A Progress Report on the Future of Your Electric Service

SEATTLE CITY LIGHT STRATEGIC PLAN UPDATE 2017–2022

The update to Seattle City Light's Strategic Plan highlights progress we're making to serve you better. The utility's goal is to exceed customer expectations in producing and delivering power that is environmentally responsible, safe, affordable and reliable.

Seattle City Light

THE NATION'S GREENEST UTILITY

Letter From the General Manager

INVESTING NOW:
A BRIGHTER FUTURE FOR CUSTOMERS

Since Seattle City Light's Strategic Plan was first approved by the City Council in 2012, the utility has been delivering on its promise to meet and exceed customer expectations in producing and providing environmentally responsible, safe, affordable and reliable power — today and for years to come.

Every two years, City Light updates the plan, with the last revision in 2014. For the 2016 update, the plan's foundation remains unchanged — maintaining current levels of service while planning for a challenging future.

A range of initiatives and investments to improve performance and provide rate reliability and predictability are well underway, with others already completed. And results are coming in, with improved savings and operations.

The 2017-2022 Strategic Plan update includes innovations that reflect City Light's identity as a "Utility of the Future," an organization able to adapt to a changing industry. The update also reflects the guidance and input of our independent Review Panel as well as extensive community engagement.

City Light continues to look for cost savings, from improving internal processes and adopting new technologies to updating our generating system. This hard work is paying off. Careful use of resources and efficient operations have resulted in sustainable cost-savings for the utility. Through these efficiencies, City Light saved $18.5 million in 2015 and most of these are ongoing. By 2018, the utility is committed to achieving an additional $10 million in cost savings for a total of $28 million.

Perhaps and most important, the Strategic Plan fulfills our commitment to transparency and accountability. It is a blueprint that outlines our path forward and serves as our report card to the community.

I offer my personal thanks for the meticulous work done by the City Light Review Panel (please see the sidebar on this page). Panel members bring broad experience and great insight to the task at hand. They are essential to the creation of a vibrant, relevant and innovative Strategic Plan.

On behalf of all the dedicated employees of City Light, thank you for your involvement in our work and in helping us be the best utility in the country.

Sincerely,

Larry Weis
General Manager and CEO
Seattle City Light

CITY LIGHT REVIEW PANEL

Created in 2010 by city of Seattle ordinance, the City Light Review Panel includes representatives from private, public and nonprofit sectors; utility experts; business leaders and community representatives. For this update, the panel met many times to hear briefings from City Light leaders about progress made on the plan, and provided valuable input that helped shape the effort. Thanks to our panel members:

David Allen
(commercial customer)

Gail Labanara
(suburban franchise representative)

Tom Lienesch (economist)

Chris Roe (industrial customer)

Julia M. Ryan (financial analyst)

Sue Selman
(low-income customer representative)

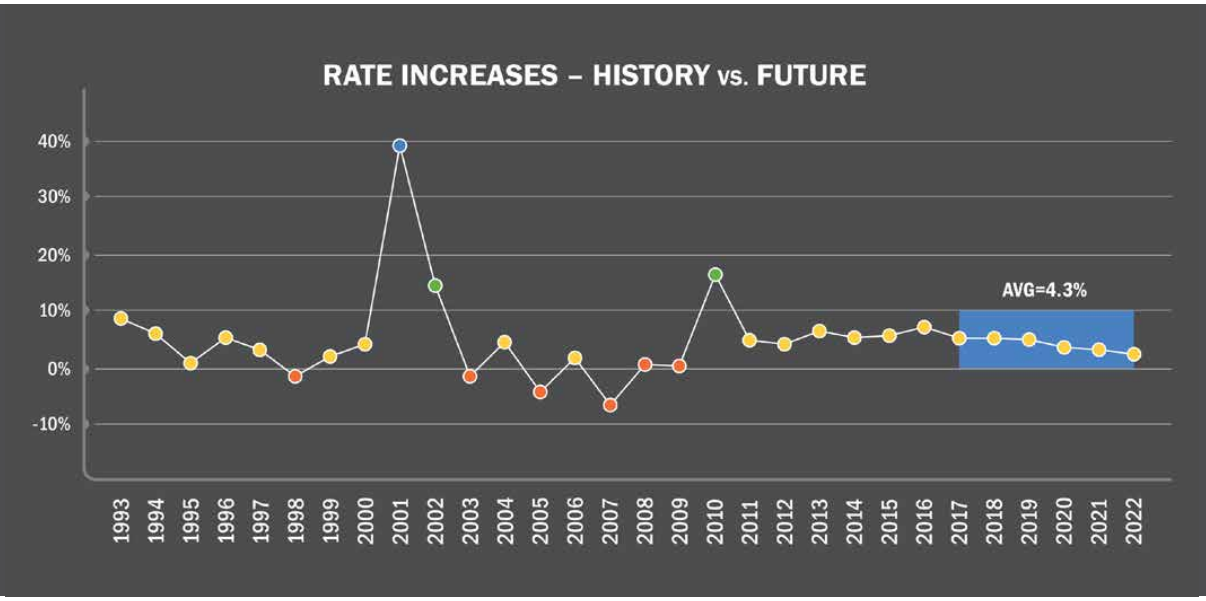
Eric Thomas
(residential representative)

