



# SEATTLE CITY COUNCIL

## Legislative Summary

Res 31678

Record No.: Res 31678

Type: Resolution (Res)

Status: Adopted

Version: 3

Ord. no:

In Control: City Clerk

File Created: 05/31/2016

Final Action: 07/29/2016

**Title:** A RESOLUTION relating to the City Light Department; adopting a 2017-2022 Strategic Plan for the City Light Department and endorsing a six-year rate path required to support the Strategic Plan.

	<u>Date</u>
<b>Notes:</b>	<b>Filed with City Clerk:</b> 7/29/2016
	<b>Mayor's Signature:</b> 7/29/2016
<b>Sponsors:</b> Sawant	<b>Vetoed by Mayor:</b>
	<b>Veto Overridden:</b>
	<b>Veto Sustained:</b>

**Attachments:** Att A - 2017-2022 Strategic Plan, Att A Ex 1 - Financial Forecast Assumptions, Att A Ex 2 - Strategic Initiatives Summary, Att A Ex 3 - Metrics Report, Att A Ex 4 - Customer Outreach Summary, Att A Ex 4a - Utility of the Future Agenda, Att A Ex 4b - Strategic Plan Customer Survey, Att A Ex 4c - Strategic Plan Employee Survey, Att A Ex 5 - Review Panel Letter, Att B - City Light Response to SLI 4-1-A-2

**Drafter:** Kathleen.Wingers@seattle.gov

### Filing Requirements/Dept Action:

### History of Legislative File

Legal Notice Published:  Yes  No

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Mayor	06/07/2016	Mayor's leg transmitted to Council	City Clerk			
	<b>Action Text:</b> The Resolution (Res) was Mayor's leg transmitted to Council. to the City Clerk						
	<b>Notes:</b>						
1	City Clerk	06/07/2016	sent for review	Council President's Office			
	<b>Action Text:</b> The Resolution (Res) was sent for review. to the Council President's Office						
	<b>Notes:</b>						
1	Council President's Office	06/10/2016	sent for review	Select Committee on the 2016 Seattle City Light Strategic Planning			
	<b>Action Text:</b> The Resolution (Res) was sent for review. to the Select Committee on the 2016 Seattle City Light Strategic Planning						

- Notes:
- 1 Full Council 06/27/2016 referred Select Committee on the 2016 Seattle City Light Strategic Planning
- Action Text: The Resolution (Res) was referred. to the Select Committee on the 2016 Seattle City Light Strategic Planning
- Notes:
- 1 Select Committee on the 2016 Seattle City Light Strategic Planning 06/30/2016 discussed
- Action Text: The Resolution (Res) was discussed.
- Notes:
- 1 Select Committee on the 2016 Seattle City Light Strategic Planning 07/14/2016
- Notes: The Committee made amendments to the Resolution.
- 1 Full Council 07/18/2016 re-referred Full Council
- Action Text: The Resolution (Res) was re-referred. to the Full Council
- Notes:
- 2 Full Council 07/25/2016 adopted as amended Pass
- Action Text: The Motion carried, the Resolution (Res) was adopted as amended by the following vote, and the President signed the Resolution:
- Notes: ACTION 1:

Motion was made and duly seconded to adopt Resolution 31678.

ACTION 2:

Motion was made by Councilmember Herbold, duly seconded and carried, to amend Resolution 31678, Section 8, by substituting the paragraph with the following language:

Section 8. The Council requests that City Light include with its next strategic plan update a report that identifies the impacts on existing customer rate classes of establishing a single rate class while preserving the existing low income discount program for low income customers. The report should clearly identify any legal, technical, or practical issues with establishing such a single class structure, especially as it relates to City Light's franchise agreements with neighboring jurisdictions. The report should include an analysis of the economic impacts to Seattle and the region.

ACTION 3:

Motion was made and duly seconded to adopt Resolution 31678 as amended.

In Favor: 8 Councilmember Burgess, Councilmember González, Council President Harrell, Councilmember Herbold, Councilmember Johnson, Councilmember Juarez, Councilmember O'Brien, Councilmember Sawant

Opposed: 0

**Legislative Summary Continued (Res 31678)**

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- 3 City Clerk 07/26/2016 submitted for Mayor  
Mayor's signature  
Action Text: The Resolution (Res) was submitted for Mayor's signature. to the Mayor  
Notes:
- 3 Mayor 07/29/2016 Signed  
Action Text: The Resolution (Res) was Signed.  
Notes:
- 3 Mayor 07/29/2016 returned City Clerk  
Action Text: The Resolution (Res) was returned. to the City Clerk  
Notes:
- 3 City Clerk 07/29/2016 attested by City  
Clerk  
Action Text: The Resolution (Res) was attested by City Clerk.  
Notes:
-

**CITY OF SEATTLE**

**RESOLUTION 31678**

1  
2  
3 ..title

4 A RESOLUTION relating to the City Light Department; adopting a 2017-2022 Strategic Plan for  
5 the City Light Department and endorsing a six-year rate path required to support the  
6 Strategic Plan.

7 ..body

8 WHEREAS, the City Light Department (“City Light”) is the tenth largest public utility in the  
9 nation, serving more than 400,000 customer accounts, and providing safe, affordable, and  
10 reliable electricity to its customers; and

11 WHEREAS, Resolution 31383 of July 2012 adopted City Light’s 2013-2018 Strategic Plan and  
12 endorsed a six-year rate path that supported that plan; and

13 WHEREAS, Resolution 31383 also specified that City Light would review and update the  
14 Strategic Plan every two years, adding two years to and re-evaluating the remaining four  
15 years of the existing Strategic Plan; and

16 WHEREAS, Resolution 31529 of June 2014 adopted City Light’s 2015-2020 Strategic Plan  
17 Update and endorsed a six-year rate path that supported that plan; and

18 WHEREAS, City Light has reviewed and updated the Strategic Plan by: (a) reviewing changes  
19 in its operating environment for the 2017-2020 period and making adjustments to remain  
20 within the previously approved rate path; and (b) adding a forecast of revenues,  
21 expenditures, and investments for two additional years, 2021 and 2022; and

22 WHEREAS, City Light continues to face challenges which include: (a) slowing load growth  
23 leaving less revenue to cover rising infrastructure costs; (b) technological changes and  
24 threats to cybersecurity; (c) an aging workforce stressing the importance of training,  
25 succession planning, and workforce development programs; (d) the emergence of electric  
26 vehicles, solar power, and other technological advances that promise to change the

1 electric industry landscape; and (e) finding and achieving new operational efficiencies;  
2 and

3 WHEREAS, City Light seeks to provide rate predictability and stability in future rates, and to  
4 avoid the pattern of volatile rate adjustments that characterized the decade before the  
5 adoption of the 2013-2018 Strategic Plan; and

6 WHEREAS, in consultation with the Mayor and the City Council, City Light initiated the  
7 Strategic Planning process in 2010 to provide more transparency and accountability for  
8 decision-making within City Light; and

9 WHEREAS, Ordinance 123256 establishes the City Light Review Panel (“Review Panel”) to  
10 represent City Light ratepayers and requires the Review Panel to review and assess City  
11 Light’s strategic plans; and

12 WHEREAS, the Review Panel has reviewed City Light’s progress in carrying out the Strategic  
13 Plan on a quarterly basis since 2013, and also reviewed the Utility’s proposed changes for  
14 the 2017-2022 Strategic Plan Update; and

15 WHEREAS, the City Council has reviewed the Strategic Plan Update, the associated six-year  
16 rate path, the recommendation of the Review Panel, and the results of customer  
17 engagement; NOW, THEREFORE,

18 **BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE**  
19 **MAYOR CONCURRING, THAT:**

20 Section 1. The City Council adopts the City Light Department’s (“City Light”) proposed  
21 2017-2022 Strategic Plan Update (the “Strategic Plan”), a copy of which is attached to this  
22 ordinance as Attachment A and incorporated by reference.

1 Section 2. To achieve the goals of the Strategic Plan, annual rate increases averaging 4.3  
2 percent system-wide per year are anticipated over the period of 2017-2022. The following six-  
3 year rate path for City Light rates is endorsed:

4 2017: 5.6%

5 2018: 5.6%

6 2019: 5.0%

7 2020: 3.6%

8 2021: 3.1%

9 2022: 2.5%

10 Section 3. The City Council requests that the executive submit the 2017-2018 City Light  
11 Proposed Budget in support of the Strategic Plan.

12 Section 4. The City Council requests that the executive submit the 2017-2018 City Light  
13 Rate Proposal in support of the Strategic Plan, including the endorsed system rate increases of  
14 5.6 percent in 2017 and 5.6 percent in 2018.

15 Section 5. City Light will continue to review and update the Strategic Plan every two  
16 years, adding two years to the Strategic Plan and re-evaluating the subsequent six-year rate path.  
17 The next review and adjustment of the Strategic Plan will be finalized in 2018 and will  
18 encompass the years 2019 through 2024.

19 Section 6. As part of the next update to the Strategic Plan, the Council requests that City  
20 Light prepare options for mitigating and preparing for the financial impacts of possibly flat or  
21 declining retail load, including:

1 1. Pursuing state authority for City light to pursue electrification of transportation  
2 and Port of Seattle operations that reduce carbon emissions and increase retail  
3 load;

4 2. Providing proposals for permanent reductions in costs; and

5 3. Proposing changes to Resolution 31351 establishing policy guidance on rate  
6 making. In developing options City Light should consider at least the following  
7 topics:

8 a. use of the Rate Stabilization Account to help reduce retail revenue  
9 volatility;

10 b. decoupling retail revenue recovery from retail sales;

11 c. changes to rate design; and

12 d. changes to the utility's approach to load forecasting as discussed in City

13 Light's response to Council's 2015 Statement of Legislative Intent 4-1-A-

14 2 (incorporated at Attachment B).

15 Section 7: Workforce Planning. Much of City Light's workforce is eligible to retire, or  
16 will be eligible to retire in the near future. Historically, apprenticeships have been used to train  
17 and hire the next generation of skilled workers. The apprenticeship program should also provide  
18 opportunities for individuals who have historically not been included in the construction  
19 industry, including women and people of color, and expansion of the program will allow for  
20 greater inclusion of these populations. Council signals its intent to work with City Light to  
21 establish new strategies and approaches, including potential legislation that would facilitate  
22 recruitment and hiring of apprentices from pre-apprenticeship programs identified in the City's

1 Project Hire Program, to ensure a diverse population is hired into City Light's apprenticeship  
2 programs as these will be City Light's future workforce.

3 Section 8. The Council requests that City Light include with its next strategic plan update  
4 a report that identifies the impacts on existing customer rate classes of establishing a single rate  
5 class while preserving the existing low income discount program for low income customers. The  
6 report should clearly identify any legal, technical, or practical issues with establishing such a  
7 single class structure, especially as it relates to City Light's franchise agreements with  
8 neighboring jurisdictions. The report should include an analysis of the economic impacts to  
9 Seattle and the region.

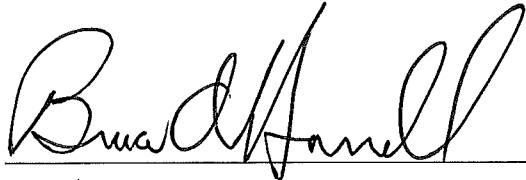
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1 Adopted by the City Council the 25<sup>th</sup> day of July, 2016,


2 and signed by me in open session in authentication of its adoption this 25<sup>th</sup> day of

3 July, 2016.

4 

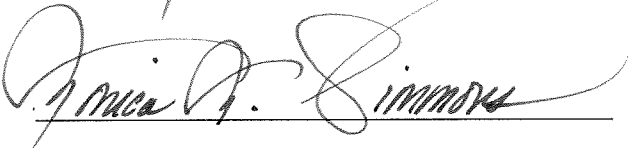
5 President \_\_\_\_\_ of the City Council

6 The Mayor concurred the 29<sup>th</sup> day of July, 2016.

7 

8 Edward B. Murray, Mayor

9 Filed by me this 29<sup>th</sup> day of July, 2016.

10 

11 Monica Martinez Simmons, City Clerk

12 (Seal)

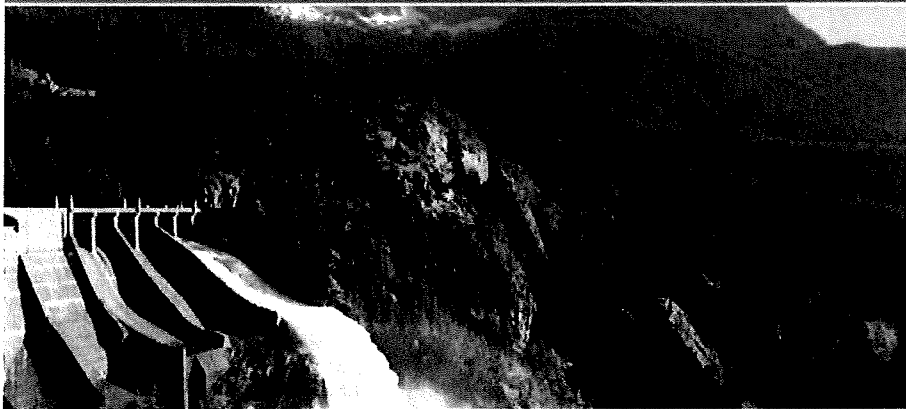
13 Attachments:

- 14 Attachment A - 2017-2022 Strategic Plan Update
- 15     Exhibit 1 - Financial Forecast Assumptions
- 16     Exhibit 2 - Strategic Initiatives Summary
- 17     Exhibit 3 - Strategic Plan Metrics
- 18     Exhibit 4 - Summary of Customer and Stakeholder Outreach
- 19         Exhibit 4a - City Light Review Panel Meeting: "Utility of the Future," Program
- 20             Agenda
- 21         Exhibit 4b - Strategic Plan Update 2017-2022: Customer Survey
- 22         Exhibit 4c - Strategic Plan Update 2017-2022: Employee Survey
- 23     Exhibit 5 - May 23, 2016 Letter from Seattle City Light Review Panel to Mayor Murray
- 24 Attachment B: City Light Response to SLI 4-1-A-2

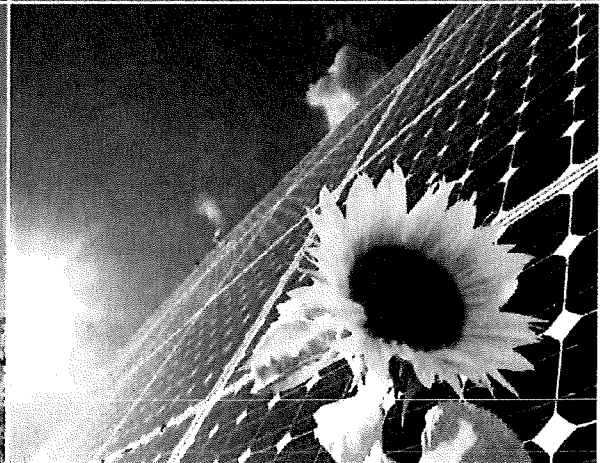
Att A

# 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.



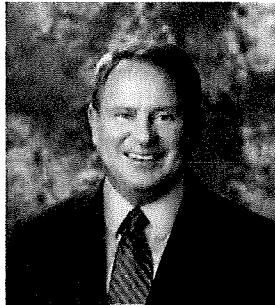
 **Seattle City Light**

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)

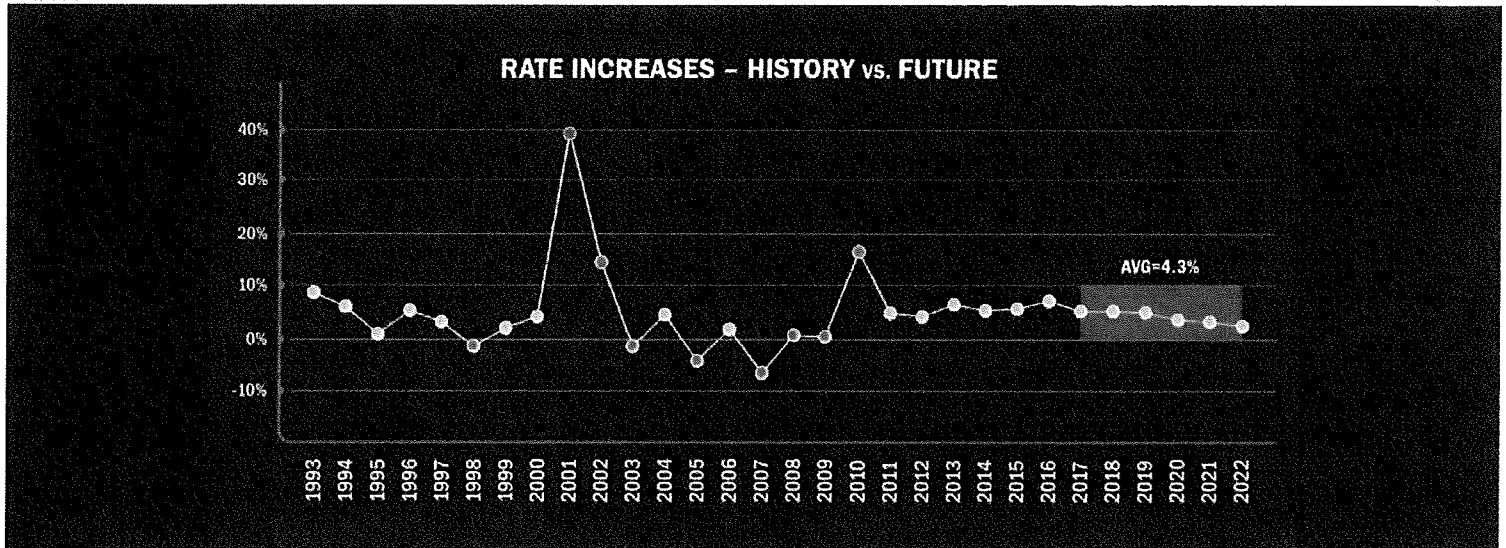
**Sara Patton**  
(non-profit energy efficiency advocate)

**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
<b>Objective 1: Improve customer experience and rate predictability</b>			
● 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)	
<b>Objective 2: Increase workforce performance and safety practices</b>			
● W1 Safety Culture Promotion/Practices			
● W2 Skilled Workforce Attraction and Retention		4.3	12.4
<b>Objective 3: Enhance organizational performance</b>			
● 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			
<b>Objective 4: Continue conservation and environmental leadership</b>			
● 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			
<b>TOTAL</b>		<b>29.1</b>	<b>695.1</b>

● 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.

