

# Strategic Plan Update 2017-2022:

## Strategic Initiatives Summary

### COMPLETED INITIATIVES

In 2013-2015, City Light completed these initiatives:

CR1	Align Budget and Rates	M1	Effective Communication and Engagement
CR2	Rate Predictability/Net Wholesale Revenue Practices	M5	Internal Audit
CR3	Strengthen Ratepayer Advocacy	M8	Procurement Process Improvements
CR4	Cost of Service and Rate Design Policies	M10	Financial Policies
CR7	Customer Contact Center Performance	A15	Standards and Compatible Units
W1	Safety Culture Promotion/ Practices	A18	Conservation Program Enhancement

### CONTINUING INITIATIVES

Objective 1: Improve customer experience and rate predictability	Objective 2: Enhance organizational performance
A2 Distribution Management System	M2 Benchmarking City Light Performance
A4 Compliance Tracking System	M3 Information Technology Roadmap
A6 Denny Substation Program	M4 Performance-Based Reporting
A7 Transmission System Improvements	M6 Project Management Quality Improvement
A8 Underground Cable Replacement	M7 Service-Level Agreements
A9 Improved Streetlight Infrastructure	M9 Efficiency Initiatives
A11 Hydro Performance and Generation Availability	A3 IT Security Upgrades
A13 Advanced Metering Infrastructure	A5 Enterprise GIS
A20 Master Service Center	A10 Mobile Workforce Implementation
CR5 Customer Portal Development	A12 Regional Power and Transmission Leadership
CR10 Utility Discount Program	
Objective 3: Increase workforce performance and safety practices	Objective 4: Continue conservation and environmental leadership
W2 Skilled Workforce Attraction and Retention	CR8 Enhanced Environmental Leadership
	CR9 Reduce Environmental Liability
	A14 Electric Vehicle Infrastructure/Transportation Electrification
	A17 Climate Research and Adaptation

### **BUDGET/RATE ALIGNMENT (COMPLETED)**

CR1: Align budgets and rates to strategic plan priorities/Implement new budget system

City Light streamlined its budget development process by purchasing a new budget system and aligned budgets and rates with the strategic plan. The new budget system was implemented one year ahead of the planned target date and expenditures were under the authorized budget. Three outdated software systems were replaced and the new system was integrated with existing forecasting and rate software. The new system was used beginning with the 2015-2016 budget process.

**This initiative was completed and is now included in baseline operations.**

### **NET WHOLESALE REVENUE PRACTICES (COMPLETED)**

CR2: Reduce rate shocks; conservative net wholesale revenue/analyze financial investments to reduce volatility

Prior to implementation of this initiative City Light's net wholesale revenue budget target was calculated as the simple average of net wholesale revenues realized in past years beginning with 2002 (Ordinance 123260, 2010). The 2013-2018 Strategic Plan altered the budget target to be a set value which would become more conservative each year. The 2015-2020 Plan Update further reduced the target to reflect lower expectations for future wholesale market prices. The Strategic Plan proposed for the 2017-2022 period maintains the target levels of the initiative through 2020, but reduces it further in 2022. Despite the lower target levels, however, it is likely that surcharges will be necessary at some time over the next three years.

**This initiative was completed and is now included in baseline operations.**

### **RATEPAYER ADVOCACY INITIATIVE (COMPLETED)**

CR3: Strengthen ratepayer advocacy in the rate process

As implemented in this initiative, City Light restructured the rate review process as well as the update of the strategic plan to ensure meaningful ratepayer input. The new process involves the Seattle City Light Review Panel as well as outreach to customers. City Light will continue to communicate and seek opportunities to improve this process.

**This initiative was completed and is now included in baseline operations.**

### **COST OF SERVICE & RATE DESIGN POLICIES (COMPLETED)**

CR4: Review and update cost of service and rate design policies for 2013 – 18

In 2014, City Light completed the update for 2015 and 2016 rates that reflected the authorized base budgets and strategic initiative spending in those years. As planned, the utility worked with the review panel, mayor and council to develop these rates and to reflect new policy decisions in the cost of service and rate designs. In 2016 City Light will undertake the same process for setting 2017 and 2018 rates.