Sara Patton
(non-profit energy efficiency advocate)

Eugene Wasserman
(at-large customer)

Why a Strategic Plan?

In a word, volatility. As you can see from this graph, City Light's customer rates have long been unpredictable and erratic.



City Light customers made it clear that they wanted stable electric rates. And the utility also needed predictability to allow for sound, informed business decisions. A Strategic Plan would provide a roadmap to follow and offer tangible results to customers.

The first Strategic Plan was approved in 2012, and the first update to it was completed in 2014. The second update is now at hand, a process that maintains current levels of service while planning for a challenging future.

The launch of the first Strategic Plan emphasized the need for a stable rate path. City Light anticipated a six-year average rate increase of 4.7 percent per year. With the Strategic Plan's first update in 2014, it had worked well, which allowed the utility to adjust the rate path down to 4.4 percent per year for the next six years. With the current second update, because of continued efforts to find savings and promote efficient operations, the utility is once again lowering the projected six-year rate path downward, to 4.3 percent.

PREDICTABLE & SUSTAINABLE

This Strategic Plan update proposes a rate increase that averages a predictable 4.3 percent annually through 2022 for an average residential bill change of $3.13 per month or $37.60 per year.

For the details of what this rate increase includes, such as debt-service coverage and inflation relating to operations and maintenance, please see the Financial Forecast Assumptions Summary Appendix.

The Plan is Working

The Strategic Plan is organized around four key objectives that are important to the utility and its customers:

1. Improve customer experience and rate predictability
2. Increase workforce performance and safety practices
3. Enhance organizational performance
4. Continue conservation and environmental leadership

City Light continues to make progress on these objectives through 38 strategic initiatives. The following chart summarizes the status of those initiatives. For more detailed information, please see the Strategic Initiatives Summary Appendix.

2017-2022 STRATEGIC INITIATIVE UPDATE	ANNUAL OPERATING COST	TOTAL PROJECT COST
Objective 1: Improve customer experience and rate predictability		
● A2 Distribution Management System	0.3	8.7
● A4 Compliance Tracking System	0.9	
● A6 Denny Substation Program		209.5
● A7 Transmission System Improvements		9.3
● A8 Underground Cable Replacement	3.1	
● A9 Improved Streetlight Infrastructure		3.1
● A11 Hydro Performance and Generation Availability		
● A13 Advanced Metering Infrastructure	1.2	95.0
● A20 Master Service Center		310.0
● CR1 Align Budget and Rates		
● CR2 Rate Predictability/Net Wholesale Revenue Practices	7.5 (a)	
● CR3 Strengthen Ratepayer Advocacy		
● CR4 Cost of Service and Rate Design Policies		
● CR5 Customer Portal Development	0.1	
● CR7 Customer Contact Center Performance		
● CR10 Utility Discount Program	7.0 (b)	
Objective 2: Increase workforce performance and safety practices		
● W1 Safety Culture Promotion/Practices		
● W2 Skilled Workforce Attraction and Retention	4.3	12.4
Objective 3: Enhance organizational performance		
● M1 Effective Communication and Engagement		
● M2 Benchmarking City Light Performance	0.1	
● M3 Information Technology Roadmap	0.6	9.2
● M4 Performance-Based Reporting	0.8	
● M5 Internal Audit		
● M6 Project Management Quality Improvement	0.3	
● M7 Service-Level Agreements		
● M8 Procurement Process Improvements		
● M9 Efficiency Initiatives	$28 million annually	
● M10 Financial Policies		
● A3 IT Security Upgrades	0.7	4.5
● A5 Enterprise GIS	1.1	4.1
● A10 Mobile Workforce Implementation	0.2	3.0
● A12 Regional Power and Transmission Leadership	0.3	
● A15 Standards and Compatible Units		
Objective 4: Continue conservation and environmental leadership		
● CR8 Enhanced Environmental Leadership	0.1	
● CR9 Reduce Environmental Liability	0.3	24.9
● A14 Electric Vehicle Infrastructure/Transportation Electrification		
● A17 Climate Research and Adaptation	0.2	1.4
● A18 Conservation Program Enhancement		
TOTAL	**29.1**	**695.1**