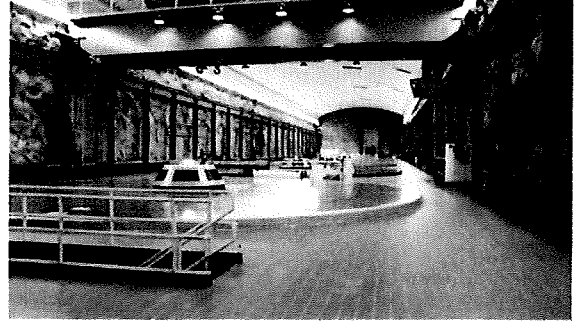
(b) Consists of \$450K annual program operating costs plus \$6.6M in reduced annual revenue due to increased program enrollment.

## 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.

### 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.



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

### 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.

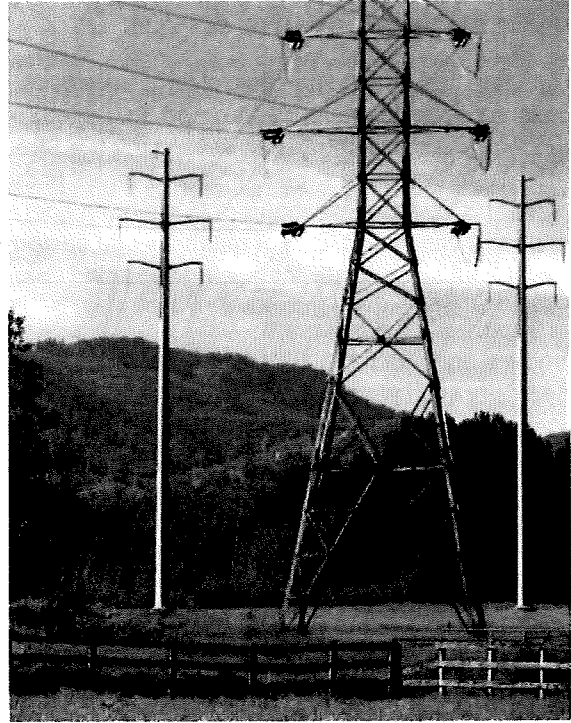
## EFFICIENT OPERATIONS MEAN COST SAVINGS

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 \$18.5M in efficiencies:

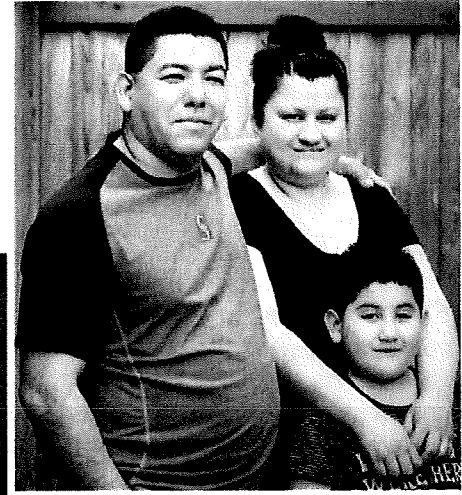
Current diversion	\$1,105,820
Fleet Reduction	\$530,000
Lower financing costs	\$9,347,000
Steel stay pole reinforcement	\$879,262
Fuel savings from on-board truck generators	\$307,800
Renegotiation of leases and permits	\$860,338
Staff reduction/reallocation	\$347,000
Credit and Collection efficiencies	\$608,280
Inventory reduction	\$106,121
Environmental Grants	\$2,566,399
Other operational efficiencies	\$1,841,980

**Total** **\$18,500,000**



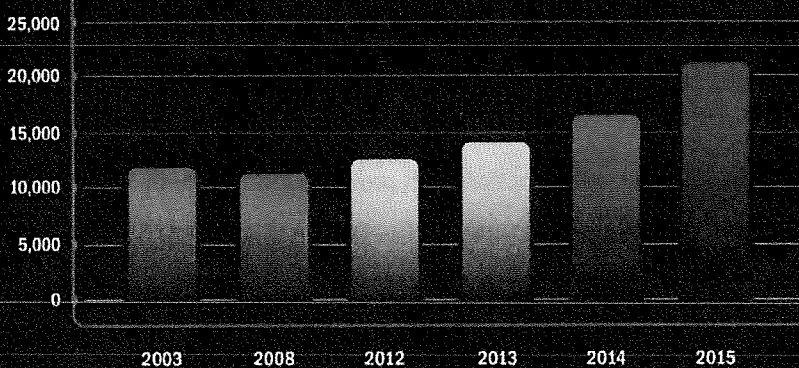
## PROVEN SUCCESS

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.

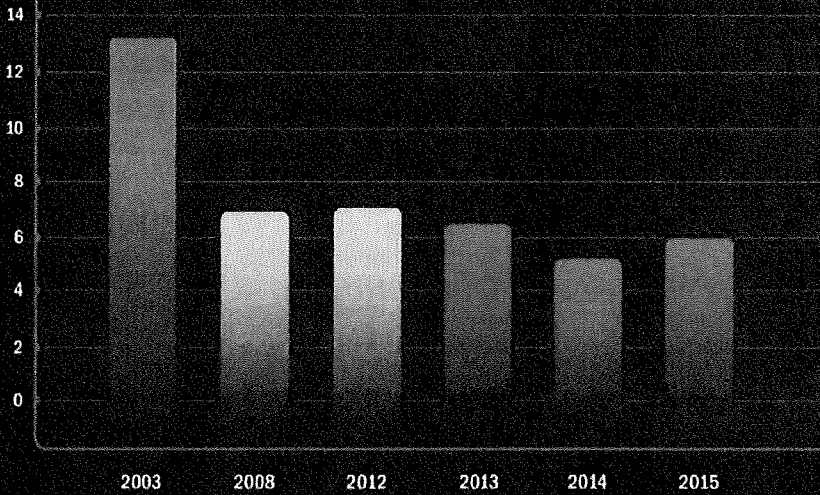
### UTILITY DISCOUNT PROGRAM PARTICIPANTS



**GOAL FOR 2018  
IS 28,000**

## INJURY RATE

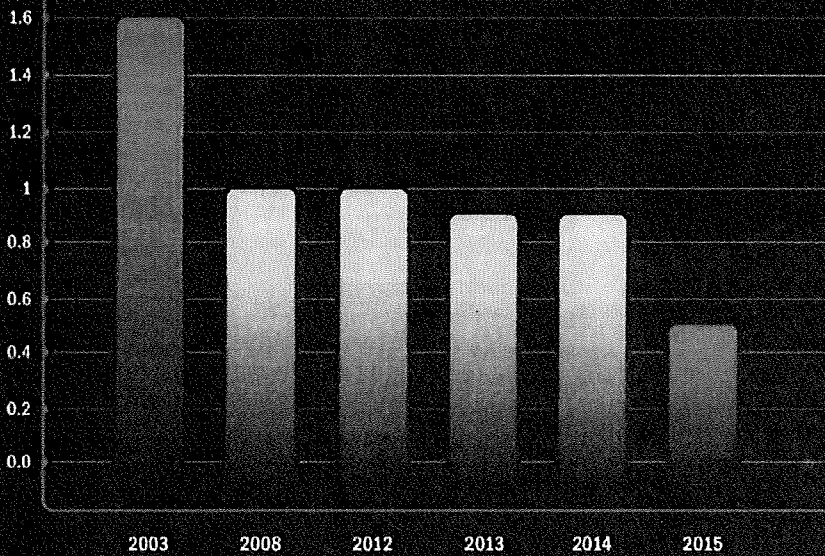
RECORDABLE ACCIDENTS



GOAL FOR 2022 IS 2.2

## OUTAGE FREQUENCY

AVERAGE NUMBER OF EVENTS/CUSTOMER



GOAL FOR 2022 IS LESS THAN 0.6



@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





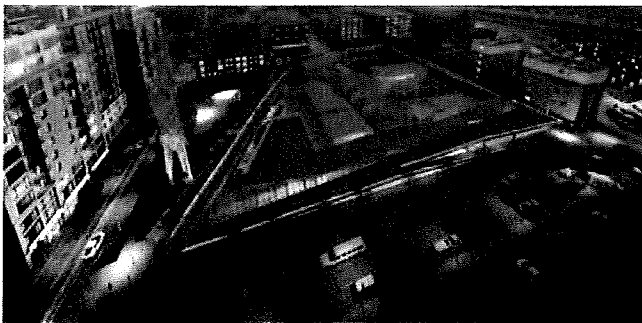
# Work the Plan

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.

### 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.



**"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.



### 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.

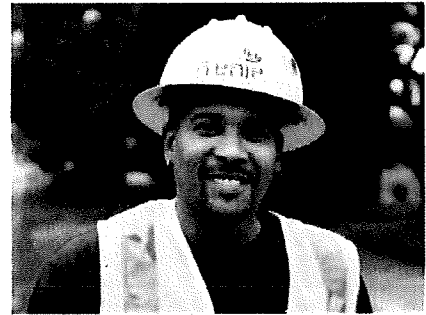
### Race & Social Justice

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

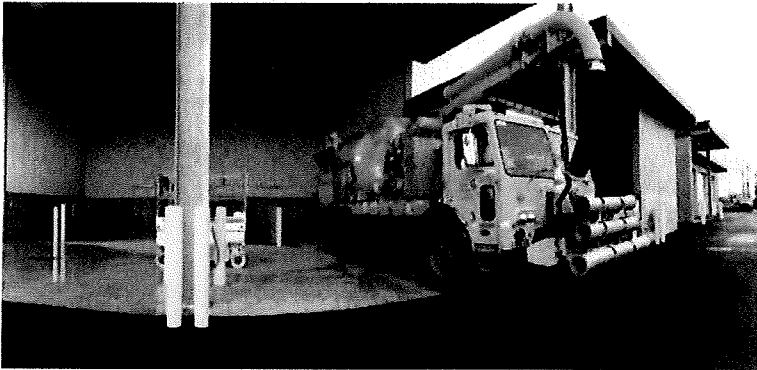
## CONSERVATION & ENVIRONMENTAL LEADERSHIP

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

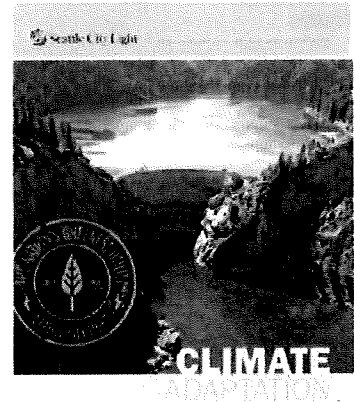
City Light is committed to adjusting to these new realities. This Strategic Plan update includes a new utility position dedicated to making City Light an agile "Utility of the Future." Already we've identified two areas where the utility must evolve:

### 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](http://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.

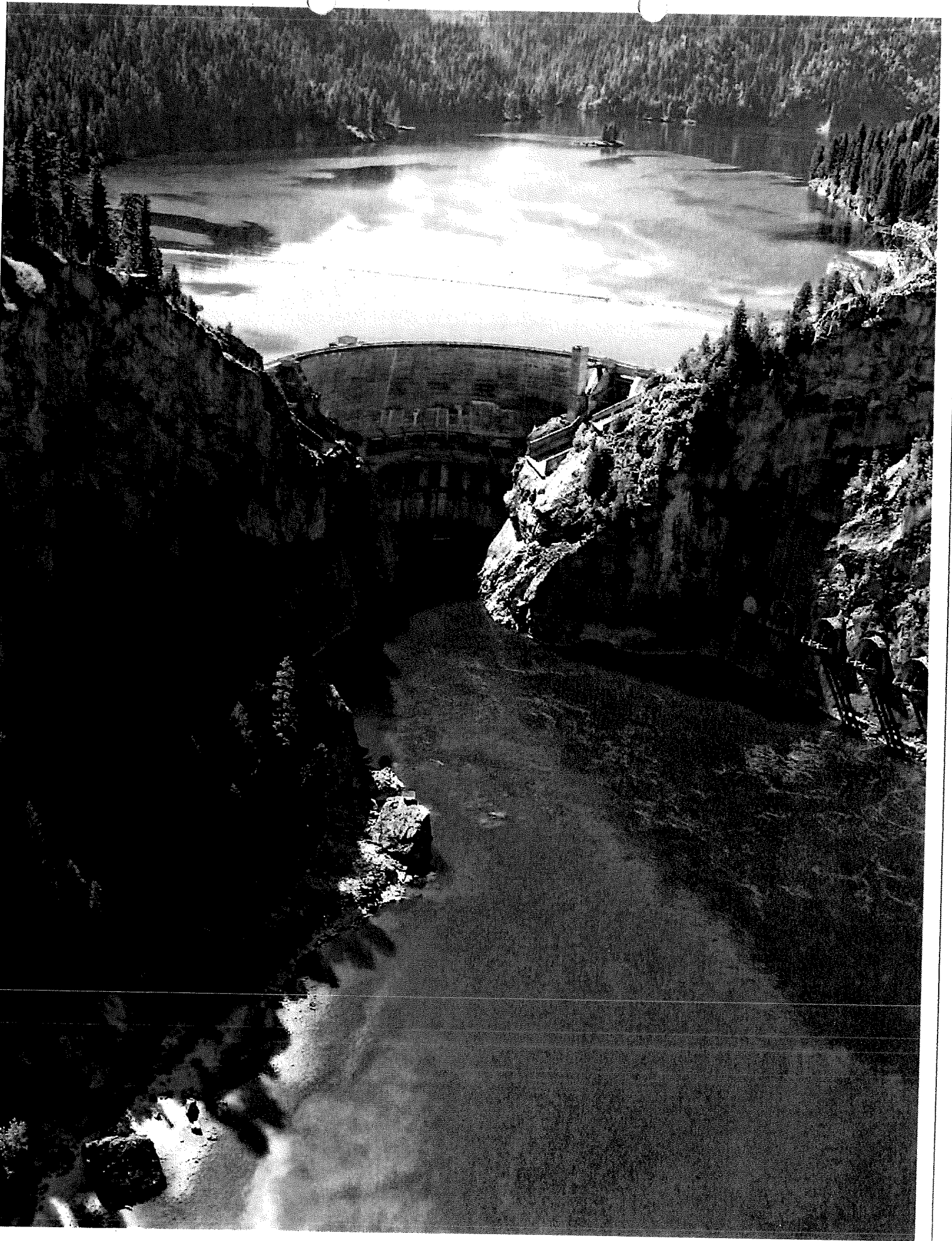
The 2017-2022 Strategic Plan positions the utility to overcome these challenges and fulfill our promise to deliver the best customer service experience of any utility in the nation.



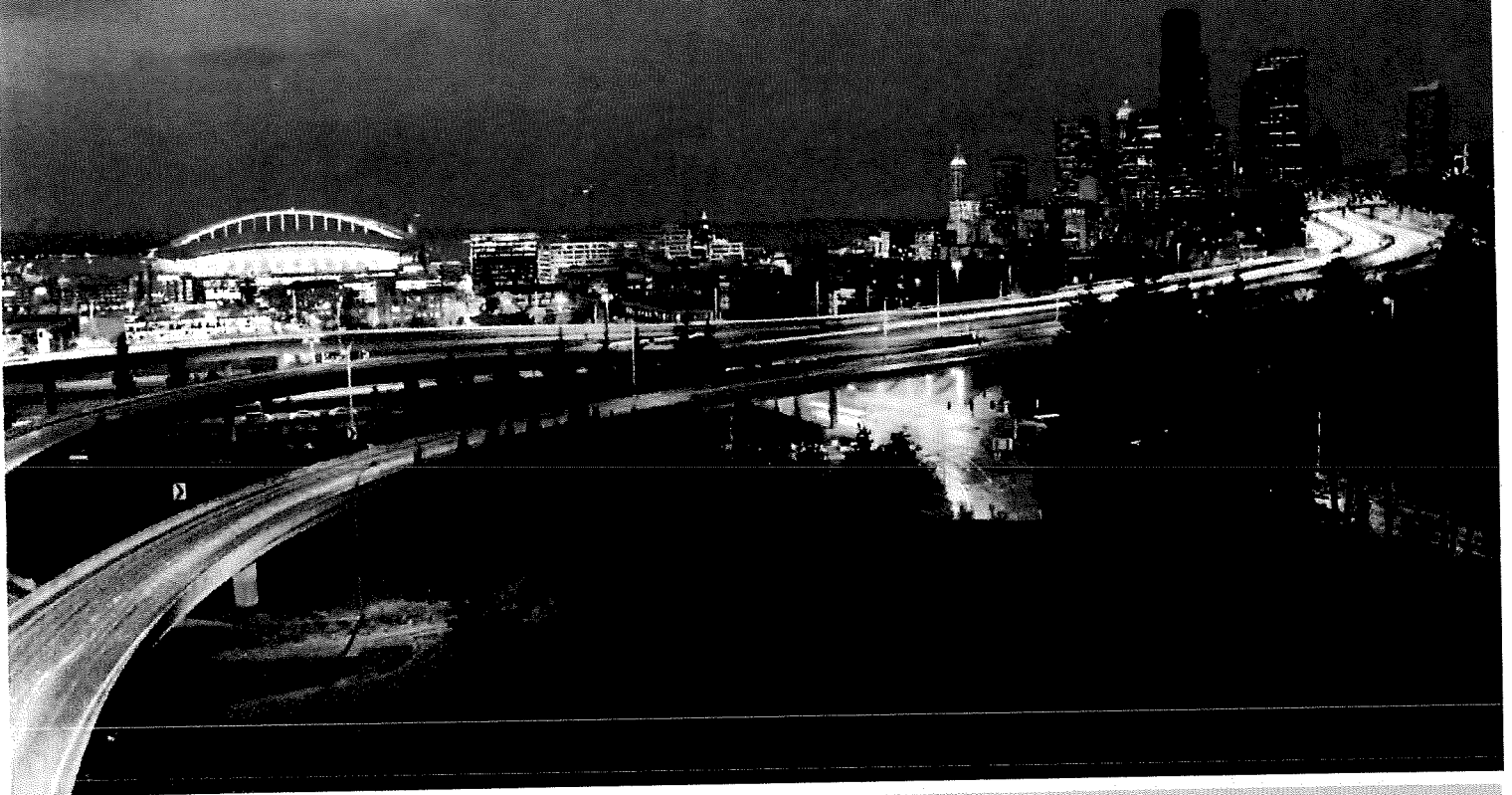
# Appendices

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

# Notes







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[seattle.gov/light](http://seattle.gov/light)





# Strategic Plan Update 2017-2022: Financial Forecast Assumptions

## EXECUTIVE SUMMARY

This document outlines the financial assumptions behind the 4.3% average rate path determined by the 2017-2022 Strategic Plan Update.

