700	5,504	7,156	6,760	6,328	6,512	6,235	8,132	47,327
<b>Total:</b>	700	5,504	7,156	6,760	6,328	6,512	6,235	8,132	47,327
<b>Fund Appropriations/Allocations</b>									
City Light Fund	700	5,504	7,156	6,760	6,328	6,512	6,235	8,132	47,327
<b>Total*:</b>	700	5,504	7,156	6,760	6,328	6,512	6,235	8,132	47,327
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,052	7,156	6,760	6,328	6,512	6,235	8,132	44,175
<b>Total:</b>		3,052	7,156	6,760	6,328	6,512	6,235	8,132	44,175

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Broad Street Substation - Network

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8203	<b>End Date:</b>	Q4/2026
<b>Location:</b>	319 6th AVE N		
<b>Neighborhood Plan:</b>	South Lake Union	<b>Council District:</b>	More than one
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	68,374	10,918	16,754	2,883	2,390	3,653	4,523	8,872	118,367
<b>Total:</b>	68,374	10,918	16,754	2,883	2,390	3,653	4,523	8,872	118,367
<b>Fund Appropriations/Allocations</b>									
City Light Fund	68,374	10,918	16,754	2,883	2,390	3,653	4,523	8,872	118,367
<b>Total*:</b>	68,374	10,918	16,754	2,883	2,390	3,653	4,523	8,872	118,367
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		10,869	16,754	2,883	2,390	3,653	4,523	8,872	49,944
<b>Total:</b>		10,869	16,754	2,883	2,390	3,653	4,523	8,872	49,944

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Broadband - City Light

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8465	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

This project provides support for expansion of broadband service to the entire City. This will involve the installation of approximately 200-250 miles of fiber optic cable, impacting about 8,000 - 10,000 utility poles. Types of construction City Light will perform include pole replacements, relocations of existing wires, equipment installation, commissioning, and inspections. This work is 100% customer driven and reimbursable.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	499	2,529	2,600	2,762	2,716	2,766	3,148	3,161	20,181
<b>Total:</b>	499	2,529	2,600	2,762	2,716	2,766	3,148	3,161	20,181
<b>Fund Appropriations/Allocations</b>									
City Light Fund	499	2,529	2,600	2,762	2,716	2,766	3,148	3,161	20,181
<b>Total*:</b>	499	2,529	2,600	2,762	2,716	2,766	3,148	3,161	20,181
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,301	2,600	2,762	2,716	2,766	3,148	3,161	18,454
<b>Total:</b>		1,301	2,600	2,762	2,716	2,766	3,148	3,161	18,454

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Building Envelope Upgrades

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2004
<b>Project ID:</b>	9072	<b>End Date:</b>	Q4/2021
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	6,902	1,822	1,501	1,512	1,412	1,245	1,258	1,288	16,940
<b>Total:</b>	6,902	1,822	1,501	1,512	1,412	1,245	1,258	1,288	16,940
<b>Fund Appropriations/Allocations</b>									
City Light Fund	6,902	1,822	1,501	1,512	1,412	1,245	1,258	1,288	16,940
<b>Total*:</b>	6,902	1,822	1,501	1,512	1,412	1,245	1,258	1,288	16,940
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		787	1,501	1,512	1,412	1,245	1,258	1,288	9,003
<b>Total:</b>		787	1,501	1,512	1,412	1,245	1,258	1,288	9,003

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*



# Seattle City Light

## Cedar Falls - Bank 6 Replacement

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2018
<b>Project ID:</b>	6573	<b>End Date:</b>	Q4/2020
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces the 60 yr old Bank 6 power step up transformer at Cedar Falls. Bank 6 provides the connection between our 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	1,420	2,281	861	0	4,562
<b>Total:</b>	0	0	0	0	1,420	2,281	861	0	4,562
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	1,420	2,281	861	0	4,562
<b>Total*:</b>	0	0	0	0	1,420	2,281	861	0	4,562
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Cedar Falls - DC Battery System and Charge Modernization

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6572	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will replace the existing DC battery system at Cedar Falls.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	107	28	24	0	0	0	0	159
<b>Total:</b>	0	107	28	24	0	0	0	0	159
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	107	28	24	0	0	0	0	159
<b>Total*:</b>	0	107	28	24	0	0	0	0	159
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	28	24	0	0	0	0	52
<b>Total:</b>		0	28	24	0	0	0	0	52

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Cedar Falls - Masonry Dam Stream Flow System Retrofit

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6534	<b>End Date:</b>	Q4/2016
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces flow sensing devices at the Cedar Falls Masonry Dam. The flow sensing devices are in need of replacement due to age and configuration.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	141	61	0	0	0	0	0	202
<b>Total:</b>	0	141	61	0	0	0	0	0	202
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	141	61	0	0	0	0	0	202
<b>Total*:</b>	0	141	61	0	0	0	0	0	202
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		139	61	0	0	0	0	0	200
<b>Total:</b>		139	61	0	0	0	0	0	200

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Cedar Falls - New Generator 5/6 Exciters

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6531	<b>End Date:</b>	Q4/2019
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces the aging generator excitation systems for Generators 5 & 6 at Cedar Falls, to standardize systems with Basler products, in order to meet current WECC standards.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	210	0	0	213	112	0	0	535
<b>Total:</b>	0	210	0	0	213	112	0	0	535
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	210	0	0	213	112	0	0	535
<b>Total*:</b>	0	210	0	0	213	112	0	0	535
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	0	0	213	112	0	0	325
<b>Total:</b>		0	0	0	213	112	0	0	325

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Cedar Falls Powerhouse - Penstock Stabilization

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	6358	<b>End Date:</b>	Q4/2019
<b>Location:</b>	19901 Cedar Falls Rd SE, North Bend, WA 98045		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,084	0	0	318	542	186	0	0	3,130
<b>Total:</b>	2,084	0	0	318	542	186	0	0	3,130
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,084	0	0	318	542	186	0	0	3,130
<b>Total*:</b>	2,084	0	0	318	542	186	0	0	3,130
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# Seattle City Light

## Cedar Falls Powerhouse - Unit 5/6 Generator Protective Relay

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	6450	<b>End Date:</b>	Q4/2016
<b>Location:</b>	19901 Cedar Falls Rd SE, North Bend, WA 98045		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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. 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,025	454	532	0	0	0	0	0	2,011
<b>Total:</b>	1,025	454	532	0	0	0	0	0	2,011
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,025	454	532	0	0	0	0	0	2,011
<b>Total*:</b>	1,025	454	532	0	0	0	0	0	2,011
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		54	532	0	0	0	0	0	586
<b>Total:</b>		54	532	0	0	0	0	0	586

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Cedar Falls Powerhouse - Valvehouse Rehabilitation

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2020
<b>Project ID:</b>	6324	<b>End Date:</b>	Q4/2021
<b>Location:</b>	19901 Cedar Falls Rd SE, North Bend, WA 98045		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	659	3,184	3,843
<b>Total:</b>	0	0	0	0	0	0	659	3,184	3,843
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	659	3,184	3,843
<b>Total*:</b>	0	0	0	0	0	0	659	3,184	3,843
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Cedar Falls/South Fork Tolt - Minor Improvements Program

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	6406	<b>End Date:</b>	Q4/2022
<b>Location:</b>	19901 Cedar Falls Rd SE, North Bend, WA 98045		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	6,037	751	1,231	1,237	1,174	1,195	2,346	2,973	16,944
<b>Total:</b>	6,037	751	1,231	1,237	1,174	1,195	2,346	2,973	16,944
<b>Fund Appropriations/Allocations</b>									
City Light Fund	6,037	751	1,231	1,237	1,174	1,195	2,346	2,973	16,944
<b>Total*:</b>	6,037	751	1,231	1,237	1,174	1,195	2,346	2,973	16,944
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		866	1,231	1,237	1,174	1,195	2,346	2,973	11,022
<b>Total:</b>		866	1,231	1,237	1,174	1,195	2,346	2,973	11,022

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### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Center City Connector Streetcar – City Light

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	8470	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	65	401	2,004	4,007	0	0	0	6,477
<b>Total:</b>	0	65	401	2,004	4,007	0	0	0	6,477
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	65	401	2,004	4,007	0	0	0	6,477
<b>Total*:</b>	0	65	401	2,004	4,007	0	0	0	6,477
<b>Spending Plan by Fund</b>									
City Light Fund		44	401	2,004	4,007	0	0	0	6,456
<b>Total:</b>		44	401	2,004	4,007	0	0	0	6,456

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# Seattle City Light

## Citywide Undergrounding Initiative - City Light

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	8403	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This ongoing project provides funding for emergent undergrounding projects. It provides a baseline commitment to take advantage of undergrounding opportunities in the course of transportation and utility projects in the City.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	2,832	10	11	11	11	11	12	2,898
<b>Total:</b>	0	2,832	10	11	11	11	11	12	2,898
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	2,832	10	11	11	11	11	12	2,898
<b>Total*:</b>	0	2,832	10	11	11	11	11	12	2,898
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		6	10	11	11	11	11	12	72
<b>Total:</b>		6	10	11	11	11	11	12	72

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Communications Improvements

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9009	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	10,530	1,553	1,107	995	954	946	962	944	17,991
<b>Total:</b>	10,530	1,553	1,107	995	954	946	962	944	17,991
<b>Fund Appropriations/Allocations</b>									
City Light Fund	10,530	1,553	1,107	995	954	946	962	944	17,991
<b>Total*:</b>	10,530	1,553	1,107	995	954	946	962	944	17,991
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,041	1,107	995	954	946	962	944	6,949
<b>Total:</b>		1,041	1,107	995	954	946	962	944	6,949

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## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Creston-Nelson to Intergate East Feeder Installation

<b>BCL/Program Name:</b>	D3 External Projects - Customer Other	<b>BCL/Program Code:</b>	SCL370-D3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2009
<b>Project ID:</b>	8430	<b>End Date:</b>	Q4/2018
<b>Location:</b>	Tukwila		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

The 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,923	243	339	299	11	0	0	0	6,815
<b>Total:</b>	5,923	243	339	299	11	0	0	0	6,815
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,923	243	339	299	11	0	0	0	6,815
<b>Total*:</b>	5,923	243	339	299	11	0	0	0	6,815
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		335	339	299	11	0	0	0	984
<b>Total:</b>		335	339	299	11	0	0	0	984

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Dallas Ave. 26 kV Crossing

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	8322	<b>End Date:</b>	Q4/2021
<b>Location:</b>	Dallas Ave S/14th Ave S		
<b>Neighborhood Plan:</b>	Duwamish	<b>Council District:</b>	2
<b>Neighborhood District:</b>	Greater Duwamish	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	816	1,583	459	1	145	13	1	1	3,019
<b>Total:</b>	816	1,583	459	1	145	13	1	1	3,019
<b>Fund Appropriations/Allocations</b>									
City Light Fund	816	1,583	459	1	145	13	1	1	3,019
<b>Total*:</b>	816	1,583	459	1	145	13	1	1	3,019
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		197	459	1	145	13	1	1	817
<b>Total:</b>		197	459	1	145	13	1	1	817

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Denny Substation - Network

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2012
<b>Project ID:</b>	8404	<b>End Date:</b>	Q4/2026
<b>Location:</b>	Valley Street/Denny Ave		
<b>Neighborhood Plan:</b>	South Lake Union	<b>Council District:</b>	TBD
<b>Neighborhood District:</b>	Lake Union	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,447	20,718	24,349	4,789	3,813	3,498	10,878	12,402	82,894
<b>Total:</b>	2,447	20,718	24,349	4,789	3,813	3,498	10,878	12,402	82,894
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,447	20,718	24,349	4,789	3,813	3,498	10,878	12,402	82,894
<b>Total*:</b>	2,447	20,718	24,349	4,789	3,813	3,498	10,878	12,402	82,894
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		11,792	23,349	11,789	3,813	3,498	10,878	12,402	77,521
<b>Total:</b>		11,792	23,349	11,789	3,813	3,498	10,878	12,402	77,521

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### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Denny Substation Development

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	7757	<b>End Date:</b>	Q4/2018
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	74,243	25,572	41,706	42,577	25,402	0	0	0	209,500
<b>Total:</b>	74,243	25,572	41,706	42,577	25,402	0	0	0	209,500
<b>Fund Appropriations/Allocations</b>									
City Light Fund	74,243	25,572	41,706	42,577	25,402	0	0	0	209,500
<b>Total*:</b>	74,243	25,572	41,706	42,577	25,402	0	0	0	209,500
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,863	38,055	42,577	35,402	0	0	0	119,897
<b>Total:</b>		3,863	38,055	42,577	35,402	0	0	0	119,897

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## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Denny Substation Tenant Improvements

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	9235	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	3,100	201	1,994	121	0	0	0	5,416
<b>Total:</b>	0	3,100	201	1,994	121	0	0	0	5,416
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	3,100	201	1,994	121	0	0	0	5,416
<b>Total*:</b>	0	3,100	201	1,994	121	0	0	0	5,416
<b>Spending Plan by Fund</b>									
City Light Fund		714	201	4,394	121	0	0	0	5,430
<b>Total:</b>		714	201	4,394	121	0	0	0	5,430

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Denny Substation Transmission Lines

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	7125	<b>End Date:</b>	Q4/2021
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	618	1,701	257	246	6,814	2,195	12,070	42,354	66,255
<b>Total:</b>	618	1,701	257	246	6,814	2,195	12,070	42,354	66,255
<b>Fund Appropriations/Allocations</b>									
City Light Fund	618	1,701	257	246	6,814	2,195	12,070	42,354	66,255
<b>Total*:</b>	618	1,701	257	246	6,814	2,195	12,070	42,354	66,255
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		804	257	246	7,414	2,195	12,070	42,354	65,340
<b>Total:</b>		804	257	246	7,414	2,195	12,070	42,354	65,340

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# Seattle City Light

## Diablo - Incline Rehabilitation

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2018
<b>Project ID:</b>	6588	<b>End Date:</b>	Q4/2020
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project provides an alternate way to access Ross Powerhouse by rehabilitating the historic incline lift in Diablo.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	110	72	2,315	0	2,497
<b>Total:</b>	0	0	0	0	110	72	2,315	0	2,497
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	110	72	2,315	0	2,497
<b>Total*:</b>	0	0	0	0	110	72	2,315	0	2,497
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# Seattle City Light