**This initiative was completed and is now included in baseline operations.**

## CUSTOMER-FOCUSED WEBSITE/SERVICES

### CR5: Customer Portal Development

Customer Focused Portal Development (formerly called Web Redevelopment) will make it easier for ratepayers to find important information, use online tools or mobile applications and participate in energy saving programs without costly messages and phone calls. This will enhance not only overall customer satisfaction but operational efficiency as well. The goal is to provide an informative, easy-to-use portal that offers customers 24/7 access to a wide range of City Light programs and services. This project was included in the new customer information system (NCIS) replacement project so timelines now follow those of the larger project. System implementation is currently scheduled for fall 2016.

## CUSTOMER SERVICE CENTER IMPROVEMENTS (COMPLETED)

### CR7: Enhance and improve Customer Contact Management model

In 2013, City Light completed a comprehensive review and analysis of ways in which City Light customers conduct business with the utility. This included a benchmarking and best practices study as well as initiation of a transactional customer satisfaction survey. These analyses resulted in a work plan that identified business process improvement efforts. The process improvements included an increase of customer self-service options, enhancements to the automated voice response system and implementation of technology changes to support improved customer service and operational efficiency. Projects included in the initial work plan were implemented in 2014.

**This initiative was completed and is now included in baseline operations.**

## ENHANCED ENVIRONMENTAL LEADERSHIP

### CR8: Environmental Leadership

This initiative includes two efforts to ensure that City Light continues to be an environmental leader among electric utilities: 1) developing an ecological approach to vegetation management along select portions of the transmission line rights-of-way to reduce long-term maintenance costs while improving habitat values, and 2) increasing awareness of City Light's many environmental achievements with an environmental report and website. Website enhancements and development of a new environmental publication were completed in 2014. In 2015 ecological management plans for sites along the Cedar Falls and Creston-Duwamish transmission right-of-way were completed. Implementation of these plans is in process throughout 2016 with work for this initiative expected to be completed in 2018.

## ENVIRONMENTAL LIABILITY REDUCTIONS

### CR9: Reduce Environmental Liability

The purpose of this initiative is to reduce the presence and use of toxic materials in current operations through implementation of an environmental management plan. The plan coordinates risk reduction efforts including: 1) testing City Light transformers for polychlorinated biphenyls (PCBs) and removal of transformers with a PCB concentration greater than 1 ppm, 2)

initiation of projects to reduce the spill risk at generating plants, and 3) development and implementation of an environmental compliance risk reduction program. The PCB master plan was completed in 2014 and software to track the PCB concentration of all transformers was implemented the following year. The 2016 work plan focuses on removal of transformers containing PCB levels of 1.0 ppm or higher from the City Light system.

#### **UTILITY DISCOUNT PROGRAM**

##### **CR10: Increase enrollment in the Utility Discount Program**

City Light's Utility Discount Program is one of the most generous income-qualified assistance programs in the country with a 60 percent discount on electric bills. City Light continues efforts to assist customers who are having difficulty paying their bills by increasing enrollment in this program. At the end of 2015, there were approximately 20,000 people enrolled in the discount program, with 75,000 potential eligible participants in Seattle and neighboring cities. With increased marketing and outreach, City Light aims to help all those who are in need. Twenty-five hundred new enrollees are targeted for 2016, with a long-term goal of enrolling 28,000 total participants by 2018.

#### **SAFETY CULTURE PROMOTION/PRACTICES (COMPLETED)**

##### **W1: Safe Work Environment**

The focus of this initiative is to reduce injury frequency and severity rates. This effort also focuses on reductions in motor vehicle accidents, cost per injury, workers compensation costs, and third-party claims. Several programs were established to meet these goals. A comprehensive driving safety program was developed in 2013. A new safety management system was implemented and safety awareness became part of new employee orientation in 2014. In 2015, driving simulators were installed and were included in the utility's safe driving program. These efforts and City Light's focus on improving the City Light safety culture will be an ongoing part of doing business.