Average rates are derived by dividing the revenue requirement by retail sales. The primary driver for the average rate increase is the growing revenue requirement, which is increasing by about \$50M per year in the first three years of the Plan, and by \$30-40M in the last three years.

### Rate Increase Summary

	2016	2017	2018	2019	2020	2021	2022
Revenue Requirement, \$M	807.4	851.8	902.1	951.6	992.8	1023.5	1053.9
Annual Increase		5.5%	5.9%	5.5%	4.3%	3.1%	3.0%
Retail Sales, GWh	9,441	9,432	9,456	9,501	9,565	9,560	9,604
Annual Increase		-0.1%	0.3%	0.5%	0.7%	-0.1%	0.5%
Average Rate, cents/kWh	8.55	9.03	9.54	10.02	10.38	10.71	10.97
<b>Annual Rate Increase*</b>		<b>5.6%</b>	<b>5.6%</b>	<b>5.0%</b>	<b>3.6%</b>	<b>3.1%</b>	<b>2.5%</b>

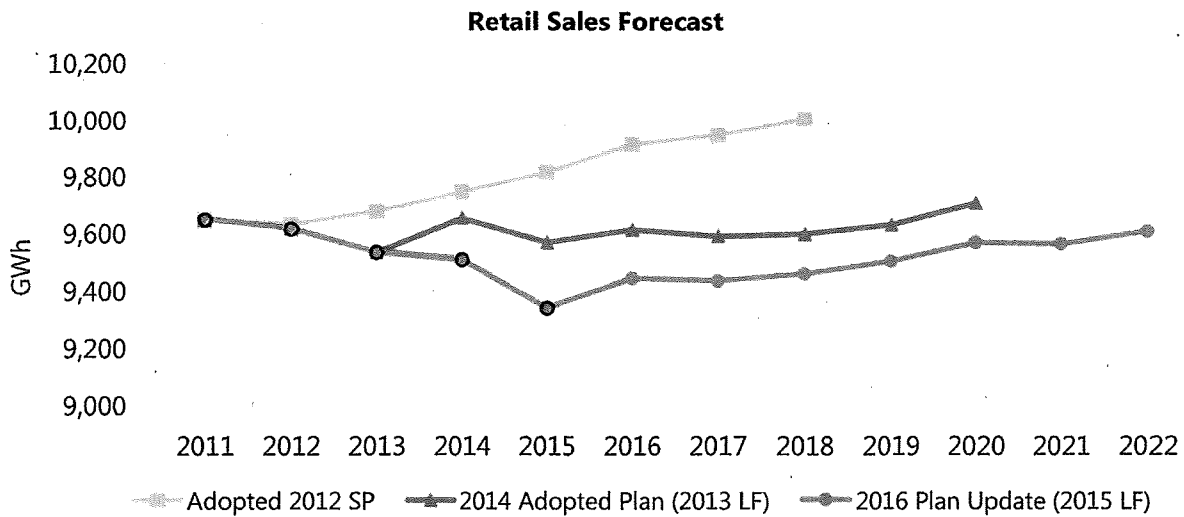
\*Rate increases shown here average slightly less than 4.3%. This is due to rounding. The correct average is 4.3%.

### 2018-2018 Actual Strategic Plan Rates

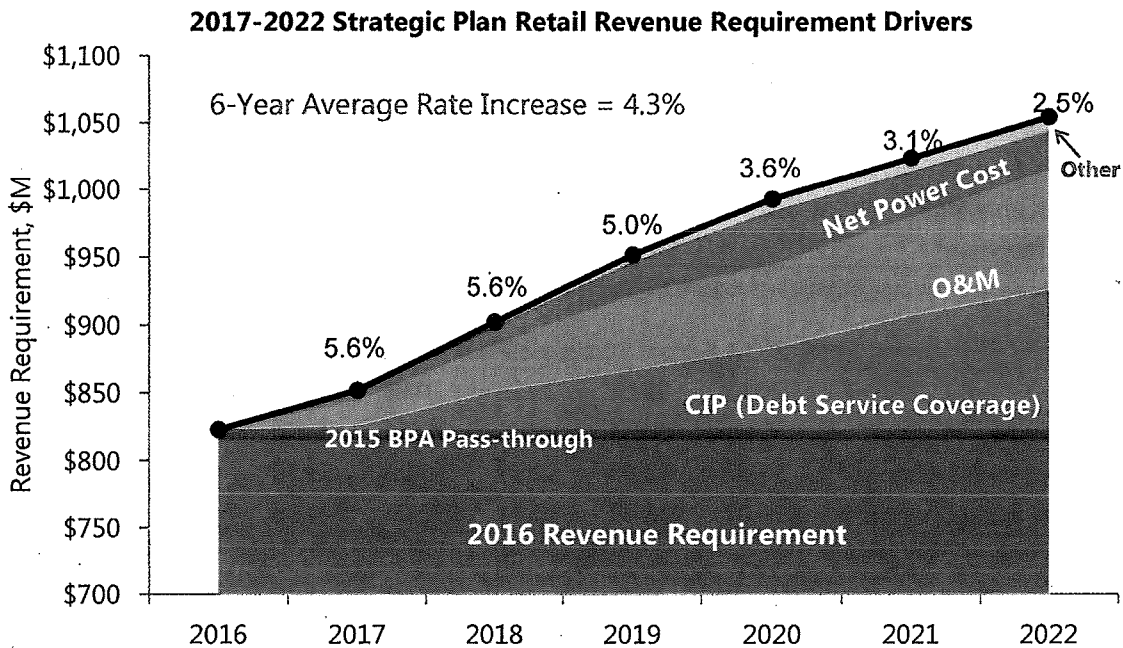
	2013	2014	2015	2016	2017	2018	Average
Base Rate Increases	4.4%	5.6%	4.2%	4.9%	5.6%	5.6%	5.1%
Residential Monthly Bill Change*	\$2.42	\$3.20	\$2.54	\$3.08	\$3.70	\$3.90	\$3.14
Residential Annual Bill Change*	\$29.07	\$38.43	\$30.44	\$37.00	\$44.36	\$46.84	\$37.69

\*Bill changes are shown as if the residential rate change equaled the average system-wide rate change. A typical residential customer is defined as a 700 kWh/month City of Seattle residential customer.

Retail sales are forecasted to increase by only 0.3% per year on average, and are not a major contributor to rate increases for 2018-2022. However, the retail sales outlook has shifted downward since both the original 2012 Strategic Plan and the 2014 Strategic Plan Update. The retail sales reduction compared to the 2014 Strategic Plan Update contributes about 1.7% of the 5.6% rate increase for 2017.



The following chart and table summarize the drivers of the change in revenue requirement over 2017-2022.



### Revenue Requirement Summary

\$, Millions	2017	2018	2019	2020	2021	2022
Revenue Requirement	851.8	901.2	950.6	991.5	1,023.9	1,054.6
Debt Service Coverage (CIP)						
Debt Service	206.2	220.3	228.8	238.0	251.1	261.6
Additional 0.8x Coverage	165.0	176.2	183.0	190.4	200.9	209.2
O&M						
Baseline 2016 O&M	252.1	252.1	252.1	252.1	252.1	252.1
Inflation	8.3	17.5	26.6	36.1	46.0	56.3
Renewable Energy Credits	3.5	4.9	8.2	8.3	8.3	14.5
Strategic Adjustments	0.8	6.1	15.2	10.9	12.4	11.9
Net Power Costs						
Power and Wheeling Contracts	283.6	289.3	293.3	301.2	295.5	280.3
Net Wholesale Energy Revenue	(60.0)	(60.0)	(55.0)	(50.0)	(50.0)	(40.0)
Other Power Revenues, Net	(21.2)	(20.6)	(19.6)	(18.2)	(15.3)	(15.2)
Other						
Other Costs	47.3	49.7	52.5	57.7	59.5	61.1
Other Revenue	(33.9)	(34.4)	(34.5)	(35.1)	(36.6)	(37.2)

City Light has a financial policy requiring that retail rates should be set so the utility has sufficient revenue net of expenses to cover annual debt service obligations by 1.8 times. Therefore, debt service coverage is debt service plus an additional 80% of debt service. Increasing debt service and associated coverage is the single largest revenue requirement driver, which is indicative of the utility's large capital program. The second largest driver is O&M, which is growing primarily due to inflation, but also from strategic adjustments that include critical additions to existing initiatives and projects.

#### O&M Inflation Assumption

Labor	2.4%-2.75%
Labor Benefits	5.0%
Non-Labor	2.4%
Transfers to City	3.0%
Operating Supplies	8.0%

The increase in net power costs is driven by inflation in long-term power contracts, plus declining net wholesale revenue. Other costs generally grow in proportion with the revenue requirement, and include state taxes, franchise payments, and uncollectible revenue. Other revenue comes from a variety of fees and service charges, as well as from interest earnings and only mild growth is expected over the six-year planning period.

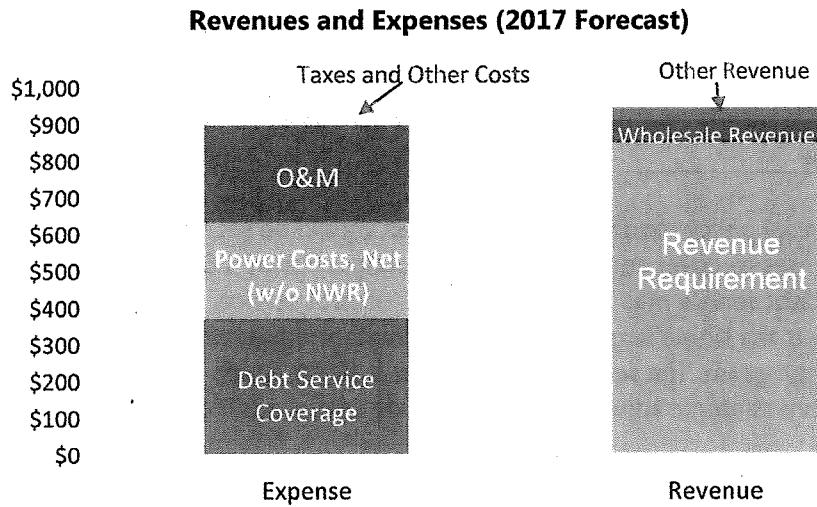
**INTRODUCTION**

The 2016 Strategic Plan Update (2016 Plan) builds on the 2014 Strategic Plan Update (2014 Plan) and the original 2012 Strategic Plan. The 2016 Plan carries out the objectives for 2017-2020 set forth in the 2014 Plan, and extends the horizon an additional two years to 2022. While there was little change overall from the 2014 Plan, there have been a number of adjustments to the financial forecast that reflect new information and changes in the utility’s operations.

This document discusses the assumptions that determine the average retail rate path for the years 2017-2022 as shown in the 2016 Plan. Average retail rates are not actual billed rates, but are the ratio of the revenue requirement to retail sales.

$$average\ rate\left(\frac{\$}{kwh}\right) = \frac{revenue\ requirement\ (\$)}{retail\ sales\ (kwh)}$$

The revenue requirement is the amount of retail revenue that must be collected to meet expenses and financial policies. The chart below shows how the revenue requirement is sized to meet expenses in a given year.



Following is a short description of each primary component of the revenue requirement. These are discussed in detail in the following sections of this document.

**Debt Service Coverage**

- This is the cost of debt funded capital investments (including deferred expenses such as programmatic conservation and superfund remediation) as recovered over time.
- Per policy, debt service coverage is equal to 1.8 times the annual debt service obligation.

- The additional funds in debt service coverage above those needed to pay principal and interest obligations (the remaining 0.8 times) cover a portion of the current year capital requirements, so they are not all debt financed.

#### O&M

- Includes expenses for all O&M costs.
- All non-capitalized labor costs are included in this category.
- Includes inflation assumptions, additional program funding requirements, as well as some cost savings to help mitigate the rate increase.

#### Power, Net

- Purchased power costs and wheeling (purchased transmission) costs, net of power revenues.
- Includes revenues from surplus power sales, also called net wholesale revenue.
- Does not include costs of operating owned generation and transmission resources, or other power O&M expenses (these are in O&M).

#### Other

- Includes taxes, franchise payments and uncollectable revenue, net of miscellaneous revenues.

This document concludes with a discussion of the retail sales (load) forecast, which is the denominator in the average rate formula.

#### **DEBT SERVICE COVERAGE (CIP, DEFERRED O&M AND BONDS)**

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Debt service coverage represents the cost of debt funded capital requirements, as recovered over time. Net capital requirements are comprised of the capital improvement program (CIP) plus expenses deferred (such as programmatic conservation and superfund remediation), less capital contributions, which are payments from outside sources that offset capital expenses.

$$\text{Net Capital Requirements} = \text{CIP} + \text{Deferred O\&M} - \text{Capital Contributions}$$

Net capital requirements are not a direct component of the revenue requirement, but determine the amount of debt (bonds) that must be issued. The principal payments on outstanding debt and associated interest expense make up debt service.

City Light's debt service coverage policy (established by Resolution 31187) calls for setting rates to yield sufficient revenue net of expenses to cover annual debt service obligations by 1.8 times. Since the additional 0.8x required for debt service coverage is not an actual expense, these funds are typically allocated to City taxes<sup>1</sup> and current year capital expenditures, which reduces the size of future bonds.

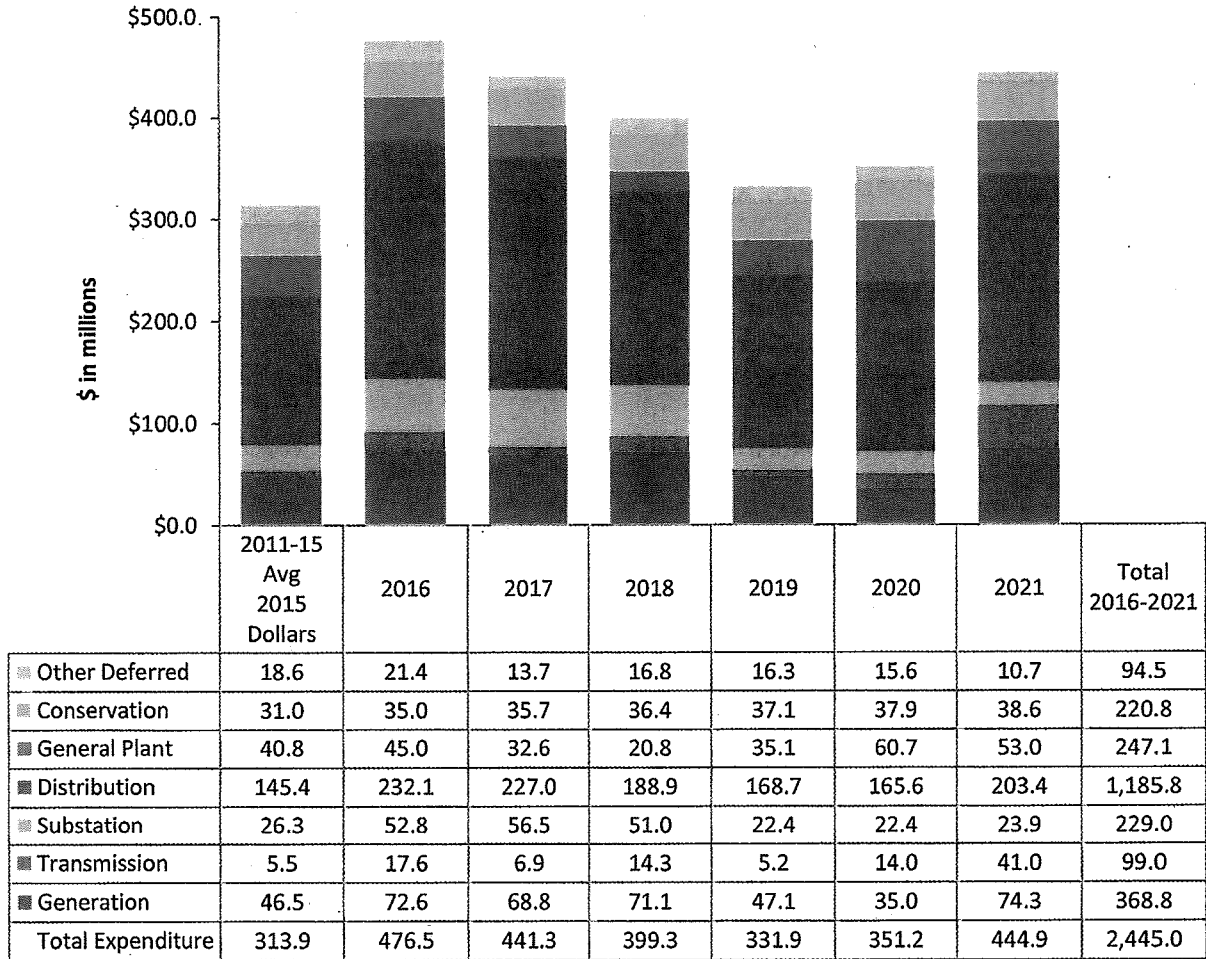
The bar chart below shows cash expenditures assumed in the Adopted 2016-2021 CIP budget, reduced by 10% to reflect an assumption for budget under-expenditure, plus a few additional adjustments

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<sup>1</sup> Taxes paid to the City of Seattle are considered junior lien to debt service. They are not included in the taxes category when calculating the revenue requirement.

described below. The year 2022 is not shown because a comprehensive CIP plan has not yet been developed for that year. Instead, a \$350 million placeholder value was used, which will help guide the development of the 2022 CIP budget. A number of key infrastructure projects are currently in progress, such as the Denny Substation, Advanced Metering and Alaskan Way Viaduct Infrastructure Relocation. As a result, current capital requirements are significantly larger than historical levels.