## Diablo - Load Interrupters Replacement

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6532	<b>End Date:</b>	Q4/2017
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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 Switchgear.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	52	0	3,126	184	0	0	0	0	3,362
<b>Total:</b>	52	0	3,126	184	0	0	0	0	3,362
<b>Fund Appropriations/Allocations</b>									
City Light Fund	52	0	3,126	184	0	0	0	0	3,362
<b>Total*:</b>	52	0	3,126	184	0	0	0	0	3,362
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		99	3,126	184	0	0	0	0	3,409
<b>Total:</b>		99	3,126	184	0	0	0	0	3,409

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Diablo - Replace AC Panels

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6584	<b>End Date:</b>	Q4/2016
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will replace air conditioning panels at Diablo.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	178	528	0	0	0	0	0	706
<b>Total:</b>	0	178	528	0	0	0	0	0	706
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	178	528	0	0	0	0	0	706
<b>Total*:</b>	0	178	528	0	0	0	0	0	706
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		90	528	0	0	0	0	0	618
<b>Total:</b>		90	528	0	0	0	0	0	618

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Diablo - Replace Bank Transformers

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2020
<b>Project ID:</b>	6589	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces the Diablo power step up transformers in 2021 when they reach the end of their useful life.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	113	922	1,035
<b>Total:</b>	0	0	0	0	0	0	113	922	1,035
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	113	922	1,035
<b>Total*:</b>	0	0	0	0	0	0	113	922	1,035
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# Seattle City Light

## Diablo Dam - Spill Gate Trunnion Upgrades

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6610	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		0	251	120	128	135	143	150	158	1,085
<b>Total:</b>		0	251	120	128	135	143	150	158	1,085
<b>Fund Appropriations/Allocations</b>										
City Light Fund		0	251	120	128	135	143	150	158	1,085
<b>Total*:</b>		0	251	120	128	135	143	150	158	1,085
<b>Spending Plan by Fund</b>										
City Light Fund			139	120	128	135	143	150	158	973
<b>Total:</b>			139	120	128	135	143	150	158	973

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Diablo Facility - Incline Lift Rehabilitation

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2020
<b>Project ID:</b>	6457	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Milepost 126 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project provides restoration of the backup access route to the Ross Powerhouse and Ross Dam. The Diablo Incline Lift, which had provided backup access, has become unusable due to deterioration of its components. The backup access is essential as there is only one road to get to the Ross Project. If the road becomes impassable, all means of access are cut off, which prevents emergency transportation or delivery of spare parts.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	30	59	89
<b>Total:</b>	0	0	0	0	0	0	30	59	89
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	30	59	89
<b>Total*:</b>	0	0	0	0	0	0	30	59	89
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# Seattle City Light

## Diablo Facility - Lines Protection Upgrades

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	6483	<b>End Date:</b>	Q4/2018
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project provides updated line protection schemes on the Diablo Facility D1, D2, & D3 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,486	1,658	405	1,404	97	0	0	0	7,050
<b>Total:</b>	3,486	1,658	405	1,404	97	0	0	0	7,050
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,486	1,658	405	1,404	97	0	0	0	7,050
<b>Total*:</b>	3,486	1,658	405	1,404	97	0	0	0	7,050
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,291	405	1,404	97	0	0	0	3,197
<b>Total:</b>		1,291	405	1,404	97	0	0	0	3,197

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### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Diablo Facility - Storage Building

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2012
<b>Project ID:</b>	6481	<b>End Date:</b>	Q4/2015
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project constructs a new storage and work building for spare materials at the Diablo location. This building will provide adequate storage space for Diablo rebuilds.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,026	1,569	0	0	0	0	0	0	2,595
<b>Total:</b>	1,026	1,569	0	0	0	0	0	0	2,595
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,026	1,569	0	0	0	0	0	0	2,595
<b>Total*:</b>	1,026	1,569	0	0	0	0	0	0	2,595
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		250	0	0	0	0	0	0	250
<b>Total:</b>		250	0	0	0	0	0	0	250

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Diablo Powerhouse - Crane Wheel Replacements

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	6471	<b>End Date:</b>	Q4/2016
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project replaces the worn wheels on the crane which was originally installed in the 1930's. The project refurbishes the crane back to specification to support the scheduled rewinding of generators 31 and 32.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	288	1,263	10	0	0	0	0	0	1,561
<b>Total:</b>	288	1,263	10	0	0	0	0	0	1,561
<b>Fund Appropriations/Allocations</b>									
City Light Fund	288	1,263	10	0	0	0	0	0	1,561
<b>Total*:</b>	288	1,263	10	0	0	0	0	0	1,561
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		299	10	0	0	0	0	0	309
<b>Total:</b>		299	10	0	0	0	0	0	309

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Diablo Powerhouse - Rebuild Generator Unit 31

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2012
<b>Project ID:</b>	6422	<b>End Date:</b>	Q4/2019
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project rebuilds Generator 31 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	71	1	5,101	3,456	370	124	0	0	9,123
<b>Total:</b>	71	1	5,101	3,456	370	124	0	0	9,123
<b>Fund Appropriations/Allocations</b>									
City Light Fund	71	1	5,101	3,456	370	124	0	0	9,123
<b>Total*:</b>	71	1	5,101	3,456	370	124	0	0	9,123
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		10,379	5,101	3,456	370	124	0	0	19,430
<b>Total:</b>		10,379	5,101	3,456	370	124	0	0	19,430

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Diablo Powerhouse - Rebuild Generator Unit 32

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6423	<b>End Date:</b>	Q4/2019
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	648	12,708	11,577	5,892	3,316	125	0	0	34,266
<b>Total:</b>	648	12,708	11,577	5,892	3,316	125	0	0	34,266
<b>Fund Appropriations/Allocations</b>									
City Light Fund	648	12,708	11,577	5,892	3,316	125	0	0	34,266
<b>Total*:</b>	648	12,708	11,577	5,892	3,316	125	0	0	34,266
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		20	3,577	13,892	3,316	125	0	0	20,930
<b>Total:</b>		20	3,577	13,892	3,316	125	0	0	20,930

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Distribution Area Communications Networks

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2000
<b>Project ID:</b>	9307	<b>End Date:</b>	Q4/2026
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	18,702	2,155	1,250	1,199	2,695	2,613	2,912	2,652	34,178
<b>Total:</b>	18,702	2,155	1,250	1,199	2,695	2,613	2,912	2,652	34,178
<b>Fund Appropriations/Allocations</b>									
City Light Fund	18,702	2,155	1,250	1,199	2,695	2,613	2,912	2,652	34,178
<b>Total*:</b>	18,702	2,155	1,250	1,199	2,695	2,613	2,912	2,652	34,178
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,155	1,250	1,199	2,695	2,613	2,912	2,652	14,476
<b>Total:</b>		1,155	1,250	1,199	2,695	2,613	2,912	2,652	14,476

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Distribution Automation

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8425	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 will provide the ability to automatically perform outage restoration, shift blocks of load to maximize efficiencies of feeders, and reconfigure the feeder grid. Typical operation will involve 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	271	2,460	3,190	4,370	2,167	2,768	2,882	2,951	21,059
<b>Total:</b>	271	2,460	3,190	4,370	2,167	2,768	2,882	2,951	21,059
<b>Fund Appropriations/Allocations</b>									
City Light Fund	271	2,460	3,190	4,370	2,167	2,768	2,882	2,951	21,059
<b>Total*:</b>	271	2,460	3,190	4,370	2,167	2,768	2,882	2,951	21,059
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,130	3,190	4,370	2,167	2,768	2,882	2,951	19,458
<b>Total:</b>		1,130	3,190	4,370	2,167	2,768	2,882	2,951	19,458

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Distribution Management System

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2019
<b>Project ID:</b>	9966	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

This project provides installation of the Distribution Management System (DMS) beginning in 2019. This comprehensive software application enables Power Dispatchers to operate automated distribution devices more effectively by interfacing with the Utility's Energy Management System (EMS), Outage Management System (OMS), Customer Information System, and the Geospatial Information System. The DMS will improve planning, coordination, and operations by enabling dispatchers to improve their switching operations for planned shutdowns. It will also make it easier to prepare planned outages and reduce the area needed for an outage.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	2,788	1,246	4,650	8,684
<b>Total:</b>	0	0	0	0	0	2,788	1,246	4,650	8,684
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	2,788	1,246	4,650	8,684
<b>Total*:</b>	0	0	0	0	0	2,788	1,246	4,650	8,684
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

**District Energy**

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	New Investment	<b>Start Date:</b>	
<b>Project ID:</b>	8466	<b>End Date:</b>	
<b>Location:</b>		<b>Council District:</b>	
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Urban Village:</b>	
<b>Neighborhood District:</b>			

This project installs district energy infrastructure, with initial focus on serving customer needs in South Lake Union. Because funding sources have not yet been identified and the project scope is being refined, no dollars are currently allocated to the project. The Office of Sustainability and Environment will refine the project scope and propose project amendments, if needed, in 2014.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
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\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.



# Seattle City Light

## East Pine Substation - Transformer Replacements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	7811	<b>End Date:</b>	Q4/2016
<b>Location:</b>	1501 23rd Ave		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	3
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	23rd Ave. @ Jackson

This project funds the replacement of one power transformer at East Pine Substation. The replacement need was determined based upon dissolved gas concentration, insulation aging, oil leaks, maintenance cost, service stress, and its criticality for the North-South transmission tie.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	107	4,900	48	0	0	0	0	0	5,055
<b>Total:</b>	107	4,900	48	0	0	0	0	0	5,055
<b>Fund Appropriations/Allocations</b>									
City Light Fund	107	4,900	48	0	0	0	0	0	5,055
<b>Total*:</b>	107	4,900	48	0	0	0	0	0	5,055
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,547	48	0	0	0	0	0	1,595
<b>Total:</b>		1,547	48	0	0	0	0	0	1,595

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Endangered Species Act Mitigation

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2000
<b>Project ID:</b>	6990	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Outside the City of Seattle		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	13,491	2,213	1,064	1,076	1,097	1,118	1,147	1,167	22,373
<b>Total:</b>	13,491	2,213	1,064	1,076	1,097	1,118	1,147	1,167	22,373
<b>Fund Appropriations/Allocations</b>									
City Light Fund	13,491	2,213	1,064	1,076	1,097	1,118	1,147	1,167	22,373
<b>Total*:</b>	13,491	2,213	1,064	1,076	1,097	1,118	1,147	1,167	22,373
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		608	1,064	1,076	1,097	1,118	1,147	1,167	7,277
<b>Total:</b>		608	1,064	1,076	1,097	1,118	1,147	1,167	7,277

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Energy Conservation

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	9320	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,016	703	954	315	323	110	113	116	4,650
<b>Total:</b>	2,016	703	954	315	323	110	113	116	4,650
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,016	703	954	315	323	110	113	116	4,650
<b>Total*:</b>	2,016	703	954	315	323	110	113	116	4,650
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		202	954	315	323	110	113	116	2,133
<b>Total:</b>		202	954	315	323	110	113	116	2,133

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Energy Management System

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9956	<b>End Date:</b>	Q4/2017
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

The project replaces the existing Energy Management System (EMS), which includes (but is not limited to) replacing portions of the EMS map board and all of the front end processors, implementing a hot EMS off site backup (Backup Control System) with live cutover testing and hot cutover without loss of historic data, and supporting design criteria of a no single point of failure and quality assurance testing on a dedicated quality assurance system.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	184	20,428	1,712	151	0	0	0	0	22,475
<b>Total:</b>	184	20,428	1,712	151	0	0	0	0	22,475
<b>Fund Appropriations/Allocations</b>									
City Light Fund	184	20,428	1,712	151	0	0	0	0	22,475
<b>Total*:</b>	184	20,428	1,712	151	0	0	0	0	22,475
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,867	10,712	151	0	0	0	0	14,730
<b>Total:</b>		3,867	10,712	151	0	0	0	0	14,730

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Enterprise Document Management System

<b>BCL/Program Name:</b>	E2 Central Utility Projects - Finance and IT Systems	<b>BCL/Program Code:</b>	SCL550-E2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9962	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,938	3,001	1,033	1,783	1,814	1,813	1,399	1,181	13,962
<b>Total:</b>	1,938	3,001	1,033	1,783	1,814	1,813	1,399	1,181	13,962
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,938	3,001	1,033	1,783	1,814	1,813	1,399	1,181	13,962
<b>Total*:</b>	1,938	3,001	1,033	1,783	1,814	1,813	1,399	1,181	13,962
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,427	1,933	1,883	1,814	1,813	1,399	1,181	11,450
<b>Total:</b>		1,427	1,933	1,883	1,814	1,813	1,399	1,181	11,450

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Enterprise Geographic Information System

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9957	<b>End Date:</b>	Q4/2019
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4	3,052	1,990	1,965	2,075	33	0	0	9,119
<b>Total:</b>	4	3,052	1,990	1,965	2,075	33	0	0	9,119
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4	3,052	1,990	1,965	2,075	33	0	0	9,119
<b>Total*:</b>	4	3,052	1,990	1,965	2,075	33	0	0	9,119
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		100	4,890	1,965	2,075	33	0	0	9,063
<b>Total:</b>		100	4,890	1,965	2,075	33	0	0	9,063

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Enterprise Performance Management

<b>BCL/Program Name:</b>	E2 Central Utility Projects - Finance and IT Systems	<b>BCL/Program Code:</b>	SCL550-E2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	9933	<b>End Date:</b>	Q4/2016
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project implements a business intelligence system for City Light. The project provides software tools and consultant support to identify and track performance metrics for each of the Departments programs, aligning organizational strategy to goal setting, planning and performance monitoring, and providing a single comprehensive system for measuring the Utility's financial and corporate health.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,504	865	684	0	0	0	0	0	6,053
<b>Total:</b>	4,504	865	684	0	0	0	0	0	6,053
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,504	865	684	0	0	0	0	0	6,053
<b>Total*:</b>	4,504	865	684	0	0	0	0	0	6,053
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		398	884	0	0	0	0	0	1,282
<b>Total:</b>		398	884	0	0	0	0	0	1,282

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Enterprise Software Solution Replacement Strategy

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2021
<b>Project ID:</b>	9969	<b>End Date:</b>	Q4/2021
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	0	12	12
<b>Total:</b>	0	0	0	0	0	0	0	12	12
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	0	12	12
<b>Total*:</b>	0	0	0	0	0	0	0	12	12