● Completed ● On Track ● Scope and/or timeline adjusted ● Not Started

A2, etc. refers to specific plan initiatives detailed in the Strategic Initiatives Summary Appendix

(a) This amount is the annual reduction in net wholesale revenue budget.
(b) Consists of $450K annual program operating costs plus $6.6M in reduced annual revenue due to increased program enrollment.

ENSURING CURRENT LEVELS OF SERVICE

City Light has been providing basic electric service for businesses and residents of Seattle and the Puget Sound region for more than a century. In developing the Strategic Plan, City Light defined a service baseline, which is the basic programs and investments required to maintain operations, and provide a consistent level of reliability and customer service without significantly increasing operating risk.

In 2015, staff repaired and returned Boundary Dam's generator unit 53 to service before the peak generation season on the Pend Oreille River in half the repair time expected and $1 million under budget. The unit went down in 2013.

Power Supply and Environment

1. Produce and purchase 10 billion kilowatt-hours of clean electricity each year to power all the homes and businesses (nearly 400,000 customers) in Seattle, Shoreline, Lake Forest Park, Burien, SeaTac, Tukwila and other small parts of King County.
2. Operate and conduct maintenance on Boundary, Skagit, Cedar Falls and Tolt Dams.
3. Incorporate environmental and wildlife habitat mitigation as part of the Boundary plant license.
4. Meet load growth with conservation and renewable power resources, including compliance with Washington's Renewable Portfolio Standard (I-937) requirements to acquire renewable power resources.
5. Continue strong conservation program and achieve I-937 mandated targets.
6. Maintain greenhouse-gas neutrality status.
7. Continue hazardous waste/Superfund cleanup, water-quality testing, and the restoration of hundreds of acres of land that includes fish and wildlife habitat.

Reliability

8. Provide reliability equal to no more than one outage per year per customer lasting no more than 70 minutes, on average, per customer.
9. Support operation and maintenance of 14 large substations and almost 3,000 miles of transmission and distribution lines.
10. Conduct maintenance on a highly reliable network system that serves customers in downtown Seattle.
11. Manage 500-plus miles of annual tree-trimming along power lines — a major contributor to keeping reliability at a high level.
12. Inspect and treat City Light's 108,000 poles and annual replacement of 1,800 poles.
13. Direct streetlight-repair response within 10 working days of a reported outage, as well as replacement of about 15,000 streetlight lamps per year with energy-efficient LEDs until all residential streets have LEDs.
14. Implement a new work- and asset-management program to assess and prioritize work on City Light's most critical assets.
15. Conduct an apprenticeship program that hires and trains 10-20 new apprentices per year.
16. Maintain an outage management system that provides customers critical information during outage events.

Customer Service

17. Manage a customer metering and billing system, including an e-billing option, that provides monthly or bi-monthly bills to all customers.
18. Ensure new service connections are completed within 40-60 days.

Infrastructure and Support

19. Continue and complete a wide variety of capital projects that maintain and upgrade City Light's power production, transmission and distribution systems.
20. Maintain the utility-wide information technology infrastructure and about 125 software applications including website, customer care, billing, energy management, inventory management and budgeting enhancements.
21. Maintain staffing at levels needed to perform necessary work in distribution, transmission, generation, conservation, customer service, and administration.
22. Maintain compliance with federal regulatory requirements regarding system reliability and critical asset protection.