**This initiative was completed and is now included in baseline operations.**

#### **SKILLED WORKFORCE ATTRACTION & RETENTION**

##### **W2: Attract, Retain and Promote /Workforce Development**

To ensure having a qualified high performance workforce in place, City Light has implemented a comprehensive workforce strategy that includes developing and implementing an incentive pay program and the roll out of a series of training programs, such as leadership development, computer training and customer service training. Review, analysis, and implementation of market pay adjustments was completed in 2015. A learning management system was also implemented in 2015.

## **DISTRIBUTION MANAGEMENT**

### **A2: Implement Distribution Management System**

The Distribution Management System (DMS) is a comprehensive software application that enables dispatchers to improve switching operations for planned shutdowns, ensuring that circuit, equipment overloads or voltage related problems do not occur. It will provide an automatic switching plan and will allow dispatchers to track and manage distributed generation connected to the system via distribution lines. DMS will improve City Light's ability to estimate system load and deliver energy to customers. This initiative will begin in 2019.

## **IT SECURITY UPGRADES**

### **A3: Implement IT Security Upgrades**

This initiative is focused on improving the security of information technology assets by updating and/or replacing the information security infrastructure. Infrastructure modernization includes upgrading firewalls, routers and switches. The outdated network infrastructure will also be improved with implementation of new enterprise security information and event management (SIEM) tools. This initiative will further define the operational standards, policies, guidelines and tools to integrate information and operational technology security into a cohesive program to manage the utility's critical assets. These efforts continue through 2020.

## **RELIABILITY & CYBERSECURITY STANDARDS**

### **A4: Compliance Tracking System and Compliance Program Standardization**

The Western Electricity Coordinating Council (WECC), the North American Electric Reliability Corporation (NERC) and the Federal Energy Regulatory Commission (FERC) periodically audit City Light for compliance with over 900 critical infrastructure protection and reliability standards requirements. Violations can incur penalties of \$1 million per day of violation. This initiative will standardize and automate compliance with these regional and cyber security standards by 1) implementing an online system to manage and track workflows and compliance with the regulatory standards, and 2) adding labor resources to develop a standardized approach to standards compliance, including documented procedures and controls, training, and self-monitoring. The tracking system will be implemented in the third quarter of 2016.

## **ENTERPRISE GIS**

### **A5: Integrated Geospatial Information System (GIS)**

This initiative supports the establishment of a strategic direction for City Light's geospatial information systems (GIS) and the implementation of an enterprise-wide GIS. The solution will replace City Light's existing environment that includes multiple, incompatible GIS systems as well as supporting both the current and emerging GIS needs of the utility. Replacing multiple systems with a single, integrated GIS will eliminate redundant data entry, increase data quality and make locational information available. In 2015, the strategic direction for GIS was approved. In 2016 a unified GIS database system will be selected. It is anticipated that work on this initiative will continue into 2020.

## **NORTH DOWNTOWN SUBSTATION**

### **A6: Denny Substation Program**

The new Denny substation and its associated transmission circuits and South Lake Union network distribution system provides needed capacity and operational flexibility to deliver highly reliable electrical service to the high-density, high-tech/bio-tech load centers and neighborhoods that make up the north downtown area. In 2015 a number of key substation and milestones were completed including 100 percent completion of facility and network design. Significant additional substation and network distribution work is scheduled for 2016, primarily the beginning of construction for both the network distribution system and the substation facility. The Denny substation is scheduled to be energized in March 2018 followed by the work to energize the network distribution system backbone feeders.