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*



# Seattle City Light

## Environmental Safeguarding and Remediation of Facilities

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9152	<b>End Date:</b>	Q4/2026
<b>Location:</b>	Outside the City of Seattle		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,197	48	49	54	55	56	57	57	1,573
<b>Total:</b>	1,197	48	49	54	55	56	57	57	1,573
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,197	48	49	54	55	56	57	57	1,573
<b>Total*:</b>	1,197	48	49	54	55	56	57	57	1,573
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		46	49	54	55	56	57	57	374
<b>Total:</b>		46	49	54	55	56	57	57	374

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Equipment Fleet Replacement

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9101	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 light-duty vehicles owned by City Light, including those previously leased from the Fleets & Facilities Department and now owned by City Light.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	80,680	8,589	5,388	7,519	7,694	7,202	7,207	7,214	131,493
<b>Total:</b>	80,680	8,589	5,388	7,519	7,694	7,202	7,207	7,214	131,493
<b>Fund Appropriations/Allocations</b>									
City Light Fund	80,680	8,589	5,388	7,519	7,694	7,202	7,207	7,214	131,493
<b>Total*:</b>	80,680	8,589	5,388	7,519	7,694	7,202	7,207	7,214	131,493
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		6,255	5,388	7,519	7,694	7,202	7,207	7,214	48,479
<b>Total:</b>		6,255	5,388	7,519	7,694	7,202	7,207	7,214	48,479

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Facilities Infrastructure Improvements

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9156	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,391	369	371	379	388	63	63	64	4,088
<b>Total:</b>	2,391	369	371	379	388	63	63	64	4,088
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,391	369	371	379	388	63	63	64	4,088
<b>Total*:</b>	2,391	369	371	379	388	63	63	64	4,088
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		223	371	379	388	63	63	64	1,551
<b>Total:</b>		223	371	379	388	63	63	64	1,551

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Facilities Regulatory Compliance

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9151	<b>End Date:</b>	Q4/2026
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This ongoing project provides for City Light to make proactive facilities modifications in accordance with the Americans with Disabilities Act (ADA) and other legal mandates. Examples of these projects include workplace modifications, air conditioning and refrigerant retrofits, and hazardous material abatement and containment.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	838	700	381	337	345	348	356	365	3,670
<b>Total:</b>	838	700	381	337	345	348	356	365	3,670
<b>Fund Appropriations/Allocations</b>									
City Light Fund	838	700	381	337	345	348	356	365	3,670
<b>Total*:</b>	838	700	381	337	345	348	356	365	3,670
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		430	381	337	345	348	356	365	2,562
<b>Total:</b>		430	381	337	345	348	356	365	2,562

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## First Hill - Network

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2002
<b>Project ID:</b>	8301	<b>End Date:</b>	Q4/2026
<b>Location:</b>	1100 Madison St		
<b>Neighborhood Plan:</b>	First Hill	<b>Council District:</b>	3
<b>Neighborhood District:</b>	East District	<b>Urban Village:</b>	First Hill

This 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	12,371	2,172	2,446	2,574	2,621	2,670	2,692	1,960	29,506
<b>Total:</b>	12,371	2,172	2,446	2,574	2,621	2,670	2,692	1,960	29,506
<b>Fund Appropriations/Allocations</b>									
City Light Fund	12,371	2,172	2,446	2,574	2,621	2,670	2,692	1,960	29,506
<b>Total*:</b>	12,371	2,172	2,446	2,574	2,621	2,670	2,692	1,960	29,506
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,253	2,446	2,574	2,621	2,670	2,692	1,960	16,216
<b>Total:</b>		1,253	2,446	2,574	2,621	2,670	2,692	1,960	16,216

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## First Hill - Network Load Transfer

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2019
<b>Project ID:</b>	8407	<b>End Date:</b>	Q4/2022
<b>Location:</b>	1100 Madison St.		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	3
<b>Neighborhood District:</b>	East District	<b>Urban Village:</b>	First Hill

This project provides the transfer of the First Hill Network to the Denny Substation. Work includes installation of transmission lines, reconfiguration of the network, transfer of the power source, and support to customers during the process.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	911	915	8,060	9,886
<b>Total:</b>	0	0	0	0	0	911	915	8,060	9,886
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	911	915	8,060	9,886
<b>Total*:</b>	0	0	0	0	0	911	915	8,060	9,886
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## First Hill Connector Streetcar

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	8442	<b>End Date:</b>	Q4/2017
<b>Location:</b>	Broadway / Boren / Jackson / King		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	More than one
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

This project facilitates construction of the First Hill Connector Streetcar project, linking Sound Transit's International District station and the Capitol Hill station. The project provides for system improvements and repairs to existing duct banks identified along this route. Typical system improvements could include replacement of old poles and the installation of new ducts under the track way for future system capacity.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,745	816	194	371	0	0	0	0	4,126
<b>Total:</b>	2,745	816	194	371	0	0	0	0	4,126
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,745	816	194	371	0	0	0	0	4,126
<b>Total*:</b>	2,745	816	194	371	0	0	0	0	4,126
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		9	394	471	0	0	0	0	874
<b>Total:</b>		9	394	471	0	0	0	0	874

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Generation Federal Reliability Standards Improvements

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	6470	<b>End Date:</b>	Q4/2020
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This ongoing project provides compliance with emergent power production (Generation) regional reliability standards mandated by the North American Electric Reliability Corporation (NERC) and its regional compliance partner, the Western Electricity Coordinating Council (WECC). Typical improvements may include, but are not limited to, power system stabilizers, generator and control system testing equipment, cyber security equipment, and system disturbance monitoring equipment. The project mitigates the probability of financial penalties of up to \$1 million per day per violation for failure to comply. Publication of new and revised standards requires an on-going project level effort to put improvements into service which keep generation equipment and operations in full compliance.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	9,518	32	10	10	11	11	11	0	9,603
<b>Total:</b>	9,518	32	10	10	11	11	11	0	9,603
<b>Fund Appropriations/Allocations</b>									
City Light Fund	9,518	32	10	10	11	11	11	0	9,603
<b>Total*:</b>	9,518	32	10	10	11	11	11	0	9,603
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4	10	10	11	11	11	0	57
<b>Total:</b>		4	10	10	11	11	11	0	57

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Georgetown Steamplant Access Road

**BCL/Program Name:** E3 Central Utility Projects - Fleets and Facilities      **BCL/Program Code:** SCL250-E3  
**Project Type:** Rehabilitation or Restoration      **Start Date:** Q1/2016  
**Project ID:** 9233      **End Date:** Q4/2016  
**Location:**  
**Neighborhood Plan:** Not in Neighborhood Plan      **Council District:**  
**Neighborhood District:**      **Urban Village:**

This ongoing 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	12	0	0	0	0	0	12
<b>Total:</b>	0	0	12	0	0	0	0	0	12
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	12	0	0	0	0	0	12
<b>Total*:</b>	0	0	12	0	0	0	0	0	12
<b>Spending Plan by Fund</b>									
City Light Fund		374	12	0	0	0	0	0	386
<b>Total:</b>		374	12	0	0	0	0	0	386

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Gorge - 240V AC Station Service Switchgear Replacement

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6581	<b>End Date:</b>	Q4/2019
<b>Location:</b>	Milepost 121 Stte Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project mitigates safety hazards at the Gorge Switchyard 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	629	454	48	51	0	0	1,182
<b>Total:</b>	0	0	629	454	48	51	0	0	1,182
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	629	454	48	51	0	0	1,182
<b>Total*:</b>	0	0	629	454	48	51	0	0	1,182
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Gorge Powerhouse - Fire Protection Improvements

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6326	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Milepost 121 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project designs and installs a water spray generator fire suppression system for the Gorge Powerhouse Generator 24. The scope of the project includes piping, valving, nozzles for a water delivery system, and a new control system for detection, alarming, and system initiation.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	74	87	310	253	146	156	170	1,196
<b>Total:</b>	0	74	87	310	253	146	156	170	1,196
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	74	87	310	253	146	156	170	1,196
<b>Total*:</b>	0	74	87	310	253	146	156	170	1,196
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		42	87	310	253	146	156	170	1,164
<b>Total:</b>		42	87	310	253	146	156	170	1,164

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Hydro Project Spill Containment

**BCL/Program Name:** A4 Power Supply - Power Supply Other    **BCL/Program Code:** SCL250-A4  
**Project Type:** Rehabilitation or Restoration    **Start Date:** Q1/2014  
**Project ID:** 6530    **End Date:** Q4/2020  
**Location:**  
**Neighborhood Plan:** Not in Neighborhood Plan    **Council District:**  
**Neighborhood District:**    **Urban Village:**

This 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	528	986	668	799	631	642	653	0	4,907
<b>Total:</b>	528	986	668	799	631	642	653	0	4,907
<b>Fund Appropriations/Allocations</b>									
City Light Fund	528	986	668	799	631	642	653	0	4,907
<b>Total*:</b>	528	986	668	799	631	642	653	0	4,907
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		750	668	799	631	642	653	0	4,143
<b>Total:</b>		750	668	799	631	642	653	0	4,143

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Information Technology Infrastructure

<b>BCL/Program Name:</b>	E2 Central Utility Projects - Finance and IT Systems	<b>BCL/Program Code:</b>	SCL550-E2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9915	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	44,556	4,379	5,155	3,342	3,409	3,478	3,547	3,618	71,484
<b>Total:</b>	44,556	4,379	5,155	3,342	3,409	3,478	3,547	3,618	71,484
<b>Fund Appropriations/Allocations</b>									
City Light Fund	44,556	4,379	5,155	3,342	3,409	3,478	3,547	3,618	71,484
<b>Total*:</b>	44,556	4,379	5,155	3,342	3,409	3,478	3,547	3,618	71,484
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,825	5,155	3,342	3,409	3,478	3,547	3,618	24,374
<b>Total:</b>		1,825	5,155	3,342	3,409	3,478	3,547	3,618	24,374

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Interbay Substation - Development

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2019
<b>Project ID:</b>	7756	<b>End Date:</b>	Q4/2022
<b>Location:</b>	17th Ave West/West Bertona St		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	7
<b>Neighborhood District:</b>	Magnolia/Queen Anne	<b>Urban Village:</b>	Ballard Interbay

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,489	0	0	0	0	74	78	390	3,031
<b>Total:</b>	2,489	0	0	0	0	74	78	390	3,031
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,489	0	0	0	0	74	78	390	3,031
<b>Total*:</b>	2,489	0	0	0	0	74	78	390	3,031
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## IT Security Upgrades

<b>BCL/Program Name:</b>	E2 Central Utility Projects - Finance and IT Systems	<b>BCL/Program Code:</b>	SCL550-E2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9960	<b>End Date:</b>	Q4/2021
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,185	1,426	600	560	1,114	1,137	1,161	576	7,759
<b>Total:</b>	1,185	1,426	600	560	1,114	1,137	1,161	576	7,759
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,185	1,426	600	560	1,114	1,137	1,161	576	7,759
<b>Total*:</b>	1,185	1,426	600	560	1,114	1,137	1,161	576	7,759
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,041	600	560	1,114	1,137	1,161	576	6,189
<b>Total:</b>		1,041	600	560	1,114	1,137	1,161	576	6,189

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Landis and Gyr RTU Modernization Boundary, CF, Skagit

<b>BCL/Program Name:</b>	A1 Power Supply - Boundary	<b>BCL/Program Code:</b>	SCL250-A1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6565	<b>End Date:</b>	Q4/2019
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This project will be combined with projects 6571 and 6579 to form a larger project to install new remote temperature monitoring equipment at the Boundary, Skagit and Cedar Falls power facilities.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	473	757	572	0	0	1,802
<b>Total:</b>	0	0	0	473	757	572	0	0	1,802
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	473	757	572	0	0	1,802
<b>Total*:</b>	0	0	0	473	757	572	0	0	1,802
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.



# Seattle City Light

## Large Overhead and Underground Services

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8365	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	17,536	3,638	2,947	2,857	2,966	4,114	3,172	4,998	42,228
<b>Total:</b>	17,536	3,638	2,947	2,857	2,966	4,114	3,172	4,998	42,228
<b>Fund Appropriations/Allocations</b>									
City Light Fund	17,536	3,638	2,947	2,857	2,966	4,114	3,172	4,998	42,228
<b>Total*:</b>	17,536	3,638	2,947	2,857	2,966	4,114	3,172	4,998	42,228
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,015	2,947	2,857	2,966	4,114	3,172	4,998	23,069
<b>Total:</b>		2,015	2,947	2,857	2,966	4,114	3,172	4,998	23,069

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Laurelhurst - Underground Rebuild

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8373	<b>End Date:</b>	Q4/2016
<b>Location:</b>	45th Street/38th Street		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	4
<b>Neighborhood District:</b>	Northeast	<b>Urban Village:</b>	Not in an Urban Village

This project completes the final three phases of a nine phase rebuilding of the underground distribution system in Laurelhurst. It replaces increasingly failure-prone aging 4 kV equipment and direct buried cables with a buried conduit system. The project improves service reliability, customer satisfaction, economic operating efficiencies, and safety, and, since PCB transformers are replaced, reduces environmental damage exposure.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	6,318	2,788	857	0	0	0	0	0	9,963
<b>Total:</b>	6,318	2,788	857	0	0	0	0	0	9,963
<b>Fund Appropriations/Allocations</b>									
City Light Fund	6,318	2,788	857	0	0	0	0	0	9,963
<b>Total*:</b>	6,318	2,788	857	0	0	0	0	0	9,963
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		574	857	0	0	0	0	0	1,431
<b>Total:</b>		574	857	0	0	0	0	0	1,431

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Looped Radial Distribution System GIS Editor Replacement

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2012
<b>Project ID:</b>	9958	<b>End Date:</b>	Q4/2016
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This project replaces the obsolete Distribution Automated Mapping System hardware and software with modern, configurable, vendor supported Consumer Off-The-Shelf (COTS) software and a server to host the software. The replacement is needed to assure ongoing day to day operation of the radial distribution mapping system at City Light. The project provides stability, availability, and reliability, lacking in the current software and hardware. The new system takes advantage of metadata driven configurability to meet changing business needs and streamlines the maintenance of enterprise level GIS data that supports engineering, operations, system control, system planning, outage management, and asset management.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,253	1,106	20	0	0	0	0	0	3,379
<b>Total:</b>	2,253	1,106	20	0	0	0	0	0	3,379
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,253	1,106	20	0	0	0	0	0	3,379
<b>Total*:</b>	2,253	1,106	20	0	0	0	0	0	3,379
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		405	20	0	0	0	0	0	425
<b>Total:</b>		405	20	0	0	0	0	0	425