### Capital Requirements



The CIP used in this forecast departs from the 2016-2021 CIP shown above to include adjustments to reflect known changes to current project schedules, increased funding requirements for some existing projects, and new high priority projects not funded in the original 2016-2021 CIP. These will be included in the 2016 budget's Proposed CIP for 2017-2022. Selected major adjustments are shown below. A more detailed listing of the CIP adjustments is provided in Appendix A.

### Major CIP Adjustments

\$, Millions	Total 2017-2021
Master Service Center development project delayed two years	-80.6
Alaskan Way Viaduct project increased funding	10.5
New streetlight infrastructure projects	33.5
Underground cable replacement program expanded	25.4
Payments to SPU for call center system improvements	10.1
Enterprise software solution – outage management funding	34.2

### Adjustments to the 2016-2021 Adopted CIP

\$, Millions	2016	2017	2018	2019	2020	2021
Adopted CIP (Cash)	402.2	363.7	318.7	258.4	314.2	368.5
Program Adjustments	17.9	28.2	27.4	20.1	(16.6)	27.1
Total CIP	420.1	391.9	346.2	278.4	297.6	395.6

The table below summarizes capital requirements and funding sources. Capital contributions include third-party funding for capital expenses such as service connections and reimbursements for certain transportation projects, and are included as a credit to total capital requirements. Capital funding from operations reflects cash drawdowns, and may represent net operating proceeds from the current or previous year(s). This forecast projects bond issuances totaling about \$1.5 billion to support 2017-2022 capital requirements, which will bring total outstanding debt to just above \$3.0 billion by 2022.

### Capital Requirements and Funding 2016-2022

\$, Millions	2016	2017	2018	2019	2020	2021	2022
Capital Requirements, net							
CIP	420.1	391.9	346.2	278.4	297.6	395.6	350.0
Deferred O&M	56.4	49.4	53.2	53.4	53.5	49.3	50.4
<u>Capital Contributions</u>	<u>(54.7)</u>	<u>(42.7)</u>	<u>(31.3)</u>	<u>(33.5)</u>	<u>(34.8)</u>	<u>(37.7)</u>	<u>(39.6)</u>
<b>Total</b>	<b>421.8</b>	<b>398.5</b>	<b>368.1</b>	<b>298.4</b>	<b>316.4</b>	<b>407.2</b>	<b>360.8</b>
Capital Funding							
Operations	129.7	130.9	124.8	79.4	48.8	163.9	141.9
<u>Bond Proceeds</u>	<u>292.1</u>	<u>267.6</u>	<u>243.3</u>	<u>218.9</u>	<u>267.6</u>	<u>243.3</u>	<u>218.9</u>
<b>Total</b>	<b>421.8</b>	<b>398.5</b>	<b>368.1</b>	<b>298.4</b>	<b>316.4</b>	<b>407.2</b>	<b>360.8</b>
Total Debt Outstanding	2,233.8	2,395.0	2,530.3	2,637.5	2,791.4	2,916.0	3,011.6



Capital requirements determine the size of future annual bond sales, and resulting debt service. The bond size is slightly higher than bond proceeds shown in the table above to account for issue costs and required deposits into the bond reserve fund. Debt service assumptions for bonds issued in 2017 and later assume a 30-year term at a 5.0% interest rate. Per financial policy, debt service has a 1.8x impact on the revenue requirement. Most existing debt was issued in the last 10 years with 25-30 year terms and level debt service, which is why debt service on these bonds is decreasing only slightly. In addition, the large capital program is driving larger future bond issues than in the past. Together these two factors are driving up the volume of debt outstanding and associated debt service obligations over the next six years.

**Bond Sales and Debt Service, \$Millions**

	<b>Bond</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Existing <sup>1</sup>	<b>Amount</b>	196.9	193.5	189.2	181.0	175.2	170.1	164.3
2016 (Aug) <sup>2</sup>	100	0.5	3.7	4.2	4.8	5.2	5.7	5.7
2016 (Sept) <sup>3</sup>	148		9.0	9.0	9.0	9.0	9.0	9.0
2017 (Aug)	275			17.8	17.8	17.8	17.8	17.8
2018 (Aug)	250				16.2	16.2	16.2	16.2
2019 (Aug)	225					14.6	14.6	14.6
2020 (Aug)	275						17.8	17.8
2021 (Aug)	250							16.2
2022 (Aug)	225							
Total Debt Service		197.4	206.2	220.3	228.8	238.0	251.1	261.6
Debt Service Coverage (1.8x)		355.3	371.2	396.5	411.8	428.5	452.1	470.8

<sup>1</sup> As of February 2016    <sup>2</sup> Variable Rate Bond Issue    <sup>3</sup> Fixed Rate Bond Issue (30 year at 4.5%)

**OPERATING AND MAINTENANCE (O&M)**

Non-power operating and maintenance expenses (O&M) are the costs associated with day-to-day operations. O&M is a large and diverse category of costs that includes functions such power production; distribution and transmission system operation and maintenance; customer services such as billing and meter reading; and administrative support. This forecast defines O&M as excluding purchased power, wheeling and taxes, which are included in separate categories.

The basis for the 2017-2022 O&M forecast is the 2016 O&M budget, which is adjusted to remove costs that do not impact debt service coverage, and then inflated appropriately. The average annual inflation applied to O&M is around 3.4% and represents the increased cost of providing the same level of services as in 2016. The table below lists the inflation assumption for each O&M cost category.

**Budget O&M Inflation by Category**

<b>\$, Millions</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Labor	139.0	142.5	146.4	149.9	153.5	157.2	160.9
Labor Benefits	75.3	79.0	83.0	87.1	91.5	96.1	100.9
Non-Labor	78.7	80.6	82.6	84.6	86.6	88.7	90.8
Transfers to City	33.7	34.7	35.8	36.9	38.0	39.1	40.3
<u>Operating Supplies</u>	<u>15.7</u>	<u>16.9</u>	<u>18.3</u>	<u>19.7</u>	<u>21.3</u>	<u>23.0</u>	<u>24.8</u>
<b>Total</b>	<b>342.4</b>	<b>353.8</b>	<b>366.0</b>	<b>378.2</b>	<b>390.8</b>	<b>404.0</b>	<b>417.7</b>
Annual Labor Increase		2.50%	2.75%	2.40%	2.40%	2.40%	2.40%
Average Growth All O&M		3.3%	3.4%	3.3%	3.3%	3.4%	3.4%

<b>O&amp;M Category</b>	<b>Annual Inflation</b>	<b>Notes</b>
Labor	see above	2017 and 2018 from Central Budget Office, 2.4% in out years
Labor Benefits	5.0%	Conservative value based on history
Non-Labor	2.4%	Assumed to grow at close to CPI inflation
Transfers to City	3.0%	Assumed to grow at a rate slightly higher than CPI Inflation
Operating Supplies	8.0%	Includes IT equipment and software, fuel costs, inventory material for distribution and generation systems. Growth assumed to remain high (conservative placeholder)

There are numerous adjustments made to the 2016 O&M budget to make it consistent with financial policies and reflect changes to plans and programs. The adjustments are described in the below table.

**O&M Adjustments Detail**

<b>\$, Millions</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Inflated 2016 Budget</b>	<b>342.4</b>	<b>353.8</b>	<b>366.0</b>	<b>378.2</b>	<b>390.8</b>	<b>404.0</b>	<b>417.7</b>
REC Expense <sup>1</sup>	3.4	3.5	4.9	8.2	8.3	8.3	14.5
3rd AC Intertie Expense <sup>1</sup>	1.1	0.9	0.9	0.8	0.8	0.8	0.8
PNCA Payment <sup>1</sup>	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Capital Loadings <sup>2</sup>	(83.3)	(86.2)	(89.1)	(92.2)	(95.4)	(98.6)	(102.0)
Under Expenditure <sup>3</sup>	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
Strategic Adjustments <sup>4</sup>	0.0	0.8	6.1	15.2	10.9	12.4	11.9
<b>Total O&amp;M</b>	<b>255.5</b>	<b>264.8</b>	<b>280.7</b>	<b>302.1</b>	<b>307.4</b>	<b>318.8</b>	<b>334.8</b>

<sup>1</sup> Items that are budgeted as purchased power budget but recognized as O&M in financials.

<sup>2</sup> Remove capital loadings and overhead expenses associated with the CIP from the O&M budget, include these expenses as capital requirements. CIP and deferred overheads are expected to increase at a rate of 3.4% per year, predicated on the assumption that labor levels will remain constant for CIP and deferred O&M over the six-year planning period.

<sup>3</sup> Remove \$10 million per year to reflect an assumption of budget under-expenditure.

<sup>4</sup> See Appendix A for more detail.

Strategic adjustments encompass all discretionary changes to O&M. These include both changes to baseline programs as well as initiatives identified in previous strategic plans. A full listing of the strategic adjustments to O&M costs is provided in Appendix A.

Some of the largest strategic adjustments include:

- Deletion of certain O&M efficiencies deemed not feasible under current labor contracts. (\$3 to \$4 million per year, ongoing)
- Additional funding for cyber security (around \$1 million per year, ongoing)
- Additional funding for the Outage Management System (ramps up to \$1 million in 2019, ongoing)
- Increased cost for new customer billing system managed services (\$1.5 million in 2018, \$2.1 million in 2019, temporary)
- Increased funding for AMI managed services (\$2 million to \$3 million per year starting in 2017, ongoing). Operational savings from full deployment are expected to reach around \$3 million annually by 2022, and will ultimately offset increased costs.

#### POWER COSTS, NET

This category includes all costs and revenue associated with the actual purchase and sale of energy.

#### Long-Term Power Contracts and Wheeling

City Light's power portfolio is a relative constant. With the sole exception being the expiration of the Stateline wind contract in 2022, this forecast projects no major contract changes, and no new resources are expected to be procured. The major financial assumptions for long-term power costs are in the table below.

#### Long-Term Power Contracts and Wheeling

\$, Millions	2016	2017	2018	2019	2020	2021	2022
BPA (Block and Slice) <sup>1</sup>	167.5	175.2	180.6	183.5	189.0	192.0	197.7
Priest Rapids <sup>2</sup>	2.5	2.4	2.2	2.1	2.0	2.0	1.9
Columbia Basin Hydro <sup>3</sup>	6.6	6.7	6.9	7.1	7.3	7.4	7.6
Lucky Peak <sup>4</sup>	7.5	7.7	7.9	8.1	8.3	8.6	8.8
SPI Purchases <sup>5</sup>	2.6	1.6	0.0	0.0	0.0	0.0	0.0
Stateline Wind <sup>6</sup>	24.5	24.6	24.7	24.8	25.0	25.0	1.9
Columbia Ridge <sup>7</sup>	6.2	6.3	6.5	6.6	6.7	6.9	7.0
King County West Point <sup>7</sup>	2.0	2.1	2.1	2.2	2.3	2.3	2.4
High Ross <sup>8</sup>	13.1	13.1	13.1	13.1	13.1	0.4	0.4
New Resources <sup>9</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BPA Wheeling <sup>1</sup>	42.1	42.6	44.1	44.6	46.2	46.7	48.3
Other Wheeling <sup>10</sup>	<u>1.2</u>	<u>1.2</u>	<u>1.2</u>	<u>1.2</u>	<u>1.2</u>	<u>4.2</u>	<u>4.3</u>
<b>Total LT Power Contracts</b>	<b>275.9</b>	<b>283.6</b>	<b>289.3</b>	<b>293.3</b>	<b>301.2</b>	<b>295.5</b>	<b>280.3</b>

<sup>1</sup> Increases by CPI biennially, effective October 1 of odd-numbered years. No change to Block/Slice product election.

<sup>2</sup> Priest Rapids costs are expected to decline because City Light's share of the project will shrink as Grant County PUD's load grows.

<sup>3</sup> Reflects City Light's apportioned allotment of production O&M costs, growing with inflation.

<sup>4</sup> Reflects production O&M cost growing with inflation.

<sup>5</sup> Sierra Pacific Industries (SPI) Biomass expires in 2017 and will not be renewed. This an expensive, relatively small contract, providing around 3aMW annually.

<sup>6</sup> Stateline wind costs will grow gradually as outlined in the integration and exchange contract with PacifiCorp. The contract expires at the end of 2021 with the last payment in 2022. City Light has already contracted to receive RECs from the Stateline Project starting in 2022 (which are included in O&M), but will not continue to purchase the power.

<sup>7</sup> Cost inflates per contract terms.

<sup>8</sup> The payment required by the High Ross Treaty is greatly reduced after 2020. The amount of energy received is unchanged.

<sup>9</sup> No new resources are assumed, per 2014 Integrated Resource Plan.

<sup>10</sup> Other Wheeling reflects an exchange agreement for the Lucky Peak output for 2017-2020 which will assign the associated transmission to the counterparty, reducing expenses by \$3 million. Starting in 2021, this expense is reinstated, as Lucky Peak energy will be retained.

## Power Revenues, Net

Power revenues are comprised of Net Wholesale Revenue, other miscellaneous power revenues, and long-term power sale obligations. The below table details these assumptions.

**Power Revenues, Net Detail**

<b>\$, Millions</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Net Wholesale Revenue <sup>1</sup>	60.0	60.0	60.0	55.0	50.0	50.0	40.0
Power Contracts							
Article 49 to PO County	2.0	2.1	2.1	2.2	2.2	2.3	2.3
Priest Rapids	2.4	2.3	2.2	2.2	2.1	2.2	2.1
BPA Credit for South Fork Toit	3.3	3.1	3.0	2.9	2.8	2.7	2.6
BPA Residential Exchange Credit <sup>2</sup>	5.7	5.7	5.7	4.3	0.0	0.0	0.0
Power Marketing Net <sup>3</sup>	4.4	4.0	3.3	3.3	3.3	3.3	3.3
Transmission Sales	<u>3.4</u>	<u>3.4</u>	<u>3.4</u>	<u>3.4</u>	<u>4.9</u>	<u>4.8</u>	<u>4.5</u>
<b>Total Power Revenues, Net</b>	<b>81.2</b>	<b>80.6</b>	<b>79.6</b>	<b>73.2</b>	<b>65.3</b>	<b>65.2</b>	<b>54.8</b>

<sup>1</sup> Net Wholesale Revenue (NWR) is the revenue from selling surplus energy on the wholesale market, net of wholesale energy purchases for load balancing. 2017-2020 NWR planning values were adopted as part of the 2014 Plan and represent a gradual downward shift reflecting less reliance on this volatile revenue source. 2022 is reduced to \$40 million to account for the expiration of the Stateline wind contract, which will reduce surplus sales the utility has to sell.

<sup>2</sup> In aggregate, revenue in this category will decline in 2020 when the lookback credit for BPA Residential Exchange expires.

<sup>3</sup> Power marketing revenues (net of purchases) are earned from sales of auxiliary services associated with generation and transmission assets, such as reserve capacity sales. Revenues are expected to decline slightly because of the phasing out of a financial settlement component of the SMUD exchange contract, which expires in 2017.

## OTHER COSTS/REVENUES

This "other" category is made up of miscellaneous costs and revenues such as taxes, interest income and fees for retail services.

### Other Costs Detail

\$, Millions	2016	2017	2018	2019	2020	2021	2022
State Taxes <sup>1</sup>	32.6	34.5	36.1	38.1	42.7	44.1	45.2
Franchise Payments & Other Taxes <sup>2</sup>	6.1	6.5	6.8	7.2	7.5	7.7	8.0
<u>Uncollectable Revenues<sup>3</sup></u>	<u>6.1</u>	<u>6.4</u>	<u>6.8</u>	<u>7.2</u>	<u>7.5</u>	<u>7.7</u>	<u>7.9</u>
<b>Total Other Cost</b>	44.8	47.3	49.7	52.5	57.7	59.5	61.1

<sup>1</sup> State taxes are 3.8734% of retail revenues, plus some other revenues and contributions. Not included are City taxes, which are 6% of total taxable revenues, but do not directly impact the revenue requirement because they are junior to debt service. They are treated as a "below the line" expenditure and are deducted from the additional 0.8x debt service coverage, reducing the amount of current year operating proceeds going to capital requirements.

<sup>2</sup> Payments associated with franchise contracts with the cities of Burien, Lake Forest Park, SeaTac, Shoreline, and Tukwila. Franchise payments range from 4% to 6% of total retail revenue in each franchise territory. Other taxes are miscellaneous taxes (e.g., B&O tax) to other jurisdictions where the utility has operations. The forecast projects only small increases in these taxes.