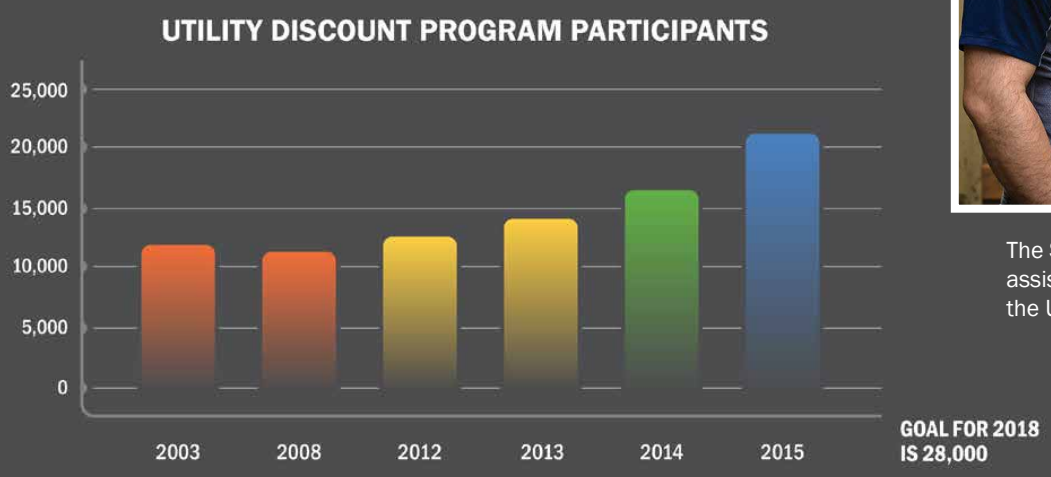
EFFICIENT OPERATIONS MEAN COST SAVINGS

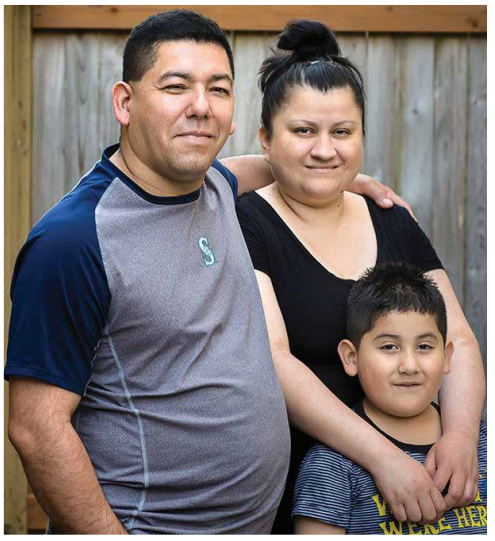
Careful use of resources and efficient operations have resulted in sustainable cost savings for the utility. Through these efficiencies, City Light saved $18.5 million in 2015. By 2018, the utility is committed to increasing cost savings, for a total of $28 million.

Efficiency Table	In 2015, City Light achieved $18.5 M in efficiencies:
Current diversion	$1,105,820
Fleet Reduction	$530,000
Lower financing costs	$9,347,000
Steel stay pole reinforcement	$879,262
Fuel savings from on-board truck generators	$307,800
Renegotiation of leases and permits	$860,338
Staff reduction/reallocation	$347,000
Credit and Collection efficiencies	$608,280
Inventory reduction	$106,121
Environmental Grants	$2,566,399
Other operational efficiencies	$1,841,980
Total	**$18,500,000**