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Major Emergency

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8380	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,144	107	256	259	263	266	270	1,375	4,940
<b>Total:</b>	2,144	107	256	259	263	266	270	1,375	4,940
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,144	107	256	259	263	266	270	1,375	4,940
<b>Total*:</b>	2,144	107	256	259	263	266	270	1,375	4,940
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		75	256	259	263	266	270	1,375	2,764
<b>Total:</b>		75	256	259	263	266	270	1,375	2,764

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Massachusetts Street Substation - Networks

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8202	<b>End Date:</b>	Q4/2026
<b>Location:</b>	1555 Utah AV S		
<b>Neighborhood Plan:</b>	Duwamish	<b>Council District:</b>	2
<b>Neighborhood District:</b>	Greater Duwamish	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	29,639	2,927	3,116	3,971	4,039	4,105	4,439	3,173	55,409
<b>Total:</b>	29,639	2,927	3,116	3,971	4,039	4,105	4,439	3,173	55,409
<b>Fund Appropriations/Allocations</b>									
City Light Fund	29,639	2,927	3,116	3,971	4,039	4,105	4,439	3,173	55,409
<b>Total*:</b>	29,639	2,927	3,116	3,971	4,039	4,105	4,439	3,173	55,409
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,692	3,116	3,971	4,039	4,105	4,439	3,173	24,535
<b>Total:</b>		1,692	3,116	3,971	4,039	4,105	4,439	3,173	24,535

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Medium Overhead and Underground Services

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8366	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	81,966	10,754	10,371	9,879	9,756	9,256	9,044	9,301	150,327
<b>Total:</b>	81,966	10,754	10,371	9,879	9,756	9,256	9,044	9,301	150,327
<b>Fund Appropriations/Allocations</b>									
City Light Fund	81,966	10,754	10,371	9,879	9,756	9,256	9,044	9,301	150,327
<b>Total*:</b>	81,966	10,754	10,371	9,879	9,756	9,256	9,044	9,301	150,327
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		7,402	10,371	9,879	9,756	9,256	9,044	9,301	65,009
<b>Total:</b>		7,402	10,371	9,879	9,756	9,256	9,044	9,301	65,009

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Mercer Corridor West Phase Relocations

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	8443	<b>End Date:</b>	Q4/2016
<b>Location:</b>	Mercer/Broad/Aurora		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	7
<b>Neighborhood District:</b>	Lake Union	<b>Urban Village:</b>	South Lake Union

This project relocates significant transmission and distribution facilities on the west end of the Mercer Street corridor in coordination with the Alaskan Way Viaduct and Seawall Replacement Utility Relocations, Project 8307. The project calls for four overhead feeders and relocation of underground ducts and vaults. The project includes City Light performing follow-up electrical work in concert with the SDOT managed project and WSDOT's Alaskan Way Viaduct replacement program.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,551	2,496	523	0	0	0	0	0	4,570
<b>Total:</b>	1,551	2,496	523	0	0	0	0	0	4,570
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,551	2,496	523	0	0	0	0	0	4,570
<b>Total*:</b>	1,551	2,496	523	0	0	0	0	0	4,570
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		550	523	0	0	0	0	0	1,073
<b>Total:</b>		550	523	0	0	0	0	0	1,073

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Meter Additions

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8054	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 installations 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	62,335	2,919	2,246	2,229	1,934	1,589	1,371	1,570	76,193
<b>Total:</b>	62,335	2,919	2,246	2,229	1,934	1,589	1,371	1,570	76,193
<b>Fund Appropriations/Allocations</b>									
City Light Fund	62,335	2,919	2,246	2,229	1,934	1,589	1,371	1,570	76,193
<b>Total*:</b>	62,335	2,919	2,246	2,229	1,934	1,589	1,371	1,570	76,193
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,689	2,246	2,229	1,934	1,589	1,371	1,570	12,628
<b>Total:</b>		1,689	2,246	2,229	1,934	1,589	1,371	1,570	12,628

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*



# Seattle City Light

## Miscellaneous Building Improvements

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9007	<b>End Date:</b>	Q4/2021
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	10,138	1,183	1,119	1,159	1,186	1,324	2,748	2,814	21,671
<b>Total:</b>	10,138	1,183	1,119	1,159	1,186	1,324	2,748	2,814	21,671
<b>Fund Appropriations/Allocations</b>									
City Light Fund	10,138	1,183	1,119	1,159	1,186	1,324	2,748	2,814	21,671
<b>Total*:</b>	10,138	1,183	1,119	1,159	1,186	1,324	2,748	2,814	21,671
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		309	1,119	1,159	1,186	1,324	2,748	2,814	10,659
<b>Total:</b>		309	1,119	1,159	1,186	1,324	2,748	2,814	10,659

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Mobile Workforce Implementation

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	8429	<b>End Date:</b>	Q4/2018
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	2,543	1,491	1,910	1,082	0	0	0	7,026
<b>Total:</b>	0	2,543	1,491	1,910	1,082	0	0	0	7,026
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	2,543	1,491	1,910	1,082	0	0	0	7,026
<b>Total*:</b>	0	2,543	1,491	1,910	1,082	0	0	0	7,026
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	4,030	1,910	1,082	0	0	0	7,022
<b>Total:</b>		0	4,030	1,910	1,082	0	0	0	7,022

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Neighborhood Voluntary Undergrounding Program

<b>BCL/Program Name:</b>	D3 External Projects - Customer Other	<b>BCL/Program Code:</b>	SCL370-D3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8383	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This ongoing project provides City Light resources to serve potential Voluntary Undergrounding Program (VUP) customers through the VUP process from initial estimate, financial planning, design, construction, and reimbursement of costs from the customers. The purpose of the Voluntary Underground Program (VUP) is to satisfy residential customers who are interested in converting their overhead distribution system to an underground system. This VUP is proscribed by Seattle Municipal Code, Section 21.49.110.T.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	277	458	16	17	17	17	40	41	883
<b>Total:</b>	277	458	16	17	17	17	40	41	883
<b>Fund Appropriations/Allocations</b>									
City Light Fund	277	458	16	17	17	17	40	41	883
<b>Total*:</b>	277	458	16	17	17	17	40	41	883
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		7	16	17	17	17	40	41	155
<b>Total:</b>		7	16	17	17	17	40	41	155

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Network Additions and Services - Denny

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8405	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Valley Street/Denny Ave		
<b>Neighborhood Plan:</b>	South Lake Union	<b>Council District:</b>	TBD
<b>Neighborhood District:</b>	Lake Union	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	608	1,719	1,508	2,372	2,730	2,778	2,530	3,167	17,412
<b>Total:</b>	608	1,719	1,508	2,372	2,730	2,778	2,530	3,167	17,412
<b>Fund Appropriations/Allocations</b>									
City Light Fund	608	1,719	1,508	2,372	2,730	2,778	2,530	3,167	17,412
<b>Total*:</b>	608	1,719	1,508	2,372	2,730	2,778	2,530	3,167	17,412
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		931	1,508	2,372	2,730	2,778	2,530	3,167	16,016
<b>Total:</b>		931	1,508	2,372	2,730	2,778	2,530	3,167	16,016

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Network Additions and Services: Broad Street Substation

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8363	<b>End Date:</b>	Q4/2026
<b>Location:</b>	319 6th AV N		
<b>Neighborhood Plan:</b>	South Lake Union	<b>Council District:</b>	7
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	45,704	6,359	5,889	6,568	6,727	6,885	7,022	6,240	91,394
<b>Total:</b>	45,704	6,359	5,889	6,568	6,727	6,885	7,022	6,240	91,394
<b>Fund Appropriations/Allocations</b>									
City Light Fund	45,704	6,359	5,889	6,568	6,727	6,885	7,022	6,240	91,394
<b>Total*:</b>	45,704	6,359	5,889	6,568	6,727	6,885	7,022	6,240	91,394
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4,140	5,889	6,568	6,727	6,885	7,022	6,240	43,471
<b>Total:</b>		4,140	5,889	6,568	6,727	6,885	7,022	6,240	43,471

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Network Additions and Svcs: First Hill, Mass, Union & Univer

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8364	<b>End Date:</b>	Q4/2026
<b>Location:</b>	1555 Utah AV S		
<b>Neighborhood Plan:</b>	Duwamish	<b>Council District:</b>	2
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	30,090	5,454	3,569	4,112	3,020	3,061	3,102	3,599	56,007
<b>Total:</b>	30,090	5,454	3,569	4,112	3,020	3,061	3,102	3,599	56,007
<b>Fund Appropriations/Allocations</b>									
City Light Fund	30,090	5,454	3,569	4,112	3,020	3,061	3,102	3,599	56,007
<b>Total*:</b>	30,090	5,454	3,569	4,112	3,020	3,061	3,102	3,599	56,007
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		5,309	3,569	4,112	3,020	3,061	3,102	3,599	25,772
<b>Total:</b>		5,309	3,569	4,112	3,020	3,061	3,102	3,599	25,772

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Network Hazeltine Upgrade

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8129	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,990	599	631	527	535	543	761	714	10,300
<b>Total:</b>	5,990	599	631	527	535	543	761	714	10,300
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,990	599	631	527	535	543	761	714	10,300
<b>Total*:</b>	5,990	599	631	527	535	543	761	714	10,300
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		350	631	527	535	543	761	714	4,061
<b>Total:</b>		350	631	527	535	543	761	714	4,061

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Network Maintenance Hole and Vault Rebuild

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8130	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	51,648	2,003	2,439	3,379	3,436	3,491	3,493	3,634	73,523
<b>Total:</b>	51,648	2,003	2,439	3,379	3,436	3,491	3,493	3,634	73,523
<b>Fund Appropriations/Allocations</b>									
City Light Fund	51,648	2,003	2,439	3,379	3,436	3,491	3,493	3,634	73,523
<b>Total*:</b>	51,648	2,003	2,439	3,379	3,436	3,491	3,493	3,634	73,523
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,177	2,439	3,379	3,436	3,491	3,493	3,634	21,049
<b>Total:</b>		1,177	2,439	3,379	3,436	3,491	3,493	3,634	21,049

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.



# Seattle City Light

## New Customer Information System

<b>BCL/Program Name:</b>	E1 Central Utility Projects - Customer and Billing	<b>BCL/Program Code:</b>	SCL370-E1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9937	<b>End Date:</b>	Q4/2017
<b>Location:</b>	700 5th Avenue		
<b>Neighborhood Plan:</b>	Commercial Core	<b>Council District:</b>	3
<b>Neighborhood District:</b>	Downtown	<b>Urban Village:</b>	Commercial Core

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 will preserve and enhance the City's ability to continue to deliver this critical function into the future.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>Total:</b>	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>Fund Appropriations/Allocations</b>									
City Light Fund	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>Total*:</b>	17,582	17,946	9,255	210	0	0	0	0	44,993
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4,946	9,255	210	0	0	0	0	14,411
<b>Total:</b>		4,946	9,255	210	0	0	0	0	14,411

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Newhalem - Generator 20/Support Facility Rebuild

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	6479	<b>End Date:</b>	Q4/2016
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,294	1,742	762	0	0	0	0	0	4,798
<b>Total:</b>	2,294	1,742	762	0	0	0	0	0	4,798
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,294	1,742	762	0	0	0	0	0	4,798
<b>Total*:</b>	2,294	1,742	762	0	0	0	0	0	4,798
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,663	762	0	0	0	0	0	2,425
<b>Total:</b>		1,663	762	0	0	0	0	0	2,425

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Normal Emergency

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8379	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	6,660	482	494	561	569	577	585	1,746	11,674
<b>Total:</b>	6,660	482	494	561	569	577	585	1,746	11,674
<b>Fund Appropriations/Allocations</b>									
City Light Fund	6,660	482	494	561	569	577	585	1,746	11,674
<b>Total*:</b>	6,660	482	494	561	569	577	585	1,746	11,674
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		284	494	561	569	577	585	1,746	4,816
<b>Total:</b>		284	494	561	569	577	585	1,746	4,816

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## North and South Service Center Improvements

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9107	<b>End Date:</b>	Q4/2026
<b>Location:</b>	Outside the City of Seattle		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	33,610	793	313	265	271	813	3,929	5,320	45,314
<b>Total:</b>	33,610	793	313	265	271	813	3,929	5,320	45,314
<b>Fund Appropriations/Allocations</b>									
City Light Fund	33,610	793	313	265	271	813	3,929	5,320	45,314
<b>Total*:</b>	33,610	793	313	265	271	813	3,929	5,320	45,314
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		269	313	265	271	813	3,929	5,320	11,180
<b>Total:</b>		269	313	265	271	813	3,929	5,320	11,180

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## NWPP Market Coordination

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	New Investment	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	9971	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This project will purchase and install hardware and software, additional real-time telemetry, and software updates so City Light can participate in a Security Constrained Economic Dispatch (SCED) model being developed by the Northwest Power Pool (NWPP). City Light is a member of NWPP, which is planning to develop the SCED to dispatch supply resources regionally, which will lower production costs compared to each utility acting independently. The project may include taking an equity stake in the entity created by NWPP to develop and operate the SCED.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	10	11	11	0	0	0	0	32
<b>Total:</b>	0	10	11	11	0	0	0	0	32
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	10	11	11	0	0	0	0	32
<b>Total*:</b>	0	10	11	11	0	0	0	0	32

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Office Furniture and Equipment Purchase

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2004
<b>Project ID:</b>	9103	<b>End Date:</b>	Q4/2021
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	18,878	686	524	683	699	1,102	1,128	1,155	24,855
<b>Total:</b>	18,878	686	524	683	699	1,102	1,128	1,155	24,855
<b>Fund Appropriations/Allocations</b>									
City Light Fund	18,878	686	524	683	699	1,102	1,128	1,155	24,855
<b>Total*:</b>	18,878	686	524	683	699	1,102	1,128	1,155	24,855
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		335	524	683	699	1,102	1,128	1,155	5,626
<b>Total:</b>		335	524	683	699	1,102	1,128	1,155	5,626

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Overhead 26kV Conversion

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8358	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 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.