<sup>3</sup> Uncollectible revenue is modeled as 0.75% of retail revenues.

### Other Revenue Sources Detail

\$, Millions	2016	2017	2018	2019	2020	2021	2022
Non-Base Rate Retail Revenue <sup>1</sup>	3.8	3.9	3.9	3.9	4.4	4.5	5.5
Other Revenue <sup>2</sup>	21.0	21.2	21.4	21.6	21.8	22.0	22.2
Suburban Undergrounding <sup>3</sup>	3.3	4.1	4.1	4.1	4.1	4.1	4.1
Property Sales <sup>4</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest Income <sup>5</sup>	5.7	5.2	5.1	5.4	6.2	6.6	6.4
RSA Transfers, Net <sup>6</sup>	<u>(1.4)</u>	<u>(1.4)</u>	<u>(1.4)</u>	<u>(1.4)</u>	<u>(1.5)</u>	<u>(1.5)</u>	<u>(1.5)</u>
<b>Total Other Revenue Sources</b>	<b>33.9</b>	<b>34.4</b>	<b>34.5</b>	<b>35.1</b>	<b>36.6</b>	<b>37.2</b>	<b>38.3</b>

<sup>1</sup> Non-base rate retail revenue includes revenues from retail customers for services or programs which are not dictated by the revenue requirement. Examples include: elective green power programs, distribution capacity charges and power factor charges.

<sup>2</sup> Other revenue includes a broad range of income sources, such as late payment fees, payments for damages to property, transmission tower attachments, distribution pole attachments and account change fees. The forecasts of these items are indexed to simple indicators such as inflation or number of accounts.

<sup>3</sup> Suburban undergrounding revenue is funds collected from customers in certain suburban cities for the repayment of discretionary undergrounding of parts of their distribution system.

<sup>4</sup> No proceeds from property sales are assumed, pending an analysis of surplus properties and development of a long-term disposition plan.

<sup>5</sup> Interest income assumes City Cash Pool cash holdings accrue interest at an annual rate of 1.5% on average. The increases reflect higher average cash balances, primarily from a growing bond reserve fund.

<sup>6</sup> These RSA transfers are the deposit of interest earnings to the RSA.

**RETAIL SALES**

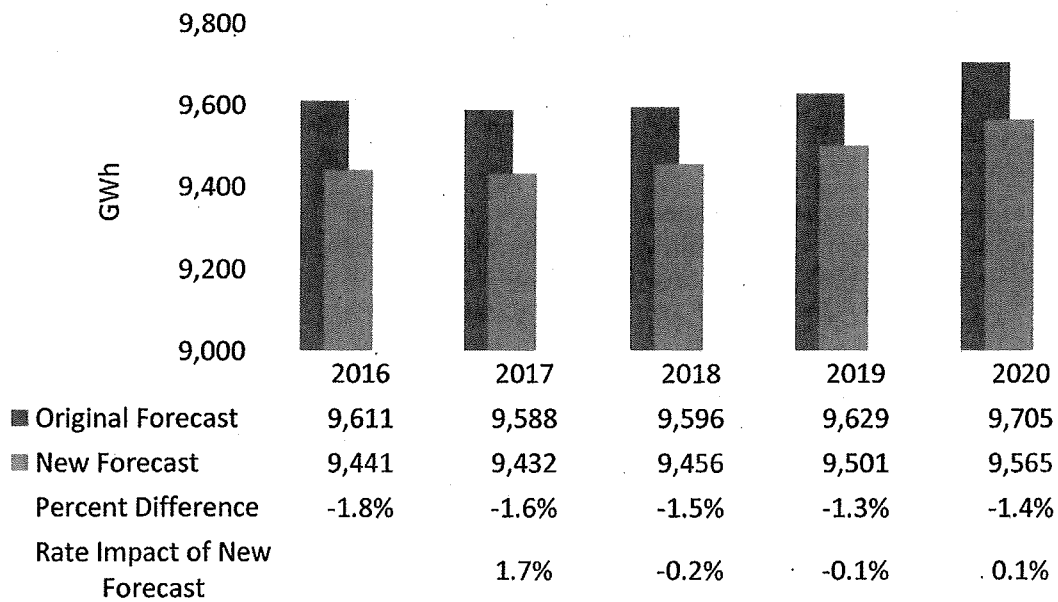
The forecast of retail sales is based on City Light’s official 2015 load forecast, which shows very small growth in retail sales over the six-year period, averaging 0.3% annually.

<b>Retail Sales Forecast</b>							
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
GWh							
Residential	3,123	3,110	3,103	3,096	3,097	3,076	3,067
Small and Medium	3,730	3,706	3,722	3,749	3,785	3,793	3,822
<u>Large and High Demand</u>	<u>2,588</u>	<u>2,616</u>	<u>2,632</u>	<u>2,655</u>	<u>2,683</u>	<u>2,691</u>	<u>2,715</u>
Total	9,441	9,432	9,456	9,501	9,565	9,560	9,604
Annual Change							
Residential		-0.4%	-0.2%	-0.2%	0.0%	-0.7%	-0.3%
Small and Medium		-0.6%	0.4%	0.7%	1.0%	0.2%	0.8%
<u>Large and High Demand</u>		<u>1.1%</u>	<u>0.6%</u>	<u>0.9%</u>	<u>1.1%</u>	<u>0.3%</u>	<u>0.9%</u>
Total		-0.1%	0.3%	0.5%	0.7%	-0.1%	0.5%

The forecast of retail sales has decreased since the 2014 Plan. Under the existing rate design, almost all revenue is collected through per-kWh or energy rates, so fewer kWh means higher rates are needed to recover the same amount of revenue.

The chart and table below show the impact to the average rate increase resulting from the current retail sales forecast being lower than what was assumed in the 2014 Strategic Plan update. Approximately 1.7% of the proposed 5.6% 2017 rate increase can be attributed to a lower forecast of retail sales.

### Retail Sales Forecast



### Retail Sales Forecast Reductions and Impact on Average Rates

	2016	2017	2018	2019	2020	2021	2022
Revenue Requirement, \$ Millions		851.8	902.1	951.6	992.8	1,023.5	1,053.9
Retail Sales Forecast, GWh							
2016 Plan	9,441	9,432	9,456	9,501	9,565	9,560	9,604
2014 Plan	9,611	9,588	9,596	9,629	9,705		
Average Rate, cents/kWh*							
2016 Plan	8.55	9.03	9.54	10.02	10.38	10.71	10.97
2014 Plan	8.55	8.88	9.40	9.88	10.23		
Annual Rate Increase							
2016 Plan		5.6%	5.6%	5.0%	3.6%	3.1%	2.5%
2014 Plan		3.9%	5.8%	5.1%	3.5%		
Difference		1.7%	-0.2%	-0.1%	0.1%		

\* Calculated using the revenue requirement from the 2016 Plan and the forecast of retail sales from the 2016 Plan and 2014 Plan, respectively



## APPENDIX A: STRATEGIC ADJUSTMENTS

Strategic adjustments encompass all discretionary changes to O&M and CIP. The values shown in the table below reflect changes as compared to the adopted 2016 O&M budget and 2016-2021 CIP. These adjustments are preliminary amounts and are expected to be further refined through the budget development process.

Adjustments to the baseline reflect new spending for high priority projects and/or programs that are not specifically identified as strategic initiatives. The adjustments account for factors such as expanded scope of work, schedule changes, and new operating requirements.

Many of the changes in the O&M spending levels for strategic initiatives were already included in previous strategic plans. One major O&M change is higher net costs for advanced metering, primarily from contracting out the meter data collection process and delaying operational savings due to the revised meter deployment schedule. Another major O&M change includes a reduction of some of the field-related operational savings assumed in previous plans. These specific cost reductions were not deemed feasible under current labor contracts.

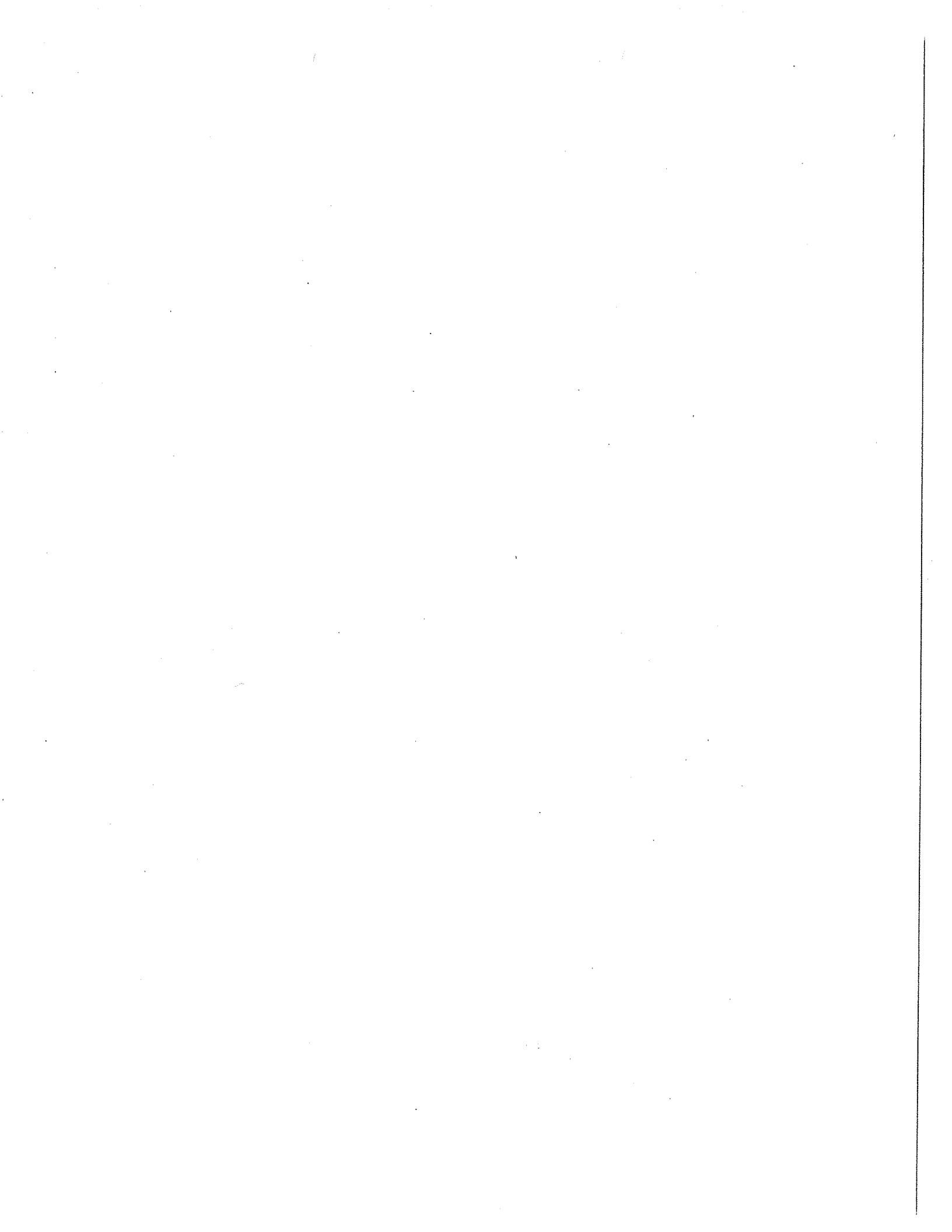
Savings identified help mitigate cost increases, as well as targeted temporary savings to help mitigate the 2017 and 2018 retail rate increase.

### Strategic Adjustments Detail

\$, Millions	O&M	O&M	O&M	O&M	O&M	O&M	Capital*
	2017	2018	2019	2020	2021	2022	2017-2021
Adjustments to Baseline							
SCL/SPU customer response MOA	0.9	0.7	0.5	0.5	0.6	0.6	10.1
CSED NERC cyber security initiative	0.6	1.0	1.0	1.0	1.0	1.1	2.0
Fauntleroy undergrounding	-	-	-	-	-	-	6.5
T&D asset testing system	-	-	-	-	0.4	0.1	1.1
Transportation levy street lighting	-	-	-	0.1	0.1	0.1	19.9
Waterfront Seattle street lighting	-	-	-	-	-	-	13.6
Streetlight control system	-	-	-	-	-	0.1	1.9
Power and data circuits to Vista switches	-	0.0	0.1	0.1	0.1	0.1	3.0
UW battery storage pilot	-	-	-	-	-	-	2.7
Alaskan Way Viaduct replacement program	-	-	-	-	-	-	10.4
Self-service channels (web & mobile apps)	-	-	0.9	0.2	0.2	0.2	-
Billing system managed service support	-	1.6	2.1	-	-	-	-
Succession planning	0.2	0.1	0.1	0.1	0.1	0.1	-
Cyber security expert	0.2	0.2	0.2	0.2	0.2	0.2	-
Annual review of Continuity of Ops Plan	0.1	-	0.1	0.1	0.1	0.1	-
Contract security services	-	0.1	0.2	0.2	0.2	0.2	-
Pre-paid metering	-	-	-	-	-	0.6	-
Mid-size business contact center	-	-	-	0.2	0.7	0.7	-

<b>\$, Millions</b>	<b>O&amp;M 2017</b>	<b>O&amp;M 2018</b>	<b>O&amp;M 2019</b>	<b>O&amp;M 2020</b>	<b>O&amp;M 2021</b>	<b>O&amp;M 2022</b>	<b>Capital* 2017-2021</b>
Adjustments to Baseline, continued							
Skagit river hydro project relicensing	-	-	-	-	-	-	6.4
Storm water compliance	0.0	0.0	0.0	-	-	-	2.1
Regional market enhancements	0.5	0.7	0.8	0.8	0.8	0.9	2.5
Cedar Falls upgrade/transfer to SPU	-	-	0.5	0.5	1.7	1.7	1.9
FERC required dam safety	0.6	0.6	0.4	0.6	0.6	0.6	1.4
Seismic upgrades-substations	-	-	-	0.1	0.1	0.1	1.1
SMT physical work environment upgrade 2015-2016 Schedule Adjustments	-	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	5.3
							15.8
<b>Subtotal adjustments to baseline</b>	<b>3.3</b>	<b>5.6</b>	<b>8.2</b>	<b>5.3</b>	<b>7.4</b>	<b>8.0</b>	<b>107.8</b>
Adjustments to Initiatives							
Project management system (software)	-	-	-	-	-	-	2.2
Advanced Metering O&M	1.5	2.1	2.7	3.0	3.1	3.3	-
AMI - delay original O&M costs & savings	-	-	0.4	(2.1)	(2.6)	(3.2)	-
Underground cable replacement update	-	-	-	-	-	-	25.4
Enterprise software solution replacement	0.3	0.8	1.1	1.1	1.1	1.1	34.2
Efficiencies not achieved (labor agreements)	2.7	3.1	3.6	3.7	3.9	4.2	-
Utility of the Future planning	0.2	0.2	0.2	0.2	0.2	0.2	-
Benchmarking analysis funding reduction	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	-
Develop performance reporting	0.3	0.6	0.6	0.7	0.7	0.7	0.8
Efficiencies expense adjustment	-	-	0.5	0.5	0.6	0.6	-
Service centers delay	-	-	-	-	-	(0.3)	(80.6)
Vehicle maintenance efficiency change	0.6	0.6	0.6	0.6	0.6	0.6	-
<b>Subtotal adjustments to initiatives</b>	<b>5.5</b>	<b>7.2</b>	<b>9.5</b>	<b>7.5</b>	<b>7.4</b>	<b>7.0</b>	<b>(18.0)</b>
New Savings							
IT efficiency	(1.0)	(1.0)	(1.1)	(1.1)	(1.1)	(1.1)	-
NEEA budgets and payments capitalized	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	3.3
Reduce professional services	(0.4)	(0.4)	-	-	-	-	(1.0)
Reduce advertising	(0.2)	(0.2)	-	-	-	-	-
Reduce conservation incentives	-	-	-	-	-	-	(5.1)
Shop Labor Efficiencies							(0.8)
Supplemental 2017-2018 reductions	(6.6)	(4.8)					
Unallocated savings (buffer)	1.0	0.5	(0.7)	(0.2)	(0.7)	(1.3)	
<b>Subtotal new savings</b>	<b>(7.9)</b>	<b>(6.7)</b>	<b>(2.4)</b>	<b>(2.0)</b>	<b>(2.4)</b>	<b>(3.1)</b>	<b>(3.7)</b>
<b>Total Strategic Adjustments</b>	<b>0.8</b>	<b>6.1</b>	<b>15.2</b>	<b>10.9</b>	<b>12.4</b>	<b>11.9</b>	<b>86.1</b>

\*Capital expenses including CIP and deferred O&M.