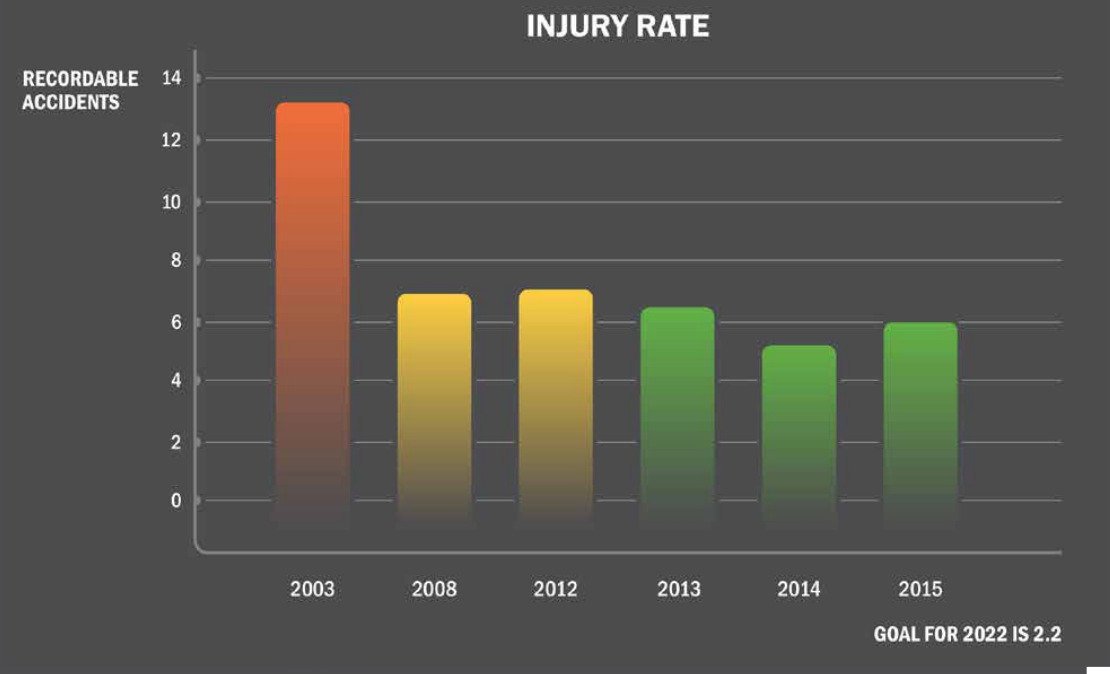
PROVEN SUCCESS

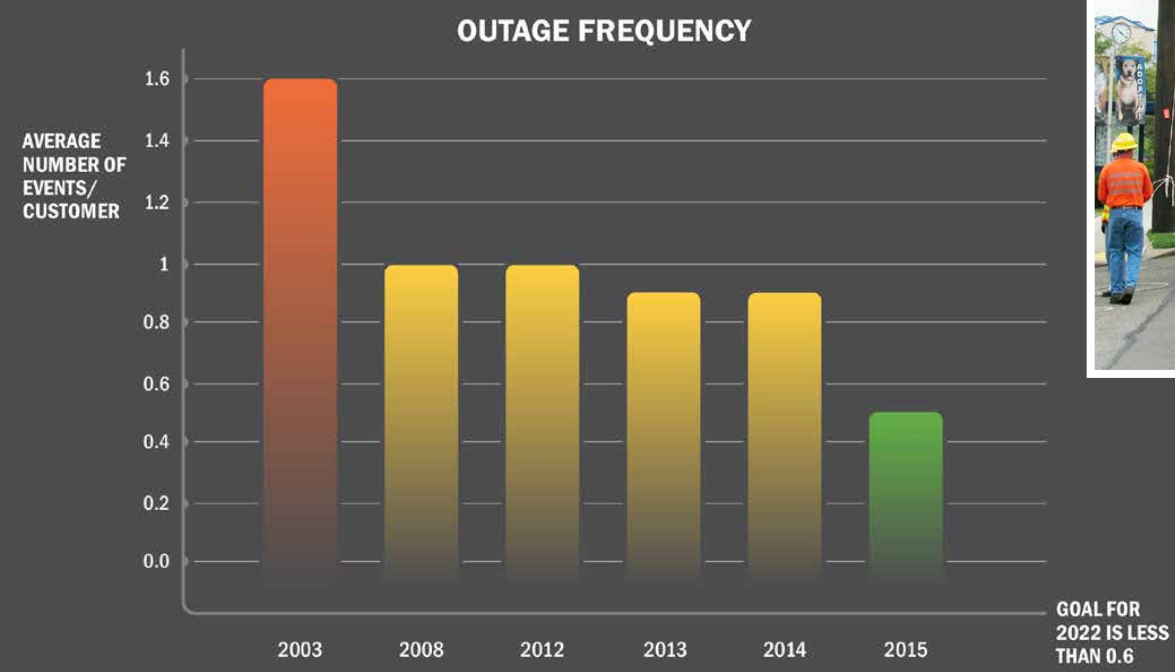
City Light is committed to the promises made in its original Strategic Plan. Now four years in, the utility is tracking metrics that show investing the time and money needed is paying off. Here are a few examples of these successes.