	<b>LTD Actuals</b>	<b>2015 Rev</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Revenue Sources</b>									
City Light Fund Revenues	12,216	1,997	2,097	1,705	1,720	1,713	1,735	1,750	24,933
<b>Total:</b>	12,216	1,997	2,097	1,705	1,720	1,713	1,735	1,750	24,933
<b>Fund Appropriations/Allocations</b>									
City Light Fund	12,216	1,997	2,097	1,705	1,720	1,713	1,735	1,750	24,933
<b>Total*:</b>	12,216	1,997	2,097	1,705	1,720	1,713	1,735	1,750	24,933
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,205	2,097	1,705	1,720	1,713	1,735	1,750	11,925
<b>Total:</b>		1,205	2,097	1,705	1,720	1,713	1,735	1,750	11,925

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Overhead and Underground Relocations

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8369	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	12,353	2,366	2,505	2,045	2,383	2,517	3,762	3,819	31,750
<b>Total:</b>	12,353	2,366	2,505	2,045	2,383	2,517	3,762	3,819	31,750
<b>Fund Appropriations/Allocations</b>									
City Light Fund	12,353	2,366	2,505	2,045	2,383	2,517	3,762	3,819	31,750
<b>Total*:</b>	12,353	2,366	2,505	2,045	2,383	2,517	3,762	3,819	31,750
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,923	2,505	2,045	2,383	2,517	3,762	3,819	19,954
<b>Total:</b>		2,923	2,505	2,045	2,383	2,517	3,762	3,819	19,954

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.



# Seattle City Light

## Overhead Customer Driven Capacity Additions

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8355	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	31,172	3,222	3,521	3,772	3,829	4,855	5,681	4,005	60,057
<b>Total:</b>	31,172	3,222	3,521	3,772	3,829	4,855	5,681	4,005	60,057
<b>Fund Appropriations/Allocations</b>									
City Light Fund	31,172	3,222	3,521	3,772	3,829	4,855	5,681	4,005	60,057
<b>Total*:</b>	31,172	3,222	3,521	3,772	3,829	4,855	5,681	4,005	60,057
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,588	3,521	3,772	3,829	4,855	5,681	4,005	27,251
<b>Total:</b>		1,588	3,521	3,772	3,829	4,855	5,681	4,005	27,251

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Overhead Equipment Replacements

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8351	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	62,673	21,227	21,010	23,689	21,033	22,501	22,990	23,439	218,562
<b>Total:</b>	62,673	21,227	21,010	23,689	21,033	22,501	22,990	23,439	218,562
<b>Fund Appropriations/Allocations</b>									
City Light Fund	62,673	21,227	21,010	23,689	21,033	22,501	22,990	23,439	218,562
<b>Total*:</b>	62,673	21,227	21,010	23,689	21,033	22,501	22,990	23,439	218,562
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		11,729	21,010	23,689	21,033	22,501	22,990	23,439	146,391
<b>Total:</b>		11,729	21,010	23,689	21,033	22,501	22,990	23,439	146,391

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Overhead Outage Replacements

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8350	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,249	287	272	304	311	449	950	899	6,721
<b>Total:</b>	3,249	287	272	304	311	449	950	899	6,721
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,249	287	272	304	311	449	950	899	6,721
<b>Total*:</b>	3,249	287	272	304	311	449	950	899	6,721
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		168	272	304	311	449	950	899	3,353
<b>Total:</b>		168	272	304	311	449	950	899	3,353

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Overhead System Capacity Additions

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8356	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	27,485	2,585	2,515	2,626	2,556	2,471	2,601	3,291	46,130
<b>Total:</b>	27,485	2,585	2,515	2,626	2,556	2,471	2,601	3,291	46,130
<b>Fund Appropriations/Allocations</b>									
City Light Fund	27,485	2,585	2,515	2,626	2,556	2,471	2,601	3,291	46,130
<b>Total*:</b>	27,485	2,585	2,515	2,626	2,556	2,471	2,601	3,291	46,130
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,495	2,515	2,626	2,556	2,471	2,601	3,291	17,555
<b>Total:</b>		1,495	2,515	2,626	2,556	2,471	2,601	3,291	17,555

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## PCB Transformer Replacement

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	8463	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This ongoing project identifies, removes, and properly disposes of transformers in City Light's system containing known PCB concentrations of 1.0 ppm or greater. The project includes master plan development, using GIS technology, and physically testing approximately 20,000 transformers and replacing about 1,500 transformers with known PCBs. The project also implements the processes and procedures for the disposal of the contaminated transformers.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	683	805	733	738	741	749	201	4,650
<b>Total:</b>	0	683	805	733	738	741	749	201	4,650
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	683	805	733	738	741	749	201	4,650
<b>Total*:</b>	0	683	805	733	738	741	749	201	4,650
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		349	805	733	738	741	749	201	4,316
<b>Total:</b>		349	805	733	738	741	749	201	4,316

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## PeopleSoft Reimplementation - City Light

<b>BCL/Program Name:</b>	E2 Central Utility Projects - Finance and IT Systems	<b>BCL/Program Code:</b>	SCL550-E2
<b>Project Type:</b>	Improved Facility	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	9970	<b>End Date:</b>	Q4/2018
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

The PeopleSoft reimplementation and upgrade is a City-wide effort to replace the City's accounting system with an upgraded version of the PeopleSoft software. In addition to City Light's costs for the upgrade, reflected in the 2013-2020 Strategic Plan - FinMAP CIP Project 9961, this project includes \$6.2M from the 2014 Strategic Plan update, which is a 25% allocated share of the City's Financial and Administrative Services departments estimated project costs.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	3,000	14,484	7,677	963	0	0	0	26,124
<b>Total:</b>	0	3,000	14,484	7,677	963	0	0	0	26,124
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	3,000	14,484	7,677	963	0	0	0	26,124
<b>Total*:</b>	0	3,000	14,484	7,677	963	0	0	0	26,124
<b>Spending Plan by Fund</b>									
City Light Fund		325	15,460	8,872	1,392	0	0	0	26,049
<b>Total:</b>		325	15,460	8,872	1,392	0	0	0	26,049

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Pole Attachment Requests Preparation Work

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	8452	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 project provides for additional revenues through pole attachment fees and construction costs, which are fully reimbursable.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,480	2,991	3,489	3,515	3,592	3,638	4,035	4,552	31,292
<b>Total:</b>	5,480	2,991	3,489	3,515	3,592	3,638	4,035	4,552	31,292
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,480	2,991	3,489	3,515	3,592	3,638	4,035	4,552	31,292
<b>Total*:</b>	5,480	2,991	3,489	3,515	3,592	3,638	4,035	4,552	31,292
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,287	3,489	3,515	3,592	3,638	4,035	4,552	25,108
<b>Total:</b>		2,287	3,489	3,515	3,592	3,638	4,035	4,552	25,108

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Power Production - Network Controls

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	6385	<b>End Date:</b>	Q4/2018
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,454	1,006	1,513	683	69	0	0	0	6,725
<b>Total:</b>	3,454	1,006	1,513	683	69	0	0	0	6,725
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,454	1,006	1,513	683	69	0	0	0	6,725
<b>Total*:</b>	3,454	1,006	1,513	683	69	0	0	0	6,725
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		412	1,513	683	69	0	0	0	2,677
<b>Total:</b>		412	1,513	683	69	0	0	0	2,677

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*



# Seattle City Light

## Relaying Improvements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7753	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	24,533	4,914	4,413	3,927	4,526	5,484	4,495	4,929	57,221
<b>Total:</b>	24,533	4,914	4,413	3,927	4,526	5,484	4,495	4,929	57,221
<b>Fund Appropriations/Allocations</b>									
City Light Fund	24,533	4,914	4,413	3,927	4,526	5,484	4,495	4,929	57,221
<b>Total*:</b>	24,533	4,914	4,413	3,927	4,526	5,484	4,495	4,929	57,221
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,815	4,413	3,927	4,526	5,484	4,495	4,929	30,589
<b>Total:</b>		2,815	4,413	3,927	4,526	5,484	4,495	4,929	30,589

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Replace Breakers BPA Covington and Maple Valley Substations

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	7121	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Kent		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	TBD
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	546	13	13	14	14	14	14	11	639
<b>Total:</b>	546	13	13	14	14	14	14	11	639
<b>Fund Appropriations/Allocations</b>									
City Light Fund	546	13	13	14	14	14	14	11	639
<b>Total*:</b>	546	13	13	14	14	14	14	11	639
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		8	13	14	14	14	14	11	88
<b>Total:</b>		8	13	14	14	14	14	11	88

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Ross - 480V AC Station Service Switchgear Replacement

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2019
<b>Project ID:</b>	6580	<b>End Date:</b>	Q4/2020
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project mitigates safety hazards at the Ross switchyard by replacing all 480kV circuit breakers with new breakers that allow for remote operation. Recent Policy changes and regulations related to electrical Arc Flash hazards have highlighted safety issues related to this equipment.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	110	5,629	0	5,739
<b>Total:</b>	0	0	0	0	0	110	5,629	0	5,739
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	110	5,629	0	5,739
<b>Total*:</b>	0	0	0	0	0	110	5,629	0	5,739
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Ross - Exciters 41-44

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	6564	<b>End Date:</b>	Q4/2019
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project provides installation of new remote temperature monitoring equipment at the Boundary, Skagit and Cedar Falls power facilities. This project is combined with projects 6571 and 6579 to form a larger project.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	237	3,005	764	385	0	0	4,391
<b>Total:</b>	0	0	237	3,005	764	385	0	0	4,391
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	237	3,005	764	385	0	0	4,391
<b>Total*:</b>	0	0	237	3,005	764	385	0	0	4,391
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Ross - Governors

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6562	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project replaces Governors and Exciters on all four of the Ross Powerhouse generating units.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	140	1,195	2,803	563	0	0	0	0	4,701
<b>Total:</b>	140	1,195	2,803	563	0	0	0	0	4,701
<b>Fund Appropriations/Allocations</b>									
City Light Fund	140	1,195	2,803	563	0	0	0	0	4,701
<b>Total*:</b>	140	1,195	2,803	563	0	0	0	0	4,701
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		973	2,803	563	0	0	0	0	4,339
<b>Total:</b>		973	2,803	563	0	0	0	0	4,339

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Ross - Powerhouse Rockfall Mitigation

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6577	<b>End Date:</b>	Q4/2020
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	109	411	54	4,623	0	5,197
<b>Total:</b>	0	0	0	109	411	54	4,623	0	5,197
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	109	411	54	4,623	0	5,197
<b>Total*:</b>	0	0	0	109	411	54	4,623	0	5,197
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Ross - R1 and R2 Relay and Instrumentation Upgrade

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6582	<b>End Date:</b>	Q4/2020
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project installs new microprocessor based relays to protect the Ross R1 and R2 lines from major electrical faults. This improves transmission reliability. The R1 and R2 lines transmit power generated at Ross to Diablo Switchyard where it is sent out to the transmission grid.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	108	114	472	134	0	828
<b>Total:</b>	0	0	0	108	114	472	134	0	828
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	108	114	472	134	0	828
<b>Total*:</b>	0	0	0	108	114	472	134	0	828
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Ross - Rock Slide Area Improvements

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	6516	<b>End Date:</b>	Q4/2017
<b>Location:</b>	Milepost 128 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project reestablishes boat and barge access to the Ross Powerhouse and Dam, Ross Lake Resort, and National Parks Facilities, severed by a rock slide in March 2010. The project stabilizes the rock slope, reestablishes a road between Ross Powerhouse and Ross Dam, and reconstructs ramps, docks, and loading areas on Diablo Reservoir for Ross Powerhouse, Ross Dam, and Ross Lake access.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,260	3,167	317	26	0	0	0	0	8,770
<b>Total:</b>	5,260	3,167	317	26	0	0	0	0	8,770
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,260	3,167	317	26	0	0	0	0	8,770
<b>Total*:</b>	5,260	3,167	317	26	0	0	0	0	8,770
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		828	317	26	0	0	0	0	1,171
<b>Total:</b>		828	317	26	0	0	0	0	1,171

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Ross Dam - AC/DC Distribution System Upgrade

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	6373	<b>End Date:</b>	Q4/2019
<b>Location:</b>	Milepost 128 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,820	694	546	2,051	2,285	1,245	0	0	8,641
<b>Total:</b>	1,820	694	546	2,051	2,285	1,245	0	0	8,641
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,820	694	546	2,051	2,285	1,245	0	0	8,641
<b>Total*:</b>	1,820	694	546	2,051	2,285	1,245	0	0	8,641
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		702	546	2,051	2,285	1,245	0	0	6,829
<b>Total:</b>		702	546	2,051	2,285	1,245	0	0	6,829

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Ross Dam - New Access Road from SR20 to Dam

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2020
<b>Project ID:</b>	6452	<b>End Date:</b>	Q4/2022
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project provides construction of an access/service road from State Route 20 to Ross Dam. Preliminary designs made in the 1970's and 1980's have been reviewed, updated, and evaluated as a first phase. This first phase study includes review of construction costs, permit and public review processes, and timetables.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	0	11,847	2,293	14,140
<b>Total:</b>	0	0	0	0	0	0	11,847	2,293	14,140
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	0	11,847	2,293	14,140
<b>Total*:</b>	0	0	0	0	0	0	11,847	2,293	14,140
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Ross Powerhouse - Programmable Language Controller Upgrade

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	6376	<b>End Date:</b>	Q4/2017
<b>Location:</b>	Milepost 128 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	175	283	561	0	0	0	0	1,019
<b>Total:</b>	0	175	283	561	0	0	0	0	1,019
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	175	283	561	0	0	0	0	1,019
<b>Total*:</b>	0	175	283	561	0	0	0	0	1,019
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		50	283	561	0	0	0	0	894
<b>Total:</b>		50	283	561	0	0	0	0	894

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Ross Powerhouse - Replace Transformer Banks 42 and 44

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6541	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will fund the design and installation of two new step-up power transformer banks at Ross Powerhouse to replace the sixty-year-old units that have exceeded their useful life and have shown indications of failure.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		255	12,713	1,501	841	0	0	0	0	15,310
<b>Total:</b>		255	12,713	1,501	841	0	0	0	0	15,310
<b>Fund Appropriations/Allocations</b>										
City Light Fund		255	12,713	1,501	841	0	0	0	0	15,310
<b>Total*:</b>		255	12,713	1,501	841	0	0	0	0	15,310
<b>O &amp; M Costs (Savings)</b>				0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>										
City Light Fund			6,477	7,901	841	0	0	0	0	15,219
<b>Total:</b>			6,477	7,901	841	0	0	0	0	15,219