## **TRANSMISSION SYSTEM IMPROVEMENT**

### **A7: Transmission System Improvements in Puget Sound area**

The transmission system improvement project increases transmission capacity in City Light's service territory to relieve congestion in the Puget Sound area resulting from changes in area generation, load growth, transfers of power to Canada required by treaty and outages needed to maintain the lines. The cost of these improvements will be partially reimbursed by other utilities in the area. The final design scope and issuance of the design request-for-proposal on the Broad Street substation inductor was completed on schedule in 2015. Continuation of engineering and completion of construction contract documents will proceed in 2016 in coordination with the Denny substation project.

## **UNDERGROUND CABLE REPLACEMENT**

### **A8: Cable Rehabilitation and Replacement**

The cable rehabilitation and replacement program is an ongoing system-wide reliability program. Cable rehabilitation prolongs the life of existing direct-buried electrical cables by testing, and where suitable, injecting cables with an approved silicon fluid. The cables not suitable for injection require replacement. In 2015 City Light completed a combined 6.7 miles of civil and electrical design work, installed 1.9 miles of conduit and replaced 6.9 miles of cable, exceeding the 2015 target for each area. Plans for 2016 include continuation of engineering design and installation of two miles of cable and one mile of conduit.

## **STREETLIGHT PLANNING, DESIGN, CONSTRUCTION**

### **A9: Streetlight Infrastructure Replacement**

The streetlight infrastructure replacement project will replace 867 (or 18 percent) of City Light's highest priority aging, dysfunctional and/or damaged streetlight poles and related infrastructure, which were identified in the Seattle City Light street lighting 10-year streetlight horizon plan. Replacing failing systems will reduce costly stop-gap repairs by crews and improve customer safety and satisfaction. Planned work at the Seattle Center and Fauntleroy Crest neighborhood was completed in 2015. Work was also started within the Holly Park

neighborhood to replace poles and related infrastructure. Holly Park will be completed in 2016 along with two additional neighborhood construction and design projects.

#### **MOBILE WORKFORCE IMPLEMENTATION**

##### **A10: Mobile Workforce Implementation**

City Light will implement mobile workforce management software. This technology will interface with both the work and asset management systems and the new customer information system (NCIS) to enable automated scheduling and dispatch of the field workforce. Implementation will begin in 2017.

#### **HYDRO PERFORMANCE AND GENERATOR AVAILABILITY**

##### **A11: Improve Hydro System Optimization and Generator Availability**

This initiative ensures that investments in and maintenance of City Light's hydro system maximize performance and reduce unit outages. Goals through 2018 are: 1) to develop an Excel optimization tool to better inform power marketing and system control decision-making "within the hour" for hydro operations, and thereby increase generation efficiency/water utilization from utility revenue and state renewable/I-937 perspectives, and 2) to prioritize crew deployment toward preventive maintenance in order to minimize unit outages.

#### **REGIONAL POWER AND TRANSMISSION LEADERSHIP**

##### **A12: Regional and industry leadership**

This initiative allows City Light to take a proactive leadership role on various regional power supply and transmission matters, particularly related to BPA wholesale power and transmission rates. The goal is to protect City Light customer interests, regionally and nationally, regarding new regulations affecting reliability, transmission planning and cost allocation, integration of renewable resources, and relieving transmission constraints.

#### **ADVANCED METERING INFRASTRUCTURE**

##### **A13: Advanced Meter Infrastructure**

This initiative began in 2014 to implement an advanced metering infrastructure ("AMI") which will provide a substantial net financial benefit to City Light as well as greatly improve customer service. AMI provides an operating platform that supports emerging consumer technologies, including customer generation, electric vehicle charging and home energy-management protocols. Installation of the new meters begins in 2017. A total of 430,000 meters will be installed by the end of 2019.

#### **ELECTRIC VEHICLE INFRASTRUCTURE AND RATES**

##### **A14: Electric Vehicles**

Electric transportation, including passenger vehicles, transit and non-road applications, aligns closely with City Light's environmental ethic and commitment to customer value. A

comprehensive strategy was developed in 2015 based on the foundation that every electric vehicle coming on to the grid creates a net benefit to all ratepayers, while supporting the city's climate action plan. Similarly, analysis has shown that electric vehicle charging offers a highly flexible load that has the potential to optimize the use of existing infrastructure. Efforts in 2016 include the development of a detailed work plan in coordination with the city's Office of Sustainability and Environment.