# 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.**

## Strategic Plan Metrics

Customer Service and Rate Predictability	2003	2008	2012	2013	2014	2015	Goal By 2022
<b>Outage Duration: SAIDI</b> (avg. cumulative minutes/customer)	77.8	88.4	69.0	68.7	69.7	62.3	Less than 60
<b>Outage Frequency: SAIFI</b> (avg. # of events/customer)	1.6	1.0	1.0	0.9	0.9	0.5	Less than 0.6
<b>Residential Customer Service</b> (JD Power Ranking, West Region)	#18	#11	#2	#3	#3	#3	#1
<b>Business Customer Service</b> (JD Power Ranking, West Region)	N/A	N/A	#4	#1	#1	#2	#1
<b>Utility Discount Program</b> (# of participants)	12,702	12,351	13,415	14,000	16,941	20,779	28,000 By 2018
<b>Streetlight Repairs</b> (% responded to in <14 days)	N/A	N/A	N/A	93.5%	95.4%	93.9%	90%
<b>Service Connections</b> (days for connection)	N/A	59.7	33.5	35.2	36.1	33.1	Less than 30
<b>Rate Predictability</b> (avg. annual increase 6 years)	N/A	N/A	N/A	4.7%	N/A	4.4%	4.3%
Workforce Performance and Safety	2003	2008	2012	2013	2014	2015	Goal By 2022
<b>Hiring Cycle</b> (days)	184	57	49	42	24	28	Less than 30
<b>Vacancy Rate</b> (% of FTE)	9.6%	6.3%	7.0%	7.0%	5.0%	5.4%	Less than 4.0%
<b>Injury Rate</b> (TRR)	13.1	6.9	7.0	6.3	5.3	6.0	Less than 2.2
<b>Preventable Vehicle Collisions</b> (#/year)	N/A	N/A	N/A	N/A	30	31	Less than 30
<b>Avg. Training \$/Employee</b>	\$593	\$798	\$622	\$799	\$1,223	\$1,689	\$2,000
Organizational Performance	2003	2008	2012	2013	2014	2015	Goal By 2022
<b>Average Rate</b> (¢/kWh)	6.2	5.6	6.8	7.2	7.6	8.1	11
<b>Rate Ranking</b> (among 25 major US cities)	#5	#1	#1	#1	#1	N/A	#1
<b>Debt Service Coverage</b>	1.56	2.05	1.81	1.85	1.86	1.62	1.80
<b>S&amp;P Credit Rating</b>	A-	AA-	AA-	AA	AA	AA	AA

<b>Efficiencies (\$M)</b>	N/A	N/A	N/A	\$9.9	\$22.4	\$18.5	\$28.0 By 2018
<b>Major Generator Rewinds (# Completed)</b>	1	3	2	1	1	1	7 per year
<b>Generator Transformer (# replacements completed)</b>	1	4	4	1	1	6	9 per year
<b>Conservation and Environmental Leadership</b>	<b>2003</b>	<b>2008</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Goal By 2022</b>
<b>Conservation (aMW added/year)</b>	7.0	10.1	13.0	14.7	16.0	15.8	14.0
<b>Residential Incentives (\$M/year)</b>	\$5.7	\$4.7	\$7.4	\$14.6	\$11.4	\$10.5	\$7.2
<b>Commercial &amp; Industrial Incentives (\$M/year)</b>	\$10.5	\$6.8	\$7.7	\$11.4	\$12.7	\$14.2	\$16.1
<b>Solar Installations (cumulative # installed)</b>	-	159	674	1,126	1,610	2,244	4,300
<b>Solar Installations (cumulative MW)</b>	-	0.5	4	6	8	13	26
<b>I-937 Compliant (note: 9% by 2016)</b>	N/A	N/A	3%	6%	6%	6%	15%
<b>GHG Emissions (metric tons)</b>	296,219	0	0	0	0	0	0



**2017-2022 Strategic Plan Update & Progress Report**  
**Summary of Customer & Stakeholder Outreach**  
**May 27, 2016**

**Overview**

An important commitment made by City Light as part of the six-year Strategic Plan process is transparency and accountability to the mayor, the City Council, and the customers and stakeholders in the utility's service territory. As with the original 2013-2018 Strategic Plan and the 2015-2022 Progress Report and Update, this latest two-year Progress Report and Update builds on the extensive customer and stakeholder engagement efforts from the two previous plans.

As in previous years, City Light and the City Light Review Panel (Review Panel) proposed two distinct phases of the public engagement and outreach plan for Seattle City Light that culminates in an updated Strategic Plan, with an accompanying recommendation from the Review Panel being sent to the mayor in May 2016.

Phase 1 provided a venue for City Light, the Review Panel and representatives from important customer classes and stakeholders to become knowledgeable on various issues and developments impacting the traditional utility business-model nationally.

Phase 2 provided an opportunity for the Review Panel, mayor and City Council to hear from the utility's customer and stakeholders regarding (1) satisfaction with implementation of the Strategic Plan to date and (2) whether the direction the utility proposes in the update adequately prepares City Light for changes in the industry and customer expectations.

**Phase 1: Changing Utility Business Model (July 2015)**

- Inform all customer classes in the residential, commercial and industrial sectors, as well as important stakeholders about changes in the utility business model and the innovations other utilities have developed or proposed to address the challenges and opportunities faced by electric utilities going forward.
- Solicit input from customers and stakeholders about priority areas of interest for the 2017-2022 Strategic Plan update.
- Continue to identify key organizations, commercial and residential customers and individuals interested in engaging with the Review Panel and utility on Strategic Plan development and implementation.

**Main Components**

A half-day session on the "Utility of the Future" led by Rocky Mountain Institute and Electric Power Institute (EPRI) along with representatives from peer utilities such as Sacramento Municipal Utility District (CA) and Salt River Project (AZ) (see attached agenda). Participants

included City Light senior staff, Review Panel members, Council staff, and customers and stakeholder representatives.

Topics discussed included (agenda attached):

- New solutions to enable greater adoption of economic distributed energy resources
- Innovations other utilities have developed or proposed to address the challenges and opportunities faced by electric utilities going forward.
- Role of emerging technology (Electric vehicles, distributed generation/solar, advanced metering (AMI), storage, controls).
- Customer expectations/needs (residential, commercial & industrial).
- Social equity model (affordability, community solar, energy efficiency and weatherization, community workforce opportunities).
- Bolder environmental leadership (new performance-based models for conservation, carbon reduction, climate resiliency and mitigation, renewables).

**Phase One Findings and Conclusions**

- Innovation is having significant impact on the industry and change is occurring quickly, as compared to traditional utility thinking. Transformations happen quickly.
- Demand for electricity is flat and may decline. Full installation of LED lights alone could shave up to 10 percent of U.S. electricity use, and buildings are becoming more efficient (saving 40-80 percent of total energy bill).
- Grid defection poses a significant risk if not managed. Typical rate design disguises the true marginal cost of service.
- Looking ahead, the power system includes more flexible generation; more resilient transmission and distribution; consumers becoming energy producers; and more dynamic and interactive load.
- Customers want more control, access and tools to use energy efficiently.
- Utilities need to map out how to manage renewable resources for a more reliable grid; change their rate structure to more accurately manage customer energy usage; send the correct price signals; and build partnerships to help with the evolution of operations.
- Interest in the future of electric vehicles (EVs) - air pollution reduction, carbon emission reduction, reduce storm water impacts. Clean power helps utility with load decline and city's carbon footprint.
- Affordability in general is a concern. Cross subsidy is going the wrong way: Incentives programs in place have typically benefited the more affluent customers (solar and energy efficiency).

**Phase 2: Draft Strategic Business Plan Update (April and May 2016)**

- Continue to inform and educate customers and stakeholders on the changing utility business model.

- Solicit support and input from customers and stakeholders on City Light's draft Strategic Plan update, including the utility's financial baseline; showing progress on efficiencies and new efficiencies; and outlining new strategic initiatives.
- Identify any major issues or concerns that need to be addressed in the final City Light proposal and recommendations from the Review Panel.

## **Main Components**

- Updated City Light Strategic Plan Website to share updated information on the draft and solicit input on the draft proposal. City Light's Facebook and Twitter resources were used to communicate and solicit input from customers and stakeholders.  
<http://www.seattle.gov/light/stratplan/>.
- Presented information to customers and stakeholders through briefings hosted by the Seattle Chamber of Commerce, NW Energy Efficiency Council & 2030 District, NW Energy Coalition, and utility hosted meetings with franchise cities and large commercial customers.
- Customer survey (both commercial and residential) distributed through social media, customer emails lists, and meeting with participants at briefings and meetings. *See attached survey.*
- Employee survey distributed through employee communications tools such as the City Light Weekly Message; NetWork News and all-user email with the focus on awareness of the Strategic Plan, and challenges and successes with implementation. *See attached survey.*

## **Phase 2 Findings & Conclusions**

### Meeting and Briefings:

- Support for transportation electrification and ensuring broad access to electric-car charging infrastructure and including mass transit in strategy.
- Interest in customer portal for advanced meter deployment to drive increased energy efficiency, including a standardized interface (compatible with other technologies) and time-of-use rates.
- Important for City Light to coordinate efforts with the city's Climate Action Plan.
- Franchise cities want to see better coordination with large capital projects in their cities as well as opportunities to collaborate on projects such as City Light's new decant facility at the South Service Center.
- Strong support for performance-based contracting for energy efficiency, including expansion into multi-family sector.

- Important for advanced meter program to engage low-income community, communicating the opportunities it provides to reduce their usage and save money.
- Must expand and grow the Low Income Weatherization Program.
- Strong support for continuing to focus on conservation as a resource, including substituting demand response for purchased power.
- Strong interest in the utility continuing to commit to additional operational efficiencies and benchmarking them to work done for the original Strategic Plan in 2012, especially the labor efficiencies identified.
- Large commercial customers were sensitive to the continued rate increases and to the likelihood of the Rate Stabilization Account surcharge being triggered in 2016.
- Interest in distribution automation and advanced meters improving operational efficiencies and better isolating outages to improve reliability across the system.

#### Customer & Stakeholder Survey:

Seattle City Light customers were asked to give the utility feedback through an online survey about the Strategic Plan and proposed initiatives for the 2017-2022 update. The survey was promoted heavily through various communication channels including social media, participants in the meetings & briefing, City Light's website and a targeted customer e-blast, which reached approximately 215,000 recipients. **A total of 3,616 recipients (residential and commercial customers) submitted their responses on the survey.** Nearly 60% of City Light customers opened the survey via a mobile device.

Overall, customers continue to show their knowledge, interest and support in the Strategic Plan. The survey shows that customers give City Light particularly good marks for its workforce, assets, infrastructure and community support. On the topic of how customers heard about City Light's efforts to update the Strategic Plan, only a third of respondents had read or heard something about the plan.

Regarding the Strategic Plan objectives, customers continue to rate renewable energy investments, increased efficiencies, rate affordability and improved electrical reliability as important priorities. However, other priorities focused on improving employee performance and online utility accounts were less important for the customer. These findings were generally consistent with the 2014 Strategic Plan customer survey.

Looking forward, customers agreed overall that City Light must continue to adapt to become a more agile "Utility of the Future." Survey respondents view the Transportation Electrification initiative and the Climate Adaptation Plan as important priorities that the utility should continue focusing on for the future. Lastly, a majority of survey respondents felt that the rate path for the Strategic Plan update is reasonable. Others were either opposed to the rate increase or unsure about the increase itself.

### Employee Survey:

City Light employees were also surveyed on the latest Strategic Plan update. **A total of 151 employees participated in the survey.** The survey was promoted throughout City Light's internal communication channels.

Overall, employees were generally aware of the Strategic Plan or were involved in the plan. Employees also gave City Light good marks on environmental commitment, affordability and customer service. Respondents were generally neutral on the initiatives and programs relating to employee development, leadership development, and workforce development and employee safety. Lastly, respondents were divided on whether the Strategic Plan impacts or change how they do work at City Light.

### **Outreach Materials Produced**

1. Strategic Plan Update Website - <http://www.seattle.gov/light/stratplan/>
2. Strategic Plan Update & Progress Report Folio - translated into Traditional Chinese, Spanish, Korean, Vietnamese, Somali and Tagalog
3. Summary of Strategic Plan Metrics
4. Customer Survey (attached)
5. Employee Survey (attached)



## CITY LIGHT REVIEW PANEL MEETING

### "Utility of the Future"

Thursday July 30, 2015

11:30 am – 5:30 pm

McKinstry Innovation Center, 210 S. Hudson St., Seattle

### PROGRAM AGENDA

11:30 AM

Arrival

12 Noon

**Welcome:** Jim Baggs, Interim CEO, City Light.  
Julie Ryan, Chair, City Light Review Panel

12:05 – 1:00 PM  
(lunch is provided)

**Keynote Lunch with Lena Hansen, Rocky Mountain Institute**

*Ms. Hansen co-developed and leads the Rocky Mountain Institute's (RMI) Electricity Innovation Lab (eLab), a unique multi-year collaboration of leading industry actors to develop, implement, and advocate for new solutions to enable greater adoption of economic distributed energy resources.*

1:00 PM – 2:00 PM

**Utility Perspective Panel** led by **Rob Chapman**, Vice-President, Electric Power Research Institute (EPRI) & **Arlen Orchard**, General Manager, Sacramento Municipal Utility District, & **Lori Singleton**, Director Emerging Customer Programs, Salt River Project.

*An opportunity to hear about innovations other utilities have developed or proposed to address the challenges and opportunities faced by electric utilities going forward.*

2:00 PM – 2:30 PM

**Networking Break**



**2:30 PM – 3:30 PM (cont'd.)**

**Breakout Sessions on Priority Areas for 2017-2022  
Strategic Business Plan**

*All attendees to participate in the session of their choice.*

*Topic Areas:*

- A. Role of Emerging Technology (EV, DG/solar, AMI, storage, controls)
- B. Customer Expectations/Needs (Residential, Commercial & Industrial)
- C. Social Equity Model (affordability, community solar, energy efficiency/weatherization, community workforce opportunities)
- D. Bolder Environmental Leadership (new performance-based models for conservation; carbon reduction; climate resiliency and mitigation; renewables)

*Detailed notes will be taken to share with all attendees following the event.*

**3:30 PM – 4:15 PM**

**Report Back from Breakout Sessions**

**4:15 PM – 5:30 PM**

**Reception hosted by McKinstry**

City Light Review Panel  
c/o: Seattle City Light,  
700 5<sup>th</sup> Avenue, Suite 3200  
P.O. Box 34023, Seattle WA 98124-4023  
Email: [clrpquestions@seattle.gov](mailto:clrpquestions@seattle.gov)



## Strategic Plan Update 2017-2022 -- Customer Survey

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 our performance and provide rate reliability and predictability are well underway, with others already completed. And we're seeing the results 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.

We continue to look for cost savings, from improving internal processes and adopting new technologies to improvements of 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. By 2018, the utility is committed to achieving an additional \$10 million in cost savings for a total of \$28 million.

Perhaps 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.

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





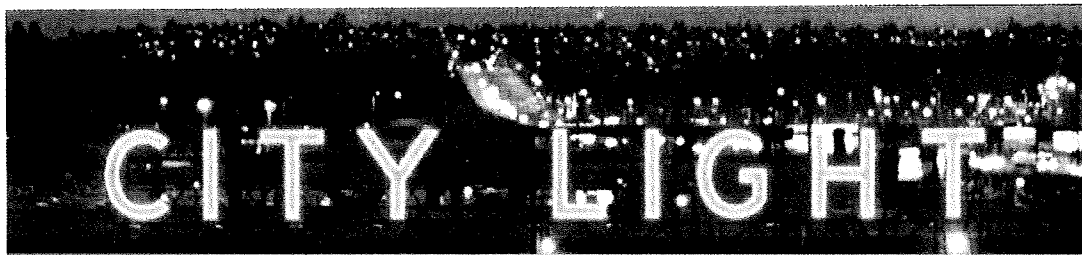
\* 1. Are you a Seattle City Light customer?

- Yes
- No
- Don't Know



2. Please identify yourself as one of the following for this survey...

- Seattle City Light residential customer
- Seattle City Light business customer
- Don't know
- None of the above



3. On average, how much is your electric bill?

- Less than \$50, every two months
- Between \$50 and \$150, every two months
- More than \$150, every two months
- Don't know/not applicable



Strategic Plan Update 2017-2022 -- Customer Survey

\* 4. On average, how much is your electric bill?

- Less than \$200
- Between \$201 and \$1,000
- Between \$1,001 and \$5,000
- More than \$5,000
- Don't know/not applicable



Strategic Plan Update 2017-2022 -- Customer Survey

5. Are you aware that Seattle City Light has a Strategic Plan to guide City Light's ability to meet customer's current and future electric needs?

- Yes
- No
- Don't know



Strategic Plan Update 2017-2022 -- Customer Survey

\* 6. How would you rate Seattle City Light's performance on the following Strategic Plan priorities, "1" is very poor and "5" is very good?

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
Assets and infrastructure – The buildings, equipment and infrastructure Seattle City Light needs to generate and distribute electricity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer service – The utility's track record of providing quality customer service and outage response.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workforce – The knowledge, experience and commitment of Seattle City Light staff – from line workers to management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental commitment – Seattle City Light's programs and practices that support conservation and environmental stewardship.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community support – The utility's support for education programs, community events and utility discount and emergency assistance programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Price – The electrical rate you pay is reasonable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



7. How have you heard about Seattle City Light's effort to update its six-year Strategic Plan? Please select one.

- Attended a meeting
- Read something about it/heard about it
- Participated in a previous survey or focus group
- Don't know
- Something else (please specify)



Strategic Plan Update 2017-2022 -- Customer Survey

\* 8. The purpose of the Seattle City Light Strategic Plan is to best position the utility to meet and exceed customers' expectations in producing and delivering environmentally responsible, safe, affordable and reliable power. In order of importance, please prioritize and rank the following objectives where "1" is the most important and "9" is the least important.

- 1  Improving the electric system's reliability
- 2  Making it easier to manage your utility account online
- 3  Making rates more predictable
- 4  Improving employee performance
- 5  Minimizing rate increases
- 6  Improving safety practices
- 7  Increasing efficiencies and improving the utility's performance
- 8  Expanding conservation results
- 9  Adding even more power resources from new renewable energy sources



Strategic Plan Update 2017-2022 -- Customer Survey

9. \*In the Seattle City Light Strategic Plan Update for 2017-2022, the utility plans to add three new initiatives that will prepare the utility for changes facing the electric sector from load growth slowing and less revenue to more opportunities and customer expectations to deploy new technologies. On a scale of 1-5, where "1" is not important at all and "5" is very important, how would you rate the utility's importance?