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Safety Modifications

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9006	<b>End Date:</b>	Q4/2021
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,514	1,279	1,290	1,300	1,329	1,359	1,351	1,381	12,803
<b>Total:</b>	3,514	1,279	1,290	1,300	1,329	1,359	1,351	1,381	12,803
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,514	1,279	1,290	1,300	1,329	1,359	1,351	1,381	12,803
<b>Total*:</b>	3,514	1,279	1,290	1,300	1,329	1,359	1,351	1,381	12,803
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		999	1,290	1,300	1,329	1,359	1,351	1,381	9,009
<b>Total:</b>		999	1,290	1,300	1,329	1,359	1,351	1,381	9,009

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Security Improvements

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	9202	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	17,849	8,633	4,641	3,239	2,155	2,199	2,250	2,302	43,268
<b>Total:</b>	17,849	8,633	4,641	3,239	2,155	2,199	2,250	2,302	43,268
<b>Fund Appropriations/Allocations</b>									
City Light Fund	17,849	8,633	4,641	3,239	2,155	2,199	2,250	2,302	43,268
<b>Total*:</b>	17,849	8,633	4,641	3,239	2,155	2,199	2,250	2,302	43,268
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,979	4,641	3,239	2,155	2,199	2,250	2,302	20,765
<b>Total:</b>		3,979	4,641	3,239	2,155	2,199	2,250	2,302	20,765

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Seismic Mitigation

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1998
<b>Project ID:</b>	9134	<b>End Date:</b>	Q4/2021
<b>Location:</b>	Outside the City of Seattle		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,350	65	31	87	45	93	95	95	5,861
<b>Total:</b>	5,350	65	31	87	45	93	95	95	5,861
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,350	65	31	87	45	93	95	95	5,861
<b>Total*:</b>	5,350	65	31	87	45	93	95	95	5,861
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		18	31	87	45	93	95	95	464
<b>Total:</b>		18	31	87	45	93	95	95	464

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Service Center Development Project

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2019
<b>Project ID:</b>	9232	<b>End Date:</b>	Q4/2020
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This ongoing project provides a Service Center Master Plan to revitalize City Light's customer service centers. A phase one report has been prepared that identifies preliminary options and associated costs, and further work is needed to refine the findings of this report to an actionable set of recommendations. In order to manage the financial impact of this initiative, major development is not anticipated to occur until 2019.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	0	0	59,733	40,349	0	100,082
<b>Total:</b>	0	0	0	0	0	59,733	40,349	0	100,082
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	0	0	59,733	40,349	0	100,082
<b>Total*:</b>	0	0	0	0	0	59,733	40,349	0	100,082

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# Seattle City Light

## Shoreline Undergrounding: North City and Aurora Avenue North

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	8320	<b>End Date:</b>	Q4/2016
<b>Location:</b>	2136 N 163rd St, Shoreline		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project funds the continuation of Phases Two and Three to convert overhead distribution circuits to underground service along Aurora Avenue in the City of Shoreline. The project enhances reliability and public relations by delivering undergrounding service to Shoreline with a coordinated and mutually agreed-upon scope, schedule, and cost and rate structure. It permits SCL to be in compliance with the new commercial area zoning for the project area as outlined in the Shoreline Municipal Code 13.20.050 (A) (1), requiring that overhead utilities in the project area be converted to underground systems. Per the City's franchise agreement with Shoreline, on the completion of project work at the fiscal year-end, costs for all the completed underground systems entered into service for that year are amortized & added to the rates for ratepayers in the City of Shoreline, which will show up as a separate bill item for those ratepayers. As of January 2012, under our current construction MOA's with Shoreline, Shoreline's civil contractors build the SCL ducts & vaults, after which Shoreline is reimbursed by SCL via a pass-thru cost arrangement. Per the franchise agreement, these pass-thru costs are also part of the added Shoreline rates.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	30,208	5,863	54	0	0	0	0	0	36,125
<b>Total:</b>	30,208	5,863	54	0	0	0	0	0	36,125
<b>Fund Appropriations/Allocations</b>									
City Light Fund	30,208	5,863	54	0	0	0	0	0	36,125
<b>Total*:</b>	30,208	5,863	54	0	0	0	0	0	36,125
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		618	479	0	0	0	0	0	1,097
<b>Total:</b>		618	479	0	0	0	0	0	1,097

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Skagit - Babcock Creek Crossing

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6514	<b>End Date:</b>	Q4/2023
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	32	390	646	95	39	41	43	45	1,331
<b>Total:</b>	32	390	646	95	39	41	43	45	1,331
<b>Fund Appropriations/Allocations</b>									
City Light Fund	32	390	646	95	39	41	43	45	1,331
<b>Total*:</b>	32	390	646	95	39	41	43	45	1,331
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		107	646	95	39	41	43	45	1,016
<b>Total:</b>		107	646	95	39	41	43	45	1,016

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Skagit - Boat Facility Improvements

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6540	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will design and construct several new structures to support industrial and recreational boat operations on our Skagit reservoirs. Structures will include a new tour dock, new dry dock, additions to the existing boat houses and a new barge landing in Diablo. The project will provide improved visitor access for the Skagit Boat Tour, safer boat fueling facilities, reduced impact of snowfall on boats, consolidated barge landings, and improved dry docks.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	380	1,236	520	0	0	0	0	2,136
<b>Total:</b>	0	380	1,236	520	0	0	0	0	2,136
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	380	1,236	520	0	0	0	0	2,136
<b>Total*:</b>	0	380	1,236	520	0	0	0	0	2,136
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		224	1,236	520	0	0	0	0	1,980
<b>Total:</b>		224	1,236	520	0	0	0	0	1,980

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit - DC Battery System & Charge Modernization

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6583	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will replace the existing DC battery system at Skagit.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	260	117	17	0	0	0	0	394
<b>Total:</b>	0	260	117	17	0	0	0	0	394
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	260	117	17	0	0	0	0	394
<b>Total*:</b>	0	260	117	17	0	0	0	0	394
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		254	117	17	0	0	0	0	388
<b>Total:</b>		254	117	17	0	0	0	0	388

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit - Facilities Energy Conservation Program

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2012
<b>Project ID:</b>	6515	<b>End Date:</b>	Q4/2016
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,931	3,430	1,075	0	0	0	0	0	9,436
<b>Total:</b>	4,931	3,430	1,075	0	0	0	0	0	9,436
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,931	3,430	1,075	0	0	0	0	0	9,436
<b>Total*:</b>	4,931	3,430	1,075	0	0	0	0	0	9,436
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,724	1,075	0	0	0	0	0	3,799
<b>Total:</b>		2,724	1,075	0	0	0	0	0	3,799

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Skagit - Facilities Plan

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	6520	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,679	466	2,265	1,870	1,087	0	0	0	8,367
<b>Total:</b>	2,679	466	2,265	1,870	1,087	0	0	0	8,367
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,679	466	2,265	1,870	1,087	0	0	0	8,367
<b>Total*:</b>	2,679	466	2,265	1,870	1,087	0	0	0	8,367
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		234	2,265	1,870	1,087	0	0	0	5,456
<b>Total:</b>		234	2,265	1,870	1,087	0	0	0	5,456

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit - Relicensing

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	New Investment	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6986	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	403	1,835	3,528	4,736	9,747	20,249
<b>Total:</b>	0	0	0	403	1,835	3,528	4,736	9,747	20,249
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	403	1,835	3,528	4,736	9,747	20,249
<b>Total*:</b>	0	0	0	403	1,835	3,528	4,736	9,747	20,249

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit - Sewer System Rehabilitation

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	6232	<b>End Date:</b>	Q4/2018
<b>Location:</b>	Milepost 126 State Highway 20		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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. This project eliminates potential overloads in the sewage treatment plant that can cause pollution of the Skagit River and surrounding soil contamination.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	787	5,004	730	80	1,266	0	0	0	7,867
<b>Total:</b>	787	5,004	730	80	1,266	0	0	0	7,867
<b>Fund Appropriations/Allocations</b>									
City Light Fund	787	5,004	730	80	1,266	0	0	0	7,867
<b>Total*:</b>	787	5,004	730	80	1,266	0	0	0	7,867
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4,513	730	80	1,266	0	0	0	6,589
<b>Total:</b>		4,513	730	80	1,266	0	0	0	6,589

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Skagit Facility - Minor Improvements Program

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1989
<b>Project ID:</b>	6405	<b>End Date:</b>	Q4/2026
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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. This project shows increased project allocations in years 2015 to 2018. This increase reflects anticipated baseline CIP spending levels for the Skagit Facility that are in line with Strategic Plan assumptions. These future year allocations will be broken out into specific CIP projects in the next year's CIP.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	18,796	3,551	2,410	2,276	5,580	2,266	9,166	13,704	57,749
<b>Total:</b>	18,796	3,551	2,410	2,276	5,580	2,266	9,166	13,704	57,749
<b>Fund Appropriations/Allocations</b>									
City Light Fund	18,796	3,551	2,410	2,276	5,580	2,266	9,166	13,704	57,749
<b>Total*:</b>	18,796	3,551	2,410	2,276	5,580	2,266	9,166	13,704	57,749
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,161	2,410	2,276	5,580	2,266	9,166	13,704	37,563
<b>Total:</b>		2,161	2,410	2,276	5,580	2,266	9,166	13,704	37,563

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit Licensing Mitigation

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1998
<b>Project ID:</b>	6991	<b>End Date:</b>	Q4/2022
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	TBD
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	36,126	1,067	249	69	70	129	118	134	37,962
<b>Total:</b>	36,126	1,067	249	69	70	129	118	134	37,962
<b>Fund Appropriations/Allocations</b>									
City Light Fund	36,126	1,067	249	69	70	129	118	134	37,962
<b>Total*:</b>	36,126	1,067	249	69	70	129	118	134	37,962
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		41	249	69	70	129	118	134	810
<b>Total:</b>		41	249	69	70	129	118	134	810

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Skagit Powerhouses - Install Protection Relays

<b>BCL/Program Name:</b>	A2 Power Supply - Skagit	<b>BCL/Program Code:</b>	SCL250-A2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2005
<b>Project ID:</b>	6415	<b>End Date:</b>	Q4/2021
<b>Location:</b>	500 Newhalem Creek Rd, Marblemount, WA 98267		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,101	435	854	1,422	1,358	1,211	1,316	961	11,658
<b>Total:</b>	4,101	435	854	1,422	1,358	1,211	1,316	961	11,658
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,101	435	854	1,422	1,358	1,211	1,316	961	11,658
<b>Total*:</b>	4,101	435	854	1,422	1,358	1,211	1,316	961	11,658
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		376	854	1,422	1,358	1,211	1,316	961	7,498
<b>Total:</b>		376	854	1,422	1,358	1,211	1,316	961	7,498

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Small Overhead and Underground Services

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8367	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	47,924	6,024	6,200	6,257	6,339	5,358	5,275	5,410	88,787
<b>Total:</b>	47,924	6,024	6,200	6,257	6,339	5,358	5,275	5,410	88,787
<b>Fund Appropriations/Allocations</b>									
City Light Fund	47,924	6,024	6,200	6,257	6,339	5,358	5,275	5,410	88,787
<b>Total*:</b>	47,924	6,024	6,200	6,257	6,339	5,358	5,275	5,410	88,787
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,515	6,200	6,257	6,339	5,358	5,275	5,410	38,354
<b>Total:</b>		3,515	6,200	6,257	6,339	5,358	5,275	5,410	38,354

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## SMT AutoLab

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	Improved Facility	<b>Start Date:</b>	Q1/2017
<b>Project ID:</b>	6600	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

This project provides expansion of the AutoLab in the Seattle Municipal Tower to what is now the Central Files Room. The extra space will be used as an equipment lab for Power Production electrical engineers to conduct necessary testing of cyber security, remote monitoring and automation equipment in a simulation environment. The testing will be conducted prior to installing and activating the equipment at our generation sites. This project also provides required HVAC upgrades as well as the installation of equipment racks, wire ways, and access security.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	0	262	484	0	0	0	746
<b>Total:</b>	0	0	0	262	484	0	0	0	746
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	0	262	484	0	0	0	746
<b>Total*:</b>	0	0	0	262	484	0	0	0	746

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Sound Transit Light Rail East Link - City Light

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	8450	<b>End Date:</b>	Q4/2017
<b>Location:</b>	I-90/International District Station/I-90 Bridge		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Central	<b>Urban Village:</b>	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.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		42	1,070	107	505	0	0	0	0	1,724
<b>Total:</b>		42	1,070	107	505	0	0	0	0	1,724
<b>Fund Appropriations/Allocations</b>										
City Light Fund		42	1,070	107	505	0	0	0	0	1,724
<b>Total*:</b>		42	1,070	107	505	0	0	0	0	1,724
<b>O &amp; M Costs (Savings)</b>				0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>										
City Light Fund			19	207	805	0	0	0	0	1,031
<b>Total:</b>			19	207	805	0	0	0	0	1,031

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Sound Transit Lynnwood - City Light

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2016
<b>Project ID:</b>	8471	<b>End Date:</b>	Q4/2021
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project supports Sound Transit's Lynnwood 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	0	216	1,274	1,611	1,579	1,580	1,038	7,298
<b>Total:</b>	0	0	216	1,274	1,611	1,579	1,580	1,038	7,298
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	0	216	1,274	1,611	1,579	1,580	1,038	7,298
<b>Total*:</b>	0	0	216	1,274	1,611	1,579	1,580	1,038	7,298
<b>Spending Plan by Fund</b>									
City Light Fund		37	216	1,274	1,611	1,579	1,580	1,038	7,335
<b>Total:</b>		37	216	1,274	1,611	1,579	1,580	1,038	7,335

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Sound Transit Northlink - City Light

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	8427	<b>End Date:</b>	Q4/2017
<b>Location:</b>	University District / Roosevelt / Northgate		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	5
<b>Neighborhood District:</b>	Northwest	<b>Urban Village:</b>	In more than one Urban Village

The project will manage utility relocations and feeder construction needed for Sound Transit to build the North Link light rail line to Northgate as part of the design and construction agreements made between the City of Seattle and Sound Transit.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,551	2,626	1,663	419	0	0	0	0	7,259
<b>Total:</b>	2,551	2,626	1,663	419	0	0	0	0	7,259
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,551	2,626	1,663	419	0	0	0	0	7,259
<b>Total*:</b>	2,551	2,626	1,663	419	0	0	0	0	7,259
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		632	2,263	419	0	0	0	0	3,314
<b>Total:</b>		632	2,263	419	0	0	0	0	3,314

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## South Fork Tolt - DC Battery System & Charge Modernization

<b>BCL/Program Name:</b>	A3 Power Supply - Cedar Falls - Tolt	<b>BCL/Program Code:</b>	SCL250-A3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	6570	<b>End Date:</b>	Q4/2017
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Outside Seattle City	<b>Urban Village:</b>	Outside Seattle City