#### **ENGINEERING AND OPERATION STANDARDS (COMPLETED)**

##### A15: Standards and Compatible Units

The standards and compatible units initiative enables City Light to develop material, design and construction standards, and update the existing standards in accordance with new products on the market, new regulatory requirements, and the latest applicable construction methodologies. These standards form the building blocks of compatible units for City Light's most frequent and repetitive work. Standard operating procedures ensure consistent, quality installation of utility material and equipment. In 2013 the first batch of four standards was developed for publication. The final three batches were published in 2015.

**This initiative was completed and is now included in baseline operations.**

#### **CLIMATE RESEARCH**

##### A17: Environmental Leadership Climate

This initiative established a program to carry out ongoing climate research on the impacts of climate change on City Light operations and to develop a strategy to adapt to these impacts. In 2015 the first phase of the climate adaptation plan was completed. Upcoming 2016 milestones include the development of the final climate adaptation plan and securing funding for additional climate research.

#### **CONSERVATION PROGRAM ENHANCEMENT (COMPLETED)**

##### A18: Conservation

This initiative focused on researching and testing innovative ways to invest conservation funds while maximizing program effectiveness and increasing partnership opportunities with City Light customers. The pay-for-performance pilot program examined whole-building savings analysis as a technique for monitoring real-time building energy performance, incentive and payment structures for periodic savings-based payments, staff and project processing efficiencies, and customer acceptance of the methods. An external consultant was engaged to assist in the evaluation of the pilot and provide recommendations for future program offerings.

**This initiative was completed and is now included in baseline operations.**



## SERVICE CENTERS' MASTER PLAN

### A20: Master Service Center

City Light's service centers are the backbone of its operations, directly impacting the mission to provide reliable, low-cost power to customers. Built in the 1920s and 1950s respectively, City Light's South and North Service Centers have exceeded their intended operational lives. This initiative will undertake a site master planning process to evaluate options for making improvements to the current facilities or potentially consolidating them into one centralized location. This initiative will begin in 2021.

## COMMUNICATIONS AND PUBLIC ENGAGEMENT (COMPLETED)

### M1: Effective Communications and Engagement

By working in close cooperation with the Seattle City Light Review Panel, City Light was able to identify methods to strengthen communication and public engagement. The initiative has provided the means by which the utility has been able to leverage work already completed on the Strategic Plan. The Review Panel continues to provide an important third-party perspective on strengthening communications and engagement as the panel members represent customers in their ongoing work.

**This initiative was completed and is now included in baseline operations.**

## PERFORMANCE BENCHMARKING & EFFICIENCIES

### M2: Benchmarking Performance

City Light established this initiative to reduce costs and enhance service by identifying process, performance and efficiency gaps. Action plans to correct deficiencies identified by the benchmarking and best practices studies are developed for each study area. Benchmarking and best practice studies completed in 2014 and 2015 addressed the following business areas: conservation, financial planning and budget, general and cost accounting, physical security, fleets, facilities, safety, workers compensation, tool room, contact center/customer contact, accounts payable, procurement, material control, HUB/WMBE program and a data warehouse health check. City Light is currently working on studies of the environmental and real estate areas, which will be completed in 2016.

## INFORMATION TECHNOLOGY ROADMAP

### M3: Implement IT Roadmap

This initiative includes three separate projects: 1. City Light's contribution to upgrading the city's financial system (which is also used by City Light), 2. Development of a plan for recovery of City Light's information technology assets in the event of a major disaster, and 3. Implementation of an enterprise document management (EDM) system. The financial system project completed all efforts to consolidate data and update existing data interfaces in 2015. The disaster recovery/business continuity plan effort has also completed all program milestones with the building of a data co-location site, engaging in disaster recovery exercises and conducting a business impact analysis. In 2015, EDM (which is now known as ECM, or enterprise

content management) successfully implemented three projects, including the automation of electrical service requests. This effort improves accuracy of information and decreases time to service by having the customer complete an on-line form. The initiative will continue to implement content and workflow solutions for other business areas of City Light through 2018.