Not important at all (1)      Somewhat important (2)      Neutral (3)      Important (4)      Very important (5)

Utility of the Future - City Light must adapt to become a more agile utility and be able to address the impacts of the fast pace of technological change from transportation electrification, increased customer solar power and battery storage.

Transportation Electrification - City Light has the opportunity to replace fossil fuels with clean electric power, especially in public transport. Building on a study done in 2015, the utility needs to consider how to invest in this effort.

Climate Adaptation - In the last plan, City Light studied how climate change would impact the utility and its customers. Now the utility must implement the plan developed to prepare for and be less vulnerable to the climate change.



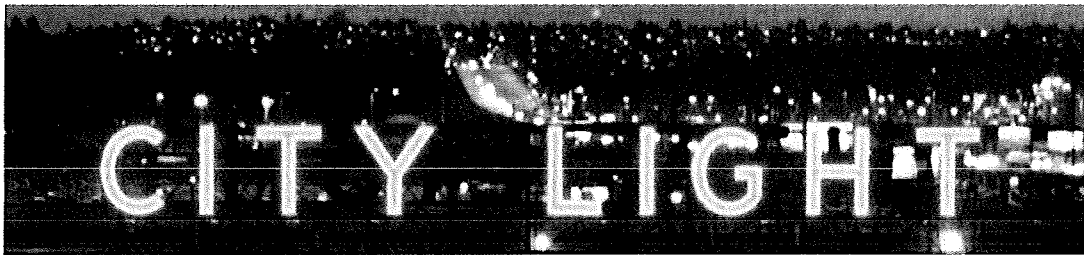
10. The 2015-2020 Strategic Plan proposed an annual rate increase that averages 4.4 percent through 2018. The 2017-2022 Strategic Plan Update proposes an annual rate increase of 4.3 percent through 2022. Does this seem reasonable (an average residential bill change of \$3.12 a month or \$37.44 a year)?

- Yes
- No
- Don't know
- Other (please specify)



**Strategic Plan Update 2017-2022 -- Customer Survey**

11. Do you have any additional comments or suggestions about the Seattle City Light Strategic Plan Update?



**Strategic Plan Update 2017-2022 -- Customer Survey**



The following questions are for demographic purposes and help us better reach out to a representative mix of City Light customers.

\* 12. Zipcode

\* 13. What is your age?

- UNDER 18
- 18 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 and older
- Prefer not to respond



Strategic Plan Update 2017-2022 -- Customer Survey

\* 14. Race/Ethnicity (Select all that apply.)

- Asian
- Black
- Latino or Hispanic
- White
- Prefer not to respond
- Other (please specify)



**Strategic Plan Update 2017-2022 -- Customer Survey**

Thank you for sharing your opinions and experiences.

For more information about our Strategic Plan Update, please visit <http://www.seattle.gov/light/stratplan/>.



Strategic Plan Update 2017-2022 -- Employee Survey

Seattle City Light is updating its Strategic Plan and we want to hear from you, our employees.

This survey should take five minutes to complete and responses are anonymous.



Strategic Plan Update 2017-2022 -- Employee Survey

\* 1. How long have you worked for City Light?

- Less than 5 years
- 5-10 years
- 10-15 years
- Over 15 years

2. What type of role do you have with City Light?

- Staff
- Management

Other (please specify)

3. Where do you work at City Light?

- Boundary Dam
- Cedar Falls
- North Service Center
- Seattle Municipal Tower
- Seattle 901 Building
- Skagit
- South Service Center
- Other (please specify)



Strategic Plan Update 2017-2022 -- Employee Survey

\* 4. Have you been involved in or heard about Seattle City Light's Strategic Plan?

- Yes
- No
- Don't know/not sure



Strategic Plan Update 2017-2022 -- Employee Survey

\* 5. How have you been informed about or involved in the Strategic Plan (select all that apply)?

- Read the Strategic Plan
- Discussed the plan in my work unit
- Responsible for implementing or tracking a strategic plan initiative
- Contributed technical or other information that helped create the plan
- Participated in meetings regarding the plan
- Don't know

Other (please specify)



Strategic Plan Update 2017-2022 -- Employee Survey

6. How would you rate Seattle City Light's performance on the following Strategic Plan priorities, "1" is very poor and "5" is very good?

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
<b>Assets and infrastructure</b> – The buildings, equipment and infrastructure Seattle City Light needs to generate and distribute electricity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Customer service</b> – The utility's track record of providing quality customer service and outage response.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Workforce</b> – The knowledge, experience and commitment of Seattle City Light staff – from line workers to management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Environmental commitment</b> – Seattle City Light's programs and practices that support conservation and environmental stewardship.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Community support</b> – The utility's support for education programs, community events and utility discount and emergency assistance programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Price</b> – The electrical rate you pay is reasonable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



One of the four Strategic Plan key objectives was to Increase Workforce Performance and Safety.

The Workforce initiative is intended to manage the upcoming retirement wave and attract and retain a highly skilled and diverse workforce. How would you rank City Light's performance on the following efforts, "1" is very poor and "5" is very good?

7. Employee Development

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
Training opportunities are available and allow employees to grow in their current role or compete for promotional opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical training opportunities to help me learn and grow technically in my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuition reimbursement to support employees' academic growth and development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online learning opportunities that provide training in areas that assist me in performing my job and are available that work with my schedule (e.g. Cornerstone, Lynda.com)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Leadership Development

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
Operational Excellence/leadership development to provide all employees in leadership roles with the tools necessary to be successful in their jobs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career development to explore new job opportunities through program participation, coaching or mentorship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Workforce Development

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
Apprenticeship and pre-apprenticeship opportunities in the skilled trades are supported	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internships programs are funded and supported through effective outreach and recruitment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Strategic Plan Update 2017-2022 -- Employee Survey

One of the four Strategic Plan key objectives was to Increase Workforce Performance and Safety.

The Safety initiative is meant to continuously improve on its employee safety record and ensure each employee returns home safe at the end of their shift. How would you rank City Light's performance on the following efforts, "1" is very poor and "5" is very good?



10. Employee Safety

	Very Poor (1)	Poor (2)	Neutral (3)	Good (4)	Very Good (5)	Don't Know
Seattle City Light Safety Standown – improved safety awareness for all employees utility-wide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grassroots Safety Team – employee driven safety actively supported by the utility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety Culture Survey – utility-wide safety culture survey and half-day workshops to improve safety culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety Camps – held semi-annually to provide safety and ensure employees maintain required certifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Strategic Plan Update 2017-2022 -- Employee Survey

11. Has the Strategic Plan changed or impacted how you do your work?

- Yes
- No
- Don't know/not sure



Strategic Plan Update 2017-2022 -- Employee Survey

12. Briefly describe how the Strategic Plan has changed or impacted your work.



Strategic Plan Update 2017-2022 -- Employee Survey

13. Do you have any additional comments or suggestions about the Seattle City Light Strategic Plan Update?



## Strategic Plan Update 2017-2022 -- Employee Survey

Thank you for sharing your opinions and experiences.

For more information about our Strategic Plan Update, please visit [www.seattle.gov/light/stratplan](http://www.seattle.gov/light/stratplan).

**Seattle City Light Review Panel**

c/o P. Leyritz, Seattle City Light  
P.O. Box 32023 Seattle, WA98124-4023  
[CLRPquestions@seattle.gov](mailto:CLRPquestions@seattle.gov)

May 23, 2016

Honorable Edward B. Murray, Mayor  
The City of Seattle  
600 Fourth Avenue  
P.O. Box 94749  
Seattle, WA 98124-4749

**RE: Seattle City Light Strategic Plan Update for 2017-2022**

Dear Mayor Murray:

The Seattle City Light Review Panel is pleased to convey our unanimous support for the Seattle City Light Strategic Plan Update for 2017-2022. We encourage the City to adopt this Plan Update as submitted by the Utility.

The Plan Update calls out some important changes to the way City Light is doing business that will require close attention over the next several years. Most significantly, City Light has experienced a decline in retail demand for power in each of the last four years, and the forecast rate of growth in demand for the next six years remains low. While not yet of the magnitude facing many utilities nationally, this decline in actual demand and weak rate of growth in forecast demand is a relatively new phenomenon for City Light. This means we need to start thinking differently about the future of the Utility: the foundation for that shift in thinking is set forth in this Plan Update.

**Progress in Meeting Plan Commitments**

Since approval of the Utility's initial six-year strategic plan in 2012, we have tracked City Light's progress in addressing the Plan's four key objectives:

- Improving the customer experience
- Increasing workforce performance and safety
- Enhancing organizational performance, and
- Continuing conservation and environmental stewardship

These four key objectives are still relevant and we support City's Light's continued focus on these areas. City Light has made good progress in meeting these objectives, as detailed in over 30 strategic initiatives. Despite significant and unanticipated changes to some capital projects and in the underlying load forecast, City Light has adhered to its rate path commitments and

delivered on its commitment of implementing \$18M in ongoing efficiencies by 2015. Of particular note is the impressive progress made in increasing enrollment in the Utility Discount Program. We are also pleased to see good progress in reducing the rate of employee injuries.

### **Looking Forward: Utility of the Future**

The new theme in the 2017-22 Strategic Plan Update is "the Utility of the Future." This theme encompasses four factors that will have major implications for City Light over the next several years: (1) declining demand for power; (2) shifting customer expectations associated with technology changes; (3) an aging City Light workforce; and (4) an evolving landscape for renewable power.

Actual retail power sales, by volume, have *fallen every year since 2011*: the Utility sold 3% less retail power in 2015 than it did in 2011. The forecast load growth rate is now about the same as it was in 2014 -- 0.36% average annual growth is forecast for 2017-2022. But this forecast growth rate is half what was forecast as recently as 2012. The Utility projects it will not again sell the same volume of power it did in 2011 until sometime *after 2022*. The graph on Attachment A illustrates this situation.

What does declining retail demand and slowing load growth mean for the Utility and its ratepayers? The Utility derives revenue from two major sources: retail sales (to local residents and businesses); and sales of excess power in the wholesale market. Activity in both of these areas is putting upward pressure on electricity rates. The Utility is experiencing declining retail demand—a result of increased conservation, warmer winter weather, increasing share of multi-family housing, and deployment of more energy efficient infrastructure and equipment. This means fixed costs are spread over a lower volume of electricity sold. Additionally, prices in the wholesale market for power are lower, largely due to competition from low natural gas prices, which has resulted in lower net wholesale revenue.

This situation will become intensified if City Light continues to experience declines in demand. This will need careful tracking, as will re-examination in coming years of the Utility's financial and rate policies, since current policies and rates are founded, in part, on the premise of continual growth in the demand for electricity.

Given the uncertainty as to future retail demand and its core importance to the Utility's fiscal health, we are very pleased that City Light has committed to undertake a thorough review of the forecast methodology in the next two years, including but not limited to a new study of consumer electrical-use patterns.

Another important element of the Utility of the Future is shifting customer expectations and technology. Customers are more than a passive revenue source. They want to participate more in tracking and controlling their electricity use, receiving timely information of power outages

and restoration, deploying more efficient home appliances, and even choosing the source of their electricity (roof-top or community solar arrays, for example). This demands a new level of communication and customer engagement supported by investment in technologies that are rapidly changing.

As was first noted back in the initial 2012 City Light Strategic Plan, fifty percent of the Utility's workforce is eligible for retirement within 5 years. That statistic remains essentially unchanged four years later (currently, 50.9% of employees are eligible to retire within five years). We appreciate City Light's pro-active stance towards this issue, as seen in the Utility's commitment to employee training and increasing the number of apprenticeships available. It is important that the Utility remain focused on addressing this major workforce transition.

The Utility of the Future will also face evolving renewable energy technologies. The price of solar power has been dramatically reduced in the last few years. Battery storage technologies are improving and costs are also coming down. Wind power prices are also falling as technology improves. At present, solar power constitutes only about 0.1% of City Light's total load (including all roof-top arrays) but this could change as the number of solar installations in the service area continues to increase. In other states, solar has already grown to a meaningful share of total power supply, and this requires watching in our region.

As a final observation, the future will call for a significant focus on cyber-security and protection of electrical system facilities. Threats that could take down our electrical grid, or dams, or result in customer privacy breaches are part of an unfortunate "new normal" that utilities must proactively address. Our economy, and our quality of life, relies on safe, reliable electricity.

#### **Rate Path for 2017-2022**

City Light is committing to a 2017-2022 rate path yielding an average annual rate revenue increase of 4.3% over each of the next six years. This is a slight reduction in the rate path from the 2015-2020 plan (4.4% average annual rate increases) and the original Strategic Plan for 2013-2018 (4.7% average annual rate increases).

Maintaining rate path predictability is one of the most important benefits of the Strategic Plan. This has been affirmed in outreach meetings. That said, we remain concerned about the impact of ongoing annual rate revenue requirement increases well in excess of the rate of inflation. And, we note that the rate revenue paths as experienced are in fact higher than the six-year averages, which are somewhat "front-loaded." The actual rate revenue requirement path since the Strategic Plan was instituted, and as projected for the next two years, is shown below:

	2013	2014	2015	2016	2017 (Proposed)	2018 (Proposed)
Rate revenue increase over previous year	4.4%	5.6%	4.2%	4.9%	5.6%	5.6%

The annual average of these rate revenue increases will be just over 5% per year.

Related to our concern about rate revenue growth, it is also important to look at customers' bills as distinct from rates, especially since overall customer usage is decreasing. Please see the Metrics section below for the Panel's recommendation on developing metrics to measure this impact.

The major driver of these rate increases is debt service from the Utility's large capital investment program. In addition to maintaining and upgrading its transmission and distribution facilities, City Light must maintain the hydropower facilities that have been producing some of the lowest cost power in the nation for decades. Maintaining all these facilities is expensive--and not optional. City Light has also invested in critical distribution infrastructure with the Denny Substation, new automated distribution technology to increase system reliability, and new automated meters to increase operational efficiency and provide customers' valuable information about their energy use. We note that many of these large investments have been made and that the future capital plan is not quite as large. But, City Light must continue to manage its capital improvement program and maintain vigilance and skill in managing its many large capital projects in order to oversee the growth in rate revenue requirements.

#### **Targeted Efficiencies**

In the 2012 Strategic Plan, the Utility committed to securing \$18 million in *ongoing* (rather than one-time) efficiencies by 2015. There were a number of challenges to reaching that goal, but the Utility persevered and was ultimately successful. The original efficiency target assumed substantial savings from collective bargaining that did not materialize. The resulting gap was filled by a variety of efforts: of particular note was refinancing and restructuring of debt to provide ongoing capital financing savings. For this Plan Update, City Light is committing to securing \$28 million in ongoing efficiencies by 2018. We strongly endorse the Utility's work in this regard.

#### **Continuing and New Strategic Initiatives**

The Strategic Plan is about delivering improvements in the Plan's four key objectives. As a Panel, we will continue to track the delivery of the dozens of specific improvements outlined in

the Plan's 30-plus strategic initiatives. These improvements are an important part of the rationale for supporting the proposed rate revenue path.

There are three new initiatives included in this Plan Update, which are of nominal cost. We support these three initiatives as they will directly benefit customers for minimal cost:

- **Utility of the Future** – supporting targeted strategic thinking around the issues outlined above in our letter.
- **Transportation Electrification** – expanding electrification beyond personal vehicles is an appealing idea to the extent it can both result in direct benefit for ratepayers, as well as improved air quality, particularly through increasing deployment of electrical buses.
- **Climate Adaptation Plan** – having developed the plan over the last three years, the Utility will now move into implementation.

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

We support the breadth and depth of the City's commitment to the Race and Social Justice initiative. City Light is committed to this initiative in its every day operations and in the execution of the initiatives in the Plan Update. The Panel has requested that City Light staff keep the Panel informed about how this initiative translates to changes in City Light's operations and management practices.

#### **Metrics**

Moving beyond the specified operational improvements and capital project deliverables identified in the various initiatives, we support the addition in this Plan Update of a set of targeted metrics focused on outcomes of the Utility's work. This is a positive step and creates a new dimension of accountability for the Utility.

One additional metric that we encourage the Utility to track is the change in typical customer bills over time. The rate revenue path is not the same as the impact on anyone's utility bill: the bill is affected not only by rates, but also by usage. Usage has generally been decreasing per household and per square foot of commercial space. The question underlying the metric is "How much conservation effort is needed by a customer to keep their electric bills at around the same level, or growing with inflation, year to year?" While there is no "average customer," we think it is important to assess and communicate with customers as we enter into a future of slowing load growth for the Utility.

#### **Conclusion**

The City Light Rate Panel was created in 2010, and a majority of our original nine volunteer members still serve on the Panel. We remain strongly supportive of the purpose behind



Mayor Murray  
May 23, 2016  
Page 6 of 7

creating this joint Mayor-Council appointed panel: to provide advice and recommendations from the perspective of key customer groups on City Light's rates and Strategic Plan. This process was instituted to expand engagement of City leaders around the strategic business operations of City Light – an over \$1 billion a year operation and the largest single City department. While some of us now in our second or third terms will be stepping down after the delivery of this Strategic Plan Update, we applaud the Mayor and Council for your continuing support of the process of which we are a part. We encourage your continued support for what we see as a very positive evolution in oversight of the Utility.

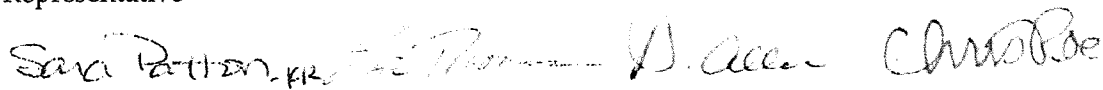
We endorse the Strategic Plan Update for 2017-2022 as proposed. We encourage the Mayor and Council to engage with the Utility over the next two years in examining what "the Utility of the Future" means for City Light and its ratepayers, and we thank you for the opportunity to share our thoughts and recommendations with you.