The Santos family is grateful for the assistance they have received from the Utility Discount Program.





@SEACityLight Thanks for the response! I know it's tricky, but y'all do a good job. We got power back way ahead of schedule!!

@SEACityLight Back on again! Super fast! Thanks.

@SEACityLight Thanks! Sorry about all the trees. Signed, Lake Forest Park.

@SEACityLight Y'all are great! Everyone appreciates your hard work! :-D

Work the Plan

Thanks to the careful guidance of the Strategic Plan, City Light is able to invest in the utility's infrastructure, operations and workforce to meet the customer expectations of a modern utility.

MAJOR PROJECTS UNDERWAY

Denny Substation

Dubbed "The World's Coolest Electrical Substation" by Fast Company Magazine, this will be the first facility City Light has built in 30 years. It is designed not only to deliver power but to also to meet the expectations of the community.

Denny Substation

The new substation will bring greater reliability and meet ever-increasing energy demands for South Lake Union, Cascade, Denny Triangle, Uptown, Belltown and First Hill.

The facility also provides support to other substations as well as the regional transmission grid.

Beyond the functionality of a substation, Denny will bring an array of public benefits including an off-leash area, meeting spaces and public art.
Completion: 2018

"To put in a substation in this dense of a neighborhood, we knew it had to be a good fit and also be a facility that engaged people."

-Michael Clark, Denny Substation program manager, Seattle City Light

Advanced Metering

City Light's adoption of 21st-century technology will usher in far-reaching improvements for the utility and its customers.

Meters in the field today have changed little since the 1950s, but the new advanced metering provides two-way communication between the customer and the utility. Customers can receive daily updates on their account-balance information as well as monitor their energy use to save money. This $94 million utility investment includes an encrypted, wireless network to ensure that customer energy-use information is secure.

No one likes power outages, and with advanced metering, the utility will be able to pinpoint problems much faster, improving restoration times as well as saving on labor costs.

With more than 500 utilities now using this proven technology, advanced metering represents a huge step forward for City Light and our customers.
Completion: 2019

Distribution Automation

City Light installed automated switching technology in Shoreline and Lake Forest Park, which is designed to speed the restoration of service when a power line is damaged. Crews placed the equipment on two feeder lines in a pilot program to test its performance during last fall and winter's storm season.

The new technology detects outages and automatically closes or opens switches to isolate the affected section of a circuit. Power is re-routed to restore service to the areas that are not directly affected. This process takes place in a matter of seconds.

In addition, the technology gives City Light the ability to actively monitor and manage its distribution system in real time. This will improve the utility's response to outages and incidents, which will save time and money while improving customer service.

We've already seen the benefits of the technology in areas often hardest hit during wind storms.
Completion: Ongoing

INVESTMENTS IN PEOPLE

Utility Discount Program

City Light is mindful of our most vulnerable customers and offers a Utility Discount Program. Income-eligible customers may receive up to 60 percent off their utility bills.

In an effort to increase participation, Mayor Edward Murray issued a challenge in 2014, pledging to reach 28,000 enrollments by 2018.

Along with the mayor, Seattle Public Utilities, Human Service Department and many community partners, City Light has streamlined a cumbersome application process and implemented a more robust outreach program to reach the right people.

Most recently, an effort to allow auto-enrollment of income-qualified residents in affordable housing is helping to increase enrollment.

"The best thing about being an apprentice is working with all the journey workers, learning something from all of them with their years of experience." - Jerry Rodriguez

Recently graduated, Jerry is now serving a one-year deployment with the National Guard in Kuwait and Iraq.

Apprentice Program

Last year, the Apprenticeship Office hired a new manager to take over a strong program with deep roots that currently has 35 apprentices.

In 2015, City Light hired six cable splicer apprentices and brought on 10 pre-apprentice line workers as well as six electrician constructors to the program. In addition, seven line apprentices completed their program.