#### **PERFORMANCE-BASED REPORTING**

##### **M4: Performance-Based Reporting**

The performance-based reporting initiative made significant progress in 2015. Among the new data marts with completed development are those for human resources, real estate, accounts payable and accounts receivable from the city's financial system as well as automation of HUB/WMBE reporting. A proof of concept for the risk oversight and power marketing organization was successfully concluded with plans to begin implementation in 2016, as well as the automation of recurring reports such as those on overtime. This initiative was also given the responsibility to produce reports for the new customer billing system, NCIS.

#### **INTERNAL MANAGEMENT REVIEW UNIT (COMPLETED)**

##### **M5: Establish Internal Audit/Management Review Group**

In 2013, the internal audit/ management review group was established and staffed. The group completed an initial risk assessment of City Light and developed an annual audit plan as specified in the 2013 deliverables. Internal audit also has assumed responsibility for managing audits performed by the state auditor.

**This initiative was completed and is now included in baseline operations.**

#### **PROJECT MANAGEMENT QUALITY IMPROVEMENT**

##### **M6: Project Management Quality Improvements**

This initiative is focused on establishing a consistent project management capability to ensure proper project development, oversight, management and accountability. Efficiencies can be gained through standardizing processes and training employees involved in all levels of project management. A project management methodology was published in 2014. Video-based training in use of the methodology was developed and made available to project managers throughout the utility in 2015. Efforts in 2016 include baseline measurement of key performance indicators and development of project performance reporting. Program efficiencies will be measured annually.

#### **SERVICE AGREEMENTS/PERFORMANCE METRICS**

##### **M7: Service Agreements with City Departments**

The goal of this initiative is to achieve enhanced accountability, improved and measured performance, and cost oversight with departments through signed service level agreements that contain metrics and performance guarantees. A service level agreement template has been developed and is being used to initiate discussions with multiple city departments, including

Seattle Public Utilities, the Seattle Office of Civil Rights and the Department of Finance and Administrative Services. Efforts going forward include finalization of agreements with each department to which City Light provides funding.

#### **EXTERNAL SERVICE CONTRACT PROCUREMENT (COMPLETED)**

##### **M8: Review and Improve Procurement Processes for External Service Contracts**

This initiative evaluated and implemented process improvements to the City Light procurement process and the administration of purchase, consultant and public works contracts while maintaining financial controls to prevent fraud and abuse. A 2013 benchmarking study provided recommendations for procedural changes, organizational structure to align with customer expectations, staff competencies and other recommendations to improve efficiencies. In 2014 new dashboards were put in place to track key performance indicators and metrics needed to ensure that the efficiency gains result.

**This initiative was completed and is now included in baseline operations.**

#### **EFFICIENCY INITIATIVES**

##### **M9: Efficiency Projects**

By focusing on value-added activities, City Light was able to not only meet its \$18.5 million efficiency savings target for 2015, but even exceeded that target by several million dollars. In 2016, the utility will achieve similar efficiency savings, and in the 2017-2022 plan expects to far exceed these amounts.

#### **FINANCIAL POLICIES INITIATIVE (COMPLETED)**

##### **M10: Review and affirm or amend financial policies**

As the Strategic Plan was being implemented an analysis of whether to purchase insurance to cover City Light's generation assets became the major focus of this initiative. A consultant was retained to update the value of the assets and the potential cost of insuring them. When the analysis was completed, City Light decided not to move forward with buying an insurance product because the annual cost was prohibitively high while the risk of catastrophic generating unit failure remained very low.

**This initiative was completed.**