This project will replace the existing DC battery system at South Fork Tolt.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	7	28	24	0	0	0	0	59
<b>Total:</b>	0	7	28	24	0	0	0	0	59
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	7	28	24	0	0	0	0	59
<b>Total*:</b>	0	7	28	24	0	0	0	0	59
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	28	24	0	0	0	0	52
<b>Total:</b>		0	28	24	0	0	0	0	52

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Special Work Equipment - Generation Plant

<b>BCL/Program Name:</b>	A4 Power Supply - Power Supply Other	<b>BCL/Program Code:</b>	SCL250-A4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	6102	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Outside the City of Seattle		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	11,302	1,836	941	929	951	1,429	1,464	1,038	19,890
<b>Total:</b>	11,302	1,836	941	929	951	1,429	1,464	1,038	19,890
<b>Fund Appropriations/Allocations</b>									
City Light Fund	11,302	1,836	941	929	951	1,429	1,464	1,038	19,890
<b>Total*:</b>	11,302	1,836	941	929	951	1,429	1,464	1,038	19,890
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,009	941	929	951	1,429	1,464	1,038	7,761
<b>Total:</b>		1,009	941	929	951	1,429	1,464	1,038	7,761

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Special Work Equipment - Other Plant

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	9102	<b>End Date:</b>	Q4/2021
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	19,735	1,227	1,052	1,077	1,103	1,129	1,156	1,184	27,663
<b>Total:</b>	19,735	1,227	1,052	1,077	1,103	1,129	1,156	1,184	27,663
<b>Fund Appropriations/Allocations</b>									
City Light Fund	19,735	1,227	1,052	1,077	1,103	1,129	1,156	1,184	27,663
<b>Total*:</b>	19,735	1,227	1,052	1,077	1,103	1,129	1,156	1,184	27,663
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		769	1,052	1,077	1,103	1,129	1,156	1,184	7,470
<b>Total:</b>		769	1,052	1,077	1,103	1,129	1,156	1,184	7,470

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Special Work Equipment - Shops

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8389	<b>End Date:</b>	Q4/2018
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,160	292	293	300	307	0	0	0	2,352
<b>Total:</b>	1,160	292	293	300	307	0	0	0	2,352
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,160	292	293	300	307	0	0	0	2,352
<b>Total*:</b>	1,160	292	293	300	307	0	0	0	2,352
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		167	293	300	307	0	0	0	1,067
<b>Total:</b>		167	293	300	307	0	0	0	1,067

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## State Route 520 Bridge Relocations

<b>BCL/Program Name:</b>	D2 External Projects - Transportation Relocations	<b>BCL/Program Code:</b>	SCL370-D2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2015
<b>Project ID:</b>	8435	<b>End Date:</b>	Q4/2019
<b>Location:</b>	SR 520 / Lake Washington	<b>Council District:</b>	Citywide
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Urban Village:</b>	Not in an Urban Village
<b>Neighborhood District:</b>	Not in a Neighborhood District		

This project relocates electrical infrastructure to support replacement of the State Route 520 Bridge.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	600	598	210	215	3,088	0	0	4,711
<b>Total:</b>	0	600	598	210	215	3,088	0	0	4,711
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	600	598	210	215	3,088	0	0	4,711
<b>Total*:</b>	0	600	598	210	215	3,088	0	0	4,711
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		0	598	210	215	3,088	0	0	4,111
<b>Total:</b>		0	598	210	215	3,088	0	0	4,111

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Streetlight Infrastructure Replacement

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8460	<b>End Date:</b>	Q4/2026
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	More than one
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

This ongoing project will replace 1,603, or 33 percent, of the highest priority streetlights and related underground infrastructure identified in the Streetlight Horizon Plan over the six-year planning horizon. Streetlight infrastructure that will be replaced includes poles, fixtures, conduits, hand holes, and wiring. Emphasis will be placed on standardization of fixtures, construction materials, and construction methods. This project will provide the engineering resources needed to prioritize replacements, develop estimates, and manage and track construction.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,368	4,587	3,016	3,096	3,173	3,298	3,969	4,365	28,872
<b>Total:</b>	3,368	4,587	3,016	3,096	3,173	3,298	3,969	4,365	28,872
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,368	4,587	3,016	3,096	3,173	3,298	3,969	4,365	28,872
<b>Total*:</b>	3,368	4,587	3,016	3,096	3,173	3,298	3,969	4,365	28,872
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,190	3,016	3,096	3,173	3,298	3,969	4,365	23,107
<b>Total:</b>		2,190	3,016	3,096	3,173	3,298	3,969	4,365	23,107

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Streetlight LED Conversion Program

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2010
<b>Project ID:</b>	8441	<b>End Date:</b>	Q4/2022
<b>Location:</b>	Citywide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	More than one
<b>Neighborhood District:</b>	In more than one District	<b>Urban Village:</b>	In more than one Urban Village

This 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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	21,111	6,746	5,817	5,827	5,462	6,122	7,019	6,795	64,899
<b>Total:</b>	21,111	6,746	5,817	5,827	5,462	6,122	7,019	6,795	64,899
<b>Fund Appropriations/Allocations</b>									
City Light Fund	21,111	6,746	5,817	5,827	5,462	6,122	7,019	6,795	64,899
<b>Total*:</b>	21,111	6,746	5,817	5,827	5,462	6,122	7,019	6,795	64,899
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,242	5,817	5,827	5,462	6,122	7,019	6,795	40,284
<b>Total:</b>		3,242	5,817	5,827	5,462	6,122	7,019	6,795	40,284

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Streetlights: Arterial, Residential and Floodlights

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8378	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	22,074	3,603	3,364	3,410	3,516	3,791	4,297	4,980	49,035
<b>Total:</b>	22,074	3,603	3,364	3,410	3,516	3,791	4,297	4,980	49,035
<b>Fund Appropriations/Allocations</b>									
City Light Fund	22,074	3,603	3,364	3,410	3,516	3,791	4,297	4,980	49,035
<b>Total*:</b>	22,074	3,603	3,364	3,410	3,516	3,791	4,297	4,980	49,035
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,481	3,364	3,410	3,516	3,791	4,297	4,980	25,839
<b>Total:</b>		2,481	3,364	3,410	3,516	3,791	4,297	4,980	25,839

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Substation Automation

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	8424	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,458	987	756	952	993	1,037	1,054	637	10,874
<b>Total:</b>	4,458	987	756	952	993	1,037	1,054	637	10,874
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,458	987	756	952	993	1,037	1,054	637	10,874
<b>Total*:</b>	4,458	987	756	952	993	1,037	1,054	637	10,874
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		559	756	952	993	1,037	1,054	637	5,988
<b>Total:</b>		559	756	952	993	1,037	1,054	637	5,988

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Substation Breaker Replacements and Reliability Additions

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2006
<b>Project ID:</b>	7779	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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, service stress, and fault interrupting history. It replaces those circuit breakers with the highest failure risk. This project also replaces transformer bank breakers at Union Street substation to support load growth.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	21,585	6,153	5,025	6,155	4,798	5,564	5,152	5,987	60,419
<b>Total:</b>	21,585	6,153	5,025	6,155	4,798	5,564	5,152	5,987	60,419
<b>Fund Appropriations/Allocations</b>									
City Light Fund	21,585	6,153	5,025	6,155	4,798	5,564	5,152	5,987	60,419
<b>Total*:</b>	21,585	6,153	5,025	6,155	4,798	5,564	5,152	5,987	60,419
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3,362	5,025	6,155	4,798	5,564	5,152	5,987	36,043
<b>Total:</b>		3,362	5,025	6,155	4,798	5,564	5,152	5,987	36,043

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Substation Capacity Additions

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7751	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	8,651	2,371	1,568	1,802	1,966	2,201	2,608	2,059	23,226
<b>Total:</b>	8,651	2,371	1,568	1,802	1,966	2,201	2,608	2,059	23,226
<b>Fund Appropriations/Allocations</b>									
City Light Fund	8,651	2,371	1,568	1,802	1,966	2,201	2,608	2,059	23,226
<b>Total*:</b>	8,651	2,371	1,568	1,802	1,966	2,201	2,608	2,059	23,226
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,533	1,568	1,802	1,966	2,201	2,608	2,059	13,737
<b>Total:</b>		1,533	1,568	1,802	1,966	2,201	2,608	2,059	13,737

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Substation Comprehensive Improvements

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	9161	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,703	199	198	236	236	258	263	267	5,360
<b>Total:</b>	3,703	199	198	236	236	258	263	267	5,360
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,703	199	198	236	236	258	263	267	5,360
<b>Total*:</b>	3,703	199	198	236	236	258	263	267	5,360
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		91	198	236	236	258	263	267	1,549
<b>Total:</b>		91	198	236	236	258	263	267	1,549

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Substation Equipment Improvements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7752	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	52,756	7,593	4,522	5,139	5,950	6,723	6,727	6,458	95,868
<b>Total:</b>	52,756	7,593	4,522	5,139	5,950	6,723	6,727	6,458	95,868
<b>Fund Appropriations/Allocations</b>									
City Light Fund	52,756	7,593	4,522	5,139	5,950	6,723	6,727	6,458	95,868
<b>Total*:</b>	52,756	7,593	4,522	5,139	5,950	6,723	6,727	6,458	95,868
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4,677	4,522	5,139	5,950	6,723	6,727	6,458	40,196
<b>Total:</b>		4,677	4,522	5,139	5,950	6,723	6,727	6,458	40,196

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Substation Plant Improvements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7750	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	7,919	848	867	909	927	946	921	1,177	14,514
<b>Total:</b>	7,919	848	867	909	927	946	921	1,177	14,514
<b>Fund Appropriations/Allocations</b>									
City Light Fund	7,919	848	867	909	927	946	921	1,177	14,514
<b>Total*:</b>	7,919	848	867	909	927	946	921	1,177	14,514
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		593	867	909	927	946	921	1,177	6,340
<b>Total:</b>		593	867	909	927	946	921	1,177	6,340

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Substation Transformer Replacements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	7776	<b>End Date:</b>	Q4/2026
<b>Location:</b>	2136 N 163rd St, Shoreline		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 with the highest failure risk, or those presenting substation capacity limits. The project enhances system reliability by replacing aging substation transformers before they fail in service. This project now includes the former projects 7778, Canal Substation - Transformer Replacements, 7810, Massachusetts Street Substation - Transformer Replacements, 7811, East Pine Substation - Transformer Replacements, and 7812, Bothell Substation - Transformer Replacements. They have been merged into this project, 7776, formerly North Substation - Transformer Replacements, to create a program to cover all substation transformers.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	3,987	2,175	4,558	359	2,185	2,701	3,683	4,986	24,634
<b>Total:</b>	3,987	2,175	4,558	359	2,185	2,701	3,683	4,986	24,634
<b>Fund Appropriations/Allocations</b>									
City Light Fund	3,987	2,175	4,558	359	2,185	2,701	3,683	4,986	24,634
<b>Total*:</b>	3,987	2,175	4,558	359	2,185	2,701	3,683	4,986	24,634
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		279	4,558	359	2,185	2,701	3,683	4,986	18,751
<b>Total:</b>		279	4,558	359	2,185	2,701	3,683	4,986	18,751

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Substations Demand Driven Improvements

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7755	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	5,810	5	5	5	5	5	6	6	5,847
<b>Total:</b>	5,810	5	5	5	5	5	6	6	5,847
<b>Fund Appropriations/Allocations</b>									
City Light Fund	5,810	5	5	5	5	5	6	6	5,847
<b>Total*:</b>	5,810	5	5	5	5	5	6	6	5,847
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		3	5	5	5	5	6	6	35
<b>Total:</b>		3	5	5	5	5	6	6	35

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Substations Oil Containment

<b>BCL/Program Name:</b>	C1 Distribution - Substations	<b>BCL/Program Code:</b>	SCL360-C1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	7783	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project will bring 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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4	291	280	332	339	334	341	217	2,138
<b>Total:</b>	4	291	280	332	339	334	341	217	2,138
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4	291	280	332	339	334	341	217	2,138
<b>Total*:</b>	4	291	280	332	339	334	341	217	2,138
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		168	280	332	339	334	341	217	2,011
<b>Total:</b>		168	280	332	339	334	341	217	2,011

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Technical Training Center Development

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	9230	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

Seattle City Light is seeking to develop a dedicated, state-of-art Technical Training Center that provides educational needs for classroom instruction and field experience training opportunities for entry-level as well as seasoned Utility service workers of SCL. The chosen site for the Technical Training Center is on an undeveloped parcel of land, west of the Duwamish River and north of the Duwamish Substation, located at 10,000 West Marginal Place South, Tukwila, WA 98108 in unincorporated King County. The classroom building, a single story, wood-framed structure, houses a number of instructional classrooms, hands-on learning environments and building support areas. The overall building's square footage is 9,000 SF and the overall training yard area is 5.75 acres. The design program focuses on flexible, hands-on instructional environments in both the Classroom Building and the Yard. These spaces include: three flexible Classrooms, Computer Lab, Bug Room, Substation Training Area, Vault Training Area, Overhead & Underground Distribution Area, Commercial & Residential Service Area, Pole Climbing Area, Crane Training Area, Commercial License Certification Area and Civil Construction Training Area. There are several shared building support spaces required which include: Administration Office, Break Room, Kitchen, Copy Room and Restrooms.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	1,567	11,179	902	307	85	0	0	0	14,040
<b>Total:</b>	1,567	11,179	902	307	85	0	0	0	14,040
<b>Fund Appropriations/Allocations</b>									
City Light Fund	1,567	11,179	902	307	85	0	0	0	14,040
<b>Total*:</b>	1,567	11,179	902	307	85	0	0	0	14,040
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		229	3,902	6,307	885	0	0	0	11,323
<b>Total:</b>		229	3,902	6,307	885	0	0	0	11,323

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Tool Room Automation

**BCL/Program Name:** C5 Distribution - Distribution Other      **BCL/Program Code:** SCL360-C5  
**Project Type:** New Facility      **Start Date:** Q1/2015  
**Project ID:** 9965      **End Date:** Q4/2016  
**Location:**  
**Neighborhood Plan:** Not in Neighborhood Plan      **Council District:**  
**Neighborhood District:**      **Urban Village:**