In 2016, we added five pre-apprentice line workers and are preparing for a new class of five electrician constructor apprentices and one generation electrician constructor apprentice. This year's graduating class will consist of four cable splicers, four electrician constructors, one generation electrician constructor, 14 line workers and two meter electricians.

There's strong competition for skilled utility workers across the industry, so the utility is pleased to have these apprentices on board.

Apprentices undergo intense education and training, often at night after a hard day's work, plus hours of field training. Many have to meet rigorous physical standards plus performance evaluations and exams from various city, union, and industry groups. But it's worth it. Apprentices receive well-paid on-the-job training and City Light gains outstanding, qualified employees in a tight talent market.

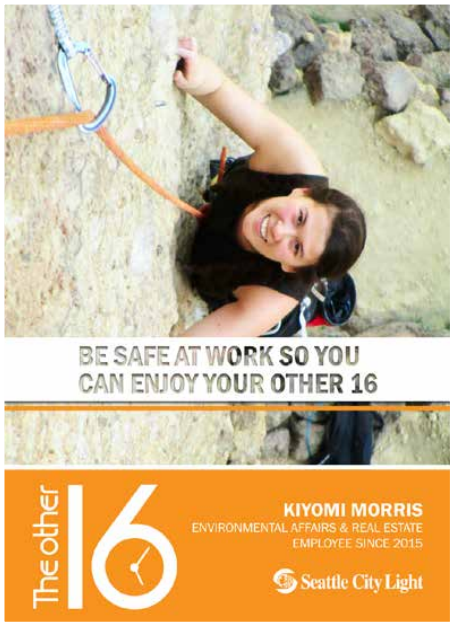
Safer Work Environment

Systematic programs have been developed to increase employee safety throughout the utility. Examples include the development of a safety and health policy, which drives efficient safety standards as well as investment in clothing that guards against burns from electrical flashes.

In 2015, City Light extended its ergonomics effort through the Safe Habits, Safe Worker program. It allows employees to get funding for tools and equipment that focus on ergonomic improvements, reducing injuries from strains. In addition, our leadership team is more engaged in operations through site visits for safety assessments.

As our safety management system matures, more information is being shared with employees to identify lessons learned from safety incidents.

To improve City Light's safety culture, a grassroots effort called "The Other 16" was launched to remind employees that safety on the job means they can enjoy the other 16 hours they have off duty. This campaign was followed by a utility-wide safety stand-down that reminded employees to focus on safety awareness. Employee suggestions from that discussion will be used to promote and encourage safety awareness.



In 2016, City Light conducted a successful employee survey on safety issues, following up on a similar survey from 2007. In a few years, workers will be surveyed again to capture fresh ideas and track the effectiveness of safety initiatives.

Skilled Workforce

In order to provide customers with the best service, City Light is committed to investing in employees. A new online training system represents a major step forward to achieve that goal. Courses include topics such as:

- information on electric utility system operations
- proficiency with Microsoft Excel, Microsoft Access, Adobe Illustrator, Microsoft SharePoint
- teamwork development in the workplace

In addition, a program on operational excellence is offered to utility leaders; the utility will make some of those classes available to all employees. This initiative includes practical training, accountability and a focus on sustainable culture change. The biggest key is that City Light has direct involvement from the top levels of the organization.

Race & Social Justice

The utility is deeply committed to the principles of the Race and Social Justice Initiative, which seeks to end institutional racism in all facets of city of Seattle business.

City Light is creating a new group to ensure that projects, construction and other programs don't harm the health and environmental quality of communities of color, immigrants or low-income residents.

The Environmental Justice Strategic Team will review and advise City Light on the impacts of projects on different communities, and better involve community members in decisions that affect them.

The initiative's purpose is to advance equity, environmental justice, and support actions for those most affected by environmental issues.

"We are bringing the community voice to the table early on and having the community shape environmental policy."

-Christopher Peguero, environmental equity advisor, Seattle City Light

CONSERVATION & ENVIRONMENTAL LEADERSHIP

City Light continues to be a leader in the careful use of our resources and preservation of the environment as we deliver affordable, sustainable power.

In 2005, City Light became the first electric utility in the nation to become greenhouse-gas neutral. We remain neutral through carbon reduction efforts and the purchase of high-quality carbon offsets.