Sincerely,

**Seattle City Light Review Panel**



<b>Julia M. Ryan, Chair</b>	<b>Tom Lienesch, Vice-Chair</b>
<i>Panel Position 2:</i>	<i>Panel Position 1:</i>
Financial Analyst Representative	Economist



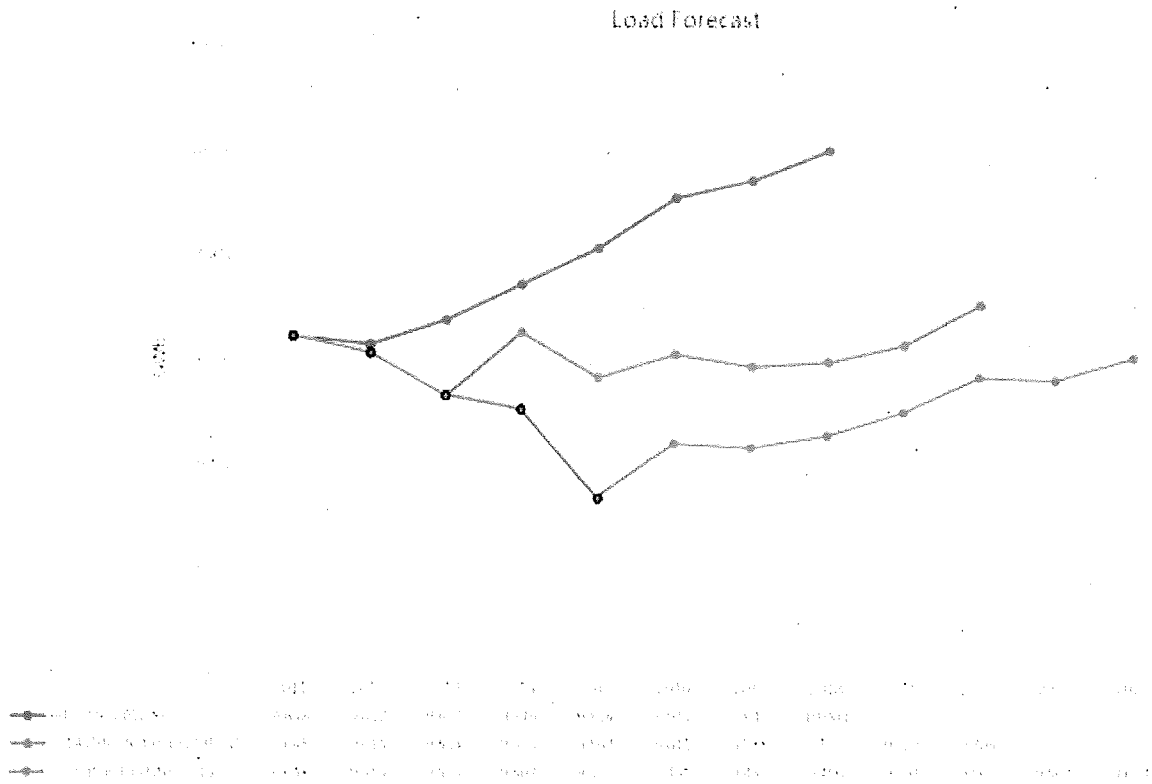
<b>Sara Patton</b>	<b>Eric Thomas</b>	<b>David Allen</b>	<b>Chris Roe</b>
<i>Panel Position 3:</i>	<i>Panel Position 4:</i>	<i>Panel Position 5:</i>	<i>Panel Position 6:</i>
Non-Profit Energy Efficiency Advocate	Residential Customer	Commercial Customer	Industrial Customer



<b>Sue Selman</b>	<b>Eugene Wasserman</b>	<b>Gail Labanara</b>
<i>Panel Position 7:</i>	<i>Panel Position 8:</i>	<i>Panel Position 9</i>
Low-Income Communities Advocate	At-Large Customer	Suburban Franchise Representative

**Attachment A: City Light Load Forecasts and Actual Power Demand, 2011-2022**  
cc: City Councilmembers; Larry Weis, General Manager, City Light

**Attachment A: City Light Load Forecasts and Actual Power Demand, 2011-2022**



Source: City Light

JUNE 30, 2016

**TO**  
City Council

**FROM**  
Paula Laschober, City Light Interim CFO

**SUBJECT**  
Response to SLI 4-1-A-2

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## **SUMMARY**

The 2015 Statement of Legislative Intent, 4-1-A-2, requests that Seattle City Light (SCL) "work with the Council's Central Staff, the City Budget Office, and the City Light Review Panel to review its financial policies and to recommend any changes necessary to ensure that they provide adequate protection from the risks associated with the utility's volatile wholesale and retail revenue streams. The Council further requests that City Light develop any necessary legislation for the Council to consider."

Earlier this year, SCL and the Seattle City Light Review Panel reviewed City Light's financial policies to ensure they provide adequate risk mitigation for uncertain wholesale and retail revenue streams. City Light and the Review Panel concluded that:

- Wholesale revenue risk is being managed effectively by the Rate Stabilization Account (RSA) and current policies for its operation.
- Retail revenue risk is still an emerging issue, and options for managing this risk should be analyzed further. Accordingly, City Light proposes incorporating a study of approaches for managing retail revenue uncertainty in the next strategic plan.

## **BACKGROUND**

City Light's current financial policies were adopted in March 2010 as part of Resolution 31187. Resolution 31187 details two main policies, a rate setting guideline which states that retail rates should be set to achieve a minimum of 1.8 times debt service coverage, and a debt policy which states that 40% of capital investments (CIP) should be funded with operating cash, on average over a 6-year period. Maintenance of a Rate Stabilization Account (RSA) is the third element of City Light's overall approach to managing its finances, and in particular the mechanism used to handle year-to-year fluctuations in net wholesale revenue.

City Light has utilized a debt service coverage policy since 1977, excepting a few years following the 2001 west coast energy crisis. From 1977 to 1989 and from 2005 to 2009, the policy called for 2.0x

coverage. From 1989-2001 and since 2010, the policy has been 1.8x coverage. The 2010 change in policy reducing coverage from 2.0x to 1.8x was partially a response to the 2009 recession, and was implemented along with a substantial rate increase (13.8% average). The reduction in coverage requirement did not impact City Light's credit ratings only because it occurred concurrently with the creation of the RSA, which greatly reduced revenue volatility, thereby improving financial stability and greater certainty of achieving the 1.8x coverage target.

The debt, or capital financing, policy requiring 40% of capital investments to be funded with current operating revenue was also put into place in 2010. From 1977 to 1989, financial policy required 50% of general capital investments to be financed with current revenue, though the policy allowed the financing of major new capital projects to be determined by the Mayor and City Council on a case-by-case basis. This policy behaves similarly to the debt coverage policy in that it determines how much debt will be issued to support capital expenditures. City Light's current capital program has been unusually large in recent years, due primarily to a handful of once-in-a-lifetime major projects such as the Alaskan Way Viaduct and Denny Substation, and so this policy has not been treated as binding for rate-setting purposes.

The Council SLI specifically requested a review of financial policies as they pertain to managing risks associated with the utility's volatile wholesale and retail revenue streams. A simple way to improve financial stability in the face of volatile revenue streams would be to make the debt coverage policy or capital financing (debt) policy more stringent. For example, Council could increase the debt coverage policy back to 2.0x, or increase the percentage of capital financed by cash to 50% or greater. The effect of such a policy change would be greater cash financing of capital expenditures, reduced debt, and a significant near-term rate impact. However, this type of policy change would not buffer revenue risk, it would merely provide City Light with more cash to help absorb the risk. Therefore, this SLI response focuses primarily on the third existing policy, the RSA, and other policy options that can specifically help to hedge or offset revenue risk.

The RSA is a reserve of funds that protects against volatility in the wholesale energy market. The basic rules and parameters for operation of the RSA were established by Ordinance 123260 in March 2010. The RSA reserve provides valuable cash liquidity, which is a strong credit positive in the eyes of credit rating agencies. It was initially funded primarily with operating surpluses but the balance now goes up or down depending on how close actual net wholesale revenue (NWR) is to the year's NWR forecast. Furthermore, if the balance grows either too large (\$125 million) or too small (\$90 million or lower), automatic rebates or surcharges are triggered to keep the RSA within an optimal range, as described in the table below.

<b>RSA Balance</b>	<b>Action</b>
Less than or equal to \$90M but greater than \$80M	Automatic 1.5% surcharge
Less than or equal to \$80M but greater than \$70M	Automatic 3.0% surcharge
Less than or equal to \$70M but greater than \$50M	Automatic 4.5% surcharge
Less than or equal to \$50M	City Council initiates a rate review within 45 days to determine actions to replenish RSA to \$100 million within 12 months
Greater than \$125M	City Council initiates a rate review within 45 days to determine actions to reduce the RSA to \$125 million within 12 months

Over the course of its operation since 2011, the RSA mechanism has proven to be very effective at neutralizing risk to NWR, which varies significantly due to wholesale market volatility and uncertain hydro runoff. A 2014 strategic initiative that changed the methodology used to forecast NWR, separating it from historic actuals and instead aligning it with a more conservative forecast, turned out to be a fortuitous move in that it helped to cushion the impacts of an unexpectedly weak wholesale power market. Despite this reduction in the forecast, net wholesale revenues have come in below the forecast in recent years, and consequently, the RSA balance has declined. The balance was at \$125 million in January of 2015 but has dipped to approximately \$90 million in Q2 of 2016, and will likely trigger a surcharge at the end of June 2016. The automatic triggers ensure that the RSA balance will remain adequate to provide City Light with sufficient liquidity, and City Light expects out-year performance of NWR to align more closely with the annual forecasts in place at this time.

The RSA is also a significant part of City Light's cash on hand, which is sufficient to fund about 166 days of operating expenses. This is low compared with peers, who typically maintain cash on hand in the 300-500+ days' range. City Light's financial advisors feel it is critical to retain this liquidity to ensure a strong credit rating to support the utility's substantial debt issuance plans.

Retail revenue has historically been considered a stable revenue source, typically fluctuating by only a percentage point or two. However, in recent years, retail revenue has come in lower than expected due to weather, the regional economic climate, and changing customer consumption patterns. In particular, improved energy efficiency seems to be driving per-customer consumption downward at an unexpectedly high rate. In 2015, unseasonably warm weather along with unprecedented levels of customer efficiency caused a 5% retail revenue shortfall, and similar weather impacts are being seen in 2016.

In February of 2016, City Light reviewed financial policies and RSA policy options with the City Light Review Panel. The Panel found the RSA to be effective at neutralizing wholesale revenue risk stemming from highly volatile wholesale market prices and hydro flows, and the \$100 million RSA cash reserve sufficient to prevent financial risk from being passed directly to retail customers. The Panel's prevailing view on retail revenue risk is that it is still an emerging area of risk, which they would like to analyze

further before recommending a mitigation solution. The Panel's recommendations are reflected in the areas for future study detailed below.

As part of the next Strategic Plan, City Light recommends exploring the following approaches for managing retail revenue risk:

### **1. Revenue Decoupling**

There is industry-wide precedent for retail revenue stabilization mechanisms, which are commonly known as "decoupling mechanisms." With decoupling, the amount of retail revenue earned by the utility is "decoupled" from the amount of energy used by customers. Rates are adjusted after the fact to true up to a pre-determined revenue amount. Both Puget Sound Energy and Avista Utilities were recently granted decoupling mechanisms by the Washington Utilities and Transportation Commission.

### **2. Retail Revenue RSA**

Using the RSA to manage retail revenue risk would provide similar benefits to decoupling, but would leverage the cash in the RSA to buffer customer rates from immediate impacts of revenue fluctuations, the same way it does for wholesale revenue. Developing prudent rules for operation would be critical to the stability of a combined retail and wholesale RSA mechanism.

### **3. Rate Design**

Rate design weighted towards variable charges (particularly per-kWh charges) adds uncertainty to retail revenue streams. In particular, City Light's residential rates include a relatively high second block rate. This structure amplifies revenue impacts of load fluctuations (which might be due to weather, efficiency or other reasons). Adjusting the rate structure to emphasize fixed charges to support fixed costs such as distribution/infrastructure and public purpose programs would help to stabilize revenue.

### **4. Revised Load Forecast**

There has long been precedent for using a conservative estimate of hydroelectric generation volumes when budgeting and rate-setting. For example, both Tacoma and Snohomish PUD use a hydro scenario that is lower than normal water when budgeting. Analyzing customer end-use trends could yield better understanding of load drivers and provide a supplemental view to the current econometric load forecast models. Better understanding of customer use patterns could help inform whether recently observed load declines will be a short-term or enduring phenomenon.

### **5. Other Factors Affecting Retail Revenue**

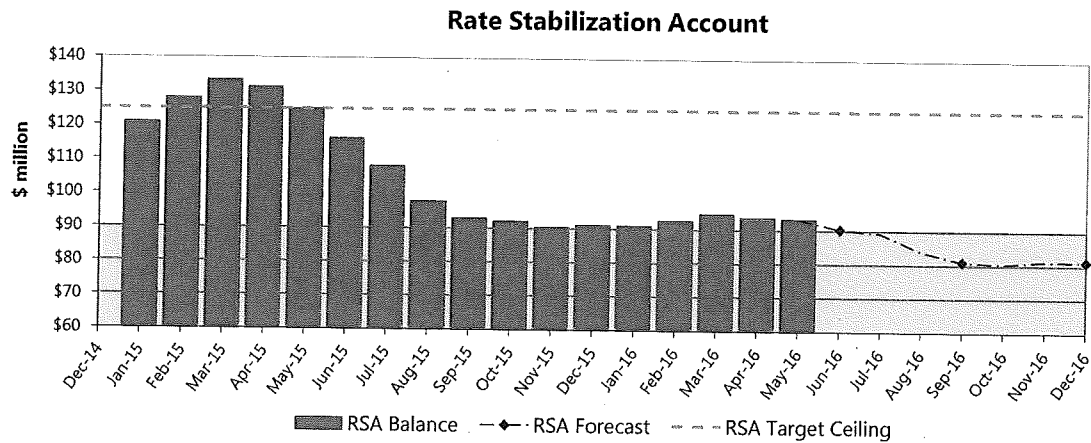
Policy decisions may impact revenue stability. For example, policy decisions around City Light's low-income rate assistance program (e.g., expanding the size of the program, type and size of discount offered) will impact the amount of revenue that must be collected from customers.

Another option to protect against low retail revenue scenarios would be to strengthen the debt service coverage policy to a more conservative ratio than 1.8 times. This would provide more cash for low revenue scenarios, but would increase rates considerably in the short-term.

**RSA History**

The RSA is a large cash reserve established to buffer volatile revenues from surplus wholesale energy sales, also known as net wholesale revenue or NWR. The RSA was implemented on January 1, 2011, and has rules governing its use prescribed by Ordinance 123260, which was adopted in March 2010. Per Ordinance 123260, automatic surcharges are triggered to replenish the RSA should it become depleted.

The chart below shows the historical balance of the RSA since late 2014, with a forecast through the end of 2016. At the beginning of 2015, the RSA balance was \$114 million, and due to a record early hydro runoff, it rose to over \$130 million by March 2015. Since then, the RSA balance has steadily declined, and since late 2015, has been hovering just above the \$90 million surcharge threshold. Hydro forecasts indicate that it is highly likely that the RSA will drop below \$90 million before the end of 2016, which will trigger an automatic 1.5% rate surcharge. This would be the first surcharge to be triggered automatically since the RSA began operation in January of 2011.



In its early years, RSA stability was an issue because wholesale prices were declining rapidly, causing NWR to fall far short of the forecast (which was based on a historical average) year after year. Fortunately, SCL had surplus operating revenues available to deposit into the RSA to bring the balance up again, thus avoiding a surcharge.

As part of the 2014 strategic plan, an initiative was adopted that would address this issue and make the NWR forecast more conservative. Rather than be based on a historical average, the NWR forecast was adjusted to use more recent actual performance. In 2012, the NWR forecast for the year was just over \$100 million. For 2016, the forecast was reduced to \$60 million, and by 2022, it drops to \$40 million per the proposed 2017 to 2022 strategic plan (see table below).

RSA Activity History and Forecast

\$ Million	2011	2012	2013	2014	2015	2016	2017	2018
RSA NWR Budget	\$96.8	\$102.1	\$90.0	\$85.0	\$65.0	\$60.0	\$60.0	\$60.0
NWR Actual/Forecast	\$98.4	\$63.9	\$51.6	\$88.6	\$33.6	\$47.9	\$52.1	\$68.1
NWR Surplus (Shortfall)	-\$1.6	\$38.2	-\$38.4	\$3.6	-\$31.4	-\$12.1	-\$7.9	\$8.1
<b>RSA Starting Balance</b>	\$79.3	\$141.5	\$128.3	\$110.0	\$114.4	\$85.5	\$84.5	\$89.4
RSA Transfers for NWR	\$1.6	-\$38.2	-\$38.4	\$3.6	-\$31.4	-\$12.1	-\$7.9	\$8.1
RSA Surcharge Revenue	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.8	\$11.6	\$7.1
Discretionary Transfers	\$61.4	\$22.0	\$21.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other Transfers*	-\$0.8	\$3.0	-\$0.9	\$0.8	\$2.5	\$1.3	\$1.3	\$1.5
<b>RSA Ending Balance</b>	\$141.5	\$128.3	\$110.0	\$114.4	\$85.5	\$84.5	\$89.4	\$106.1

\*Interest, True-ups

Forecast 5/13/16

In conclusion, City Light feels that the current financial policies serve the utility and its customers well. However, the recent changes outlined above related to NWR and retail revenues require that City Light continue to monitor these emerging issues and develop plans to address them. As part of the next strategic plan, City Light proposes assessing options for strengthening existing policies, as well as exploring potential new risk mitigation strategies, particularly in the area of retail sales.