This project funds the purchase and implementation of a software solution to improve accountability of the tool room budget and tracking of tools. The project will provide electronic means of tracking tool inventory, age and condition of tools, tool check out and return, and costs to maintain them. It will also include process redesign and a complete inventory audit.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	0	648	342	0	0	0	0	0	990
<b>Total:</b>	0	648	342	0	0	0	0	0	990
<b>Fund Appropriations/Allocations</b>									
City Light Fund	0	648	342	0	0	0	0	0	990
<b>Total*:</b>	0	648	342	0	0	0	0	0	990
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		453	342	0	0	0	0	0	795
<b>Total:</b>		453	342	0	0	0	0	0	795

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Transformer and Network Load Management Tools Upgrade

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2011
<b>Project ID:</b>	9952	<b>End Date:</b>	Q4/2016
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This project replaces and upgrades the Transformer and Network Load Management systems and Load Flow software. This project provides modern software capable of performing more robust and accurate system analysis which allows more effective management of distribution system assets for a lower overall cost. The project reduces the possibility of costly unplanned outages due to the inability to perform effective design, reduces the possible duration of those outages, and provides the load data required to perform necessary system analysis and planning. The Outage Management System requires this customer to system connectivity information to efficiently locate and manage outages. The project ensures that City Light can meet the expectations of fully utilizing our system capacity.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	223	58	11	0	0	0	0	0	292
<b>Total:</b>	223	58	11	0	0	0	0	0	292
<b>Fund Appropriations/Allocations</b>									
City Light Fund	223	58	11	0	0	0	0	0	292
<b>Total*:</b>	223	58	11	0	0	0	0	0	292
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		437	11	0	0	0	0	0	448
<b>Total:</b>		437	11	0	0	0	0	0	448

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Transmission & Generation Radio Systems

<b>BCL/Program Name:</b>	C5 Distribution - Distribution Other	<b>BCL/Program Code:</b>	SCL360-C5
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9108	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	14,973	457	294	1,294	1,384	802	991	1,021	21,216
<b>Total:</b>	14,973	457	294	1,294	1,384	802	991	1,021	21,216
<b>Fund Appropriations/Allocations</b>									
City Light Fund	14,973	457	294	1,294	1,384	802	991	1,021	21,216
<b>Total*:</b>	14,973	457	294	1,294	1,384	802	991	1,021	21,216
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		221	294	1,294	1,384	802	991	1,021	6,007
<b>Total:</b>		221	294	1,294	1,384	802	991	1,021	6,007

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Transmission Capacity

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	7011	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	10,736	22	2,026	23	23	24	24	11	12,889
<b>Total:</b>	10,736	22	2,026	23	23	24	24	11	12,889
<b>Fund Appropriations/Allocations</b>									
City Light Fund	10,736	22	2,026	23	23	24	24	11	12,889
<b>Total*:</b>	10,736	22	2,026	23	23	24	24	11	12,889
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		13	2,026	23	23	24	24	11	2,144
<b>Total:</b>		13	2,026	23	23	24	24	11	2,144

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Transmission Inter-Agency

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7105	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	2,061	542	557	566	580	594	605	613	6,118
<b>Total:</b>	2,061	542	557	566	580	594	605	613	6,118
<b>Fund Appropriations/Allocations</b>									
City Light Fund	2,061	542	557	566	580	594	605	613	6,118
<b>Total*:</b>	2,061	542	557	566	580	594	605	613	6,118
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		315	557	566	580	594	605	613	3,830
<b>Total:</b>		315	557	566	580	594	605	613	3,830

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Transmission Line Inductor Installation

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8461	<b>End Date:</b>	Q4/2019
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	688	3,531	6,958	2,681	4,698	27	0	0	18,583
<b>Total:</b>	688	3,531	6,958	2,681	4,698	27	0	0	18,583
<b>Fund Appropriations/Allocations</b>									
City Light Fund	688	3,531	6,958	2,681	4,698	27	0	0	18,583
<b>Total*:</b>	688	3,531	6,958	2,681	4,698	27	0	0	18,583
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		4,780	6,958	2,681	4,698	27	0	0	19,144
<b>Total:</b>		4,780	6,958	2,681	4,698	27	0	0	19,144

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program



# Seattle City Light

## Transmission Line Reconductoring

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8462	<b>End Date:</b>	Q4/2018
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	178	745	7,072	1,356	507	0	0	0	9,858
<b>Total:</b>	178	745	7,072	1,356	507	0	0	0	9,858
<b>Fund Appropriations/Allocations</b>									
City Light Fund	178	745	7,072	1,356	507	0	0	0	9,858
<b>Total*:</b>	178	745	7,072	1,356	507	0	0	0	9,858
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		408	7,072	1,356	507	0	0	0	9,343
<b>Total:</b>		408	7,072	1,356	507	0	0	0	9,343

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Transmission Reliability

<b>BCL/Program Name:</b>	B1 Transmission - Transmission	<b>BCL/Program Code:</b>	SCL360-B1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2001
<b>Project ID:</b>	7104	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	19,365	3,071	2,785	2,895	2,970	3,046	3,115	2,676	39,923
<b>Total:</b>	19,365	3,071	2,785	2,895	2,970	3,046	3,115	2,676	39,923
<b>Fund Appropriations/Allocations</b>									
City Light Fund	19,365	3,071	2,785	2,895	2,970	3,046	3,115	2,676	39,923
<b>Total*:</b>	19,365	3,071	2,785	2,895	2,970	3,046	3,115	2,676	39,923
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,617	2,785	2,895	2,970	3,046	3,115	2,676	19,104
<b>Total:</b>		1,617	2,785	2,895	2,970	3,046	3,115	2,676	19,104

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Transportation Streetlights

<b>BCL/Program Name:</b>	D1 External Projects - Local Jurisdictions	<b>BCL/Program Code:</b>	SCL370-D1
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2008
<b>Project ID:</b>	8377	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	Not in an Urban Village

This ongoing project relocates Seattle City Light owned streetlights as required by City of Seattle transportation projects.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	9,126	1,741	2,740	755	599	620	1,733	3,614	20,928
<b>Total:</b>	9,126	1,741	2,740	755	599	620	1,733	3,614	20,928
<b>Fund Appropriations/Allocations</b>									
City Light Fund	9,126	1,741	2,740	755	599	620	1,733	3,614	20,928
<b>Total*:</b>	9,126	1,741	2,740	755	599	620	1,733	3,614	20,928
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,439	2,740	755	599	620	1,733	3,614	11,500
<b>Total:</b>		1,439	2,740	755	599	620	1,733	3,614	11,500

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Underground 26kV Conversion

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8362	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,859	1,631	1,633	1,666	2,006	2,492	2,524	2,496	19,307
<b>Total:</b>	4,859	1,631	1,633	1,666	2,006	2,492	2,524	2,496	19,307
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,859	1,631	1,633	1,666	2,006	2,492	2,524	2,496	19,307
<b>Total*:</b>	4,859	1,631	1,633	1,666	2,006	2,492	2,524	2,496	19,307
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		934	1,633	1,666	2,006	2,492	2,524	2,496	13,751
<b>Total:</b>		934	1,633	1,666	2,006	2,492	2,524	2,496	13,751

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

### 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Underground Customer Driven Capacity Additions

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8360	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	24,291	3,013	2,918	2,139	2,169	2,330	2,221	2,214	41,295
<b>Total:</b>	24,291	3,013	2,918	2,139	2,169	2,330	2,221	2,214	41,295
<b>Fund Appropriations/Allocations</b>									
City Light Fund	24,291	3,013	2,918	2,139	2,169	2,330	2,221	2,214	41,295
<b>Total*:</b>	24,291	3,013	2,918	2,139	2,169	2,330	2,221	2,214	41,295
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		2,163	2,918	2,139	2,169	2,330	2,221	2,214	16,154
<b>Total:</b>		2,163	2,918	2,139	2,169	2,330	2,221	2,214	16,154

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Underground Equipment Replacements

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2009
<b>Project ID:</b>	8353	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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 Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		25,437	13,166	7,681	5,898	4,990	5,317	5,705	9,764	77,958
<b>Total:</b>		25,437	13,166	7,681	5,898	4,990	5,317	5,705	9,764	77,958
<b>Fund Appropriations/Allocations</b>										
City Light Fund		25,437	13,166	7,681	5,898	4,990	5,317	5,705	9,764	77,958
<b>Total*:</b>		25,437	13,166	7,681	5,898	4,990	5,317	5,705	9,764	77,958
<b>O &amp; M Costs (Savings)</b>				0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>										
City Light Fund			7,925	7,681	5,898	4,990	5,317	5,705	9,764	47,280
<b>Total:</b>			7,925	7,681	5,898	4,990	5,317	5,705	9,764	47,280

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

# Seattle City Light

## Underground Outage Replacements

<b>BCL/Program Name:</b>	C4 Distribution - Service Connections	<b>BCL/Program Code:</b>	SCL370-C4
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8352	<b>End Date:</b>	Q4/2022
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	18,425	1,096	1,126	1,146	1,161	1,506	1,941	1,969	28,370
<b>Total:</b>	18,425	1,096	1,126	1,146	1,161	1,506	1,941	1,969	28,370
<b>Fund Appropriations/Allocations</b>									
City Light Fund	18,425	1,096	1,126	1,146	1,161	1,506	1,941	1,969	28,370
<b>Total*:</b>	18,425	1,096	1,126	1,146	1,161	1,506	1,941	1,969	28,370
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		643	1,126	1,146	1,161	1,506	1,941	1,969	9,492
<b>Total:</b>		643	1,126	1,146	1,161	1,506	1,941	1,969	9,492

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## Underground System Capacity Additions

<b>BCL/Program Name:</b>	C3 Distribution - Radial	<b>BCL/Program Code:</b>	SCL360-C3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2007
<b>Project ID:</b>	8361	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	25,946	2,791	2,715	2,826	2,864	2,948	2,384	4,256	46,730
<b>Total:</b>	25,946	2,791	2,715	2,826	2,864	2,948	2,384	4,256	46,730
<b>Fund Appropriations/Allocations</b>									
City Light Fund	25,946	2,791	2,715	2,826	2,864	2,948	2,384	4,256	46,730
<b>Total*:</b>	25,946	2,791	2,715	2,826	2,864	2,948	2,384	4,256	46,730
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		1,455	2,715	2,826	2,864	2,948	2,384	4,256	19,448
<b>Total:</b>		1,455	2,715	2,826	2,864	2,948	2,384	4,256	19,448

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*



# Seattle City Light

## Union Street Substation Networks

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	New Facility	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	8201	<b>End Date:</b>	Q4/2026
<b>Location:</b>	1312 Western AV		
<b>Neighborhood Plan:</b>	Commercial Core	<b>Council District:</b>	7
<b>Neighborhood District:</b>	Downtown	<b>Urban Village:</b>	Commercial Core

This ongoing project increases the Union Street Substation network capacity to provide sufficient and reliable electrical capacity for the growing power needs of our customers. It funds a programmatic approach for the comprehensive management of underground network assets serving customers in the area bounded by Yesler Street, Alaskan Way, Pike Street, 6th Avenue Union Street, the Freeway, University Street, 3rd Avenue, and the Waterfront area from Denny to Yesler.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	25,784	1,429	2,415	2,481	2,546	2,591	2,704	2,894	42,844
<b>Total:</b>	25,784	1,429	2,415	2,481	2,546	2,591	2,704	2,894	42,844
<b>Fund Appropriations/Allocations</b>									
City Light Fund	25,784	1,429	2,415	2,481	2,546	2,591	2,704	2,894	42,844
<b>Total*:</b>	25,784	1,429	2,415	2,481	2,546	2,591	2,704	2,894	42,844
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		925	2,415	2,481	2,546	2,591	2,704	2,894	16,556
<b>Total:</b>		925	2,415	2,481	2,546	2,591	2,704	2,894	16,556

\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.

## 2016 - 2021 Proposed Capital Improvement Program

# Seattle City Light

## University Substation - Network

<b>BCL/Program Name:</b>	C2 Distribution - Network	<b>BCL/Program Code:</b>	SCL360-C2
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/2014
<b>Project ID:</b>	8464	<b>End Date:</b>	Q4/2022
<b>Location:</b>			
<b>Neighborhood Plan:</b>	Not in Neighborhood Plan	<b>Council District:</b>	
<b>Neighborhood District:</b>		<b>Urban Village:</b>	

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.

		LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>										
City Light Fund Revenues		1,294	1,035	457	371	377	383	467	479	4,863
<b>Total:</b>		1,294	1,035	457	371	377	383	467	479	4,863
<b>Fund Appropriations/Allocations</b>										
City Light Fund		1,294	1,035	457	371	377	383	467	479	4,863
<b>Total*:</b>		1,294	1,035	457	371	377	383	467	479	4,863
<b>O &amp; M Costs (Savings)</b>				0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>										
City Light Fund			602	457	371	377	383	467	479	3,136
<b>Total:</b>			602	457	371	377	383	467	479	3,136

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

# Seattle City Light

## Workplace and Process Improvement

<b>BCL/Program Name:</b>	E3 Central Utility Projects - Fleets and Facilities	<b>BCL/Program Code:</b>	SCL250-E3
<b>Project Type:</b>	Rehabilitation or Restoration	<b>Start Date:</b>	Q1/1999
<b>Project ID:</b>	9159	<b>End Date:</b>	Q4/2026
<b>Location:</b>	System Wide		
<b>Neighborhood Plan:</b>	Not in a Neighborhood Plan	<b>Council District:</b>	Citywide
<b>Neighborhood District:</b>	Not in a Neighborhood District	<b>Urban Village:</b>	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.

	LTD Actuals	2015 Rev	2016	2017	2018	2019	2020	2021	Total
<b>Revenue Sources</b>									
City Light Fund Revenues	4,398	1,335	1,158	1,070	260	852	1,083	1,436	11,592
<b>Total:</b>	4,398	1,335	1,158	1,070	260	852	1,083	1,436	11,592
<b>Fund Appropriations/Allocations</b>									
City Light Fund	4,398	1,335	1,158	1,070	260	852	1,083	1,436	11,592
<b>Total*:</b>	4,398	1,335	1,158	1,070	260	852	1,083	1,436	11,592
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan by Fund</b>									
City Light Fund		816	1,158	1,070	260	852	1,083	1,436	6,675
<b>Total:</b>		816	1,158	1,070	260	852	1,083	1,436	6,675

*\* Funds are appropriated through the Adopted Budget at the Budget Control Level. Amounts shown above are in thousands of dollars.*

### 2016 - 2021 Proposed Capital Improvement Program