City Light embraced solar power, pioneering four Community Solar projects around Seattle which generate more than 75,000 kilowatt–hours of clean, local energy every year.

We've built a new treatment facility at the South Service Center, which pretreats water that collects in vaults. Before that, water was trucked to another city where we had no control over the quality of treatment.

South Service Center treatment facility

Each year, City Light buys land along the Skagit River to protect spawning habitat. For instance, in support of the Puget Sound Chinook Recovery Plan's goal of protecting Chinook spawning areas, City Light acquired 40 acres in the floodplain of the Sauk River northeast of Darrington.

The property is covered by high-value forested riparian habitat and is adjacent to other properties owned by City Light.

"Seattle Meter Watch saves me thousands, upwards of tens of thousands of dollars a year by helping me focus on how I spend energy."

-Bob Cowan, director of facilities engineering, Fred Hutchinson Cancer Center

Meter Watch is a password-secured, online energy-use information service from City Light, available free to the utility's large customers, including the Fred Hutchinson Cancer Center, which has used the service since 2008.

I love how SCL works to make their biz and employees be and think green!

So glad to have clean energy!

(Seattle Aquarium Community Solar Project) - We enjoyed this project! Great thing is, our kids and grandkids will be able to see our work on this iconic Seattle building. Go solar!

Looking Forward

THE ELECTRIC INDUSTRY IS CHANGING

Seattle's electric load growth is slowing and may decline long term, even as the economy grows. That means less revenue for the utility as it faces increasing costs to replace aging infrastructure and deploy new technology customers want.

An aging workforce means that half of City Light's employees will be eligible to retire within a few years, initiating a massive loss of institutional knowledge. However, it also offers the opportunity to bring in new ideas and innovations.

In today's world, there are sobering cybersecurity issues that create existential threats for the industry and beyond.

The fast pace of technological change means we must also change. Electric vehicles, solar power and battery storage are becoming more efficient and less expensive. The reality is that customers may not need traditional utility service tomorrow as they do today.

UTILITY OF THE FUTURE

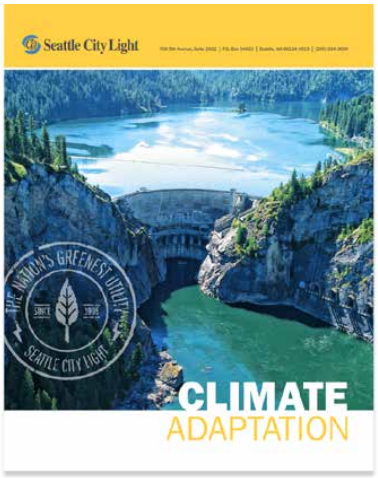
City Light is committed to adjusting to these new realities. This Strategic Plan update includes a new utility position dedicated to making City Light an agile "Utility of the Future." Already we've identified two areas where the utility must evolve:

Electric Transportation

City Light studied the electrification of Seattle's transportation sector and the benefits of replacing fossil fuels with clean electric power, especially in public transport. We worked with Mayor Edward Murray and other city departments to launch the "Drive Clean Seattle" initiative, and will continue to invest in this effort.

Climate Adaptation Plan

In our last Strategic Plan, we studied how climate change would impact the utility and our customers. Now City Light has the results and has published a Climate Adaptation Plan that helps the utility prepare for and be less vulnerable to climate change. The plan summarizes expected impacts of climate change on five aspects of the utility's operations and infrastructure. It also includes potential actions City Light can consider to reduce impacts and increase resilience.



Read the entire document at: seattle.gov/light/enviro/docs/Executive_Summary_Climate_Adaptation.pdf

CONCLUSION

There is an urgency to address the challenges facing Seattle City Light. Delays will inevitably affect customer service. Costs will go up, reliability becomes less assured, economic advantages are lost, and customer satisfaction is compromised.

The 2017-2022 Strategic Plan positions the utility to overcome these challenges and fulfill our promise to deliver the best customer service experience of any utility in the nation.

Appendices

- Financial Forecast Assumptions Summary
- Strategic Initiatives Summary
- Strategic Plan Metrics
- Strategic Plan Outreach Summary
- Review Panel Recommendations Letter

Notes

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