Seattle City 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
Annual Rate Increase*		**5.6%**	**5.6%**	**5.0%**	**3.6%**	**3.1%**	**2.5%**

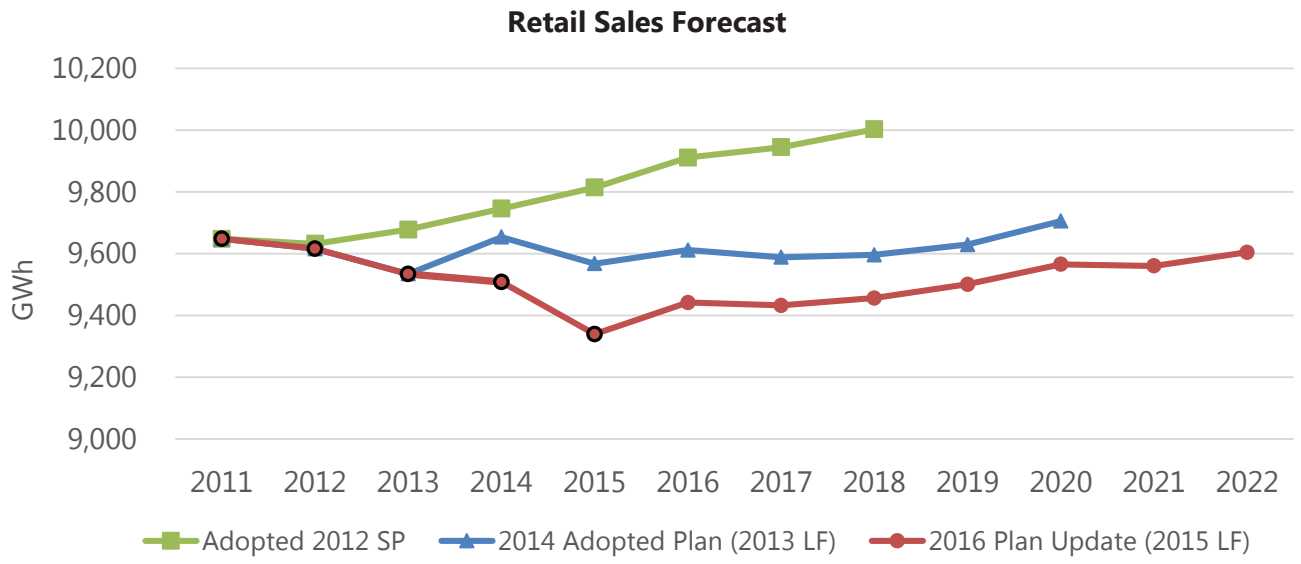
*Rate increases shown here average slightly less than 4.3%. This is due to rounding. The correct average is 4.3%.

2018-2018 Actual Strategic Plan Rates

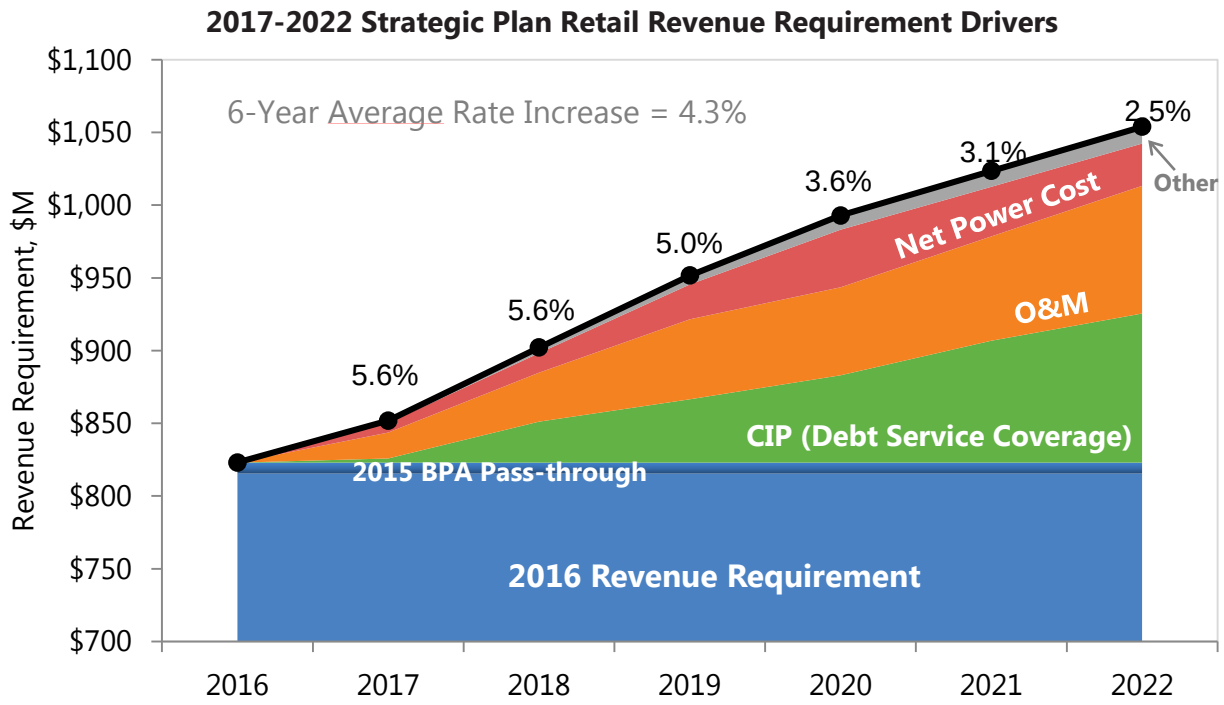
	2013	2014	2015	2016	2017	2018	Average
Base Rate Increases	4.4%	5.6%	4.2%	4.9%	5.6%	5.6%	5.1%
Residential Monthly Bill Change*	$2.42	$3.20	$2.54	$3.08	$3.70	$3.90	$3.14
Residential Annual Bill Change*	$29.07	$38.43	$30.44	$37.00	$44.36	$46.84	$37.69

*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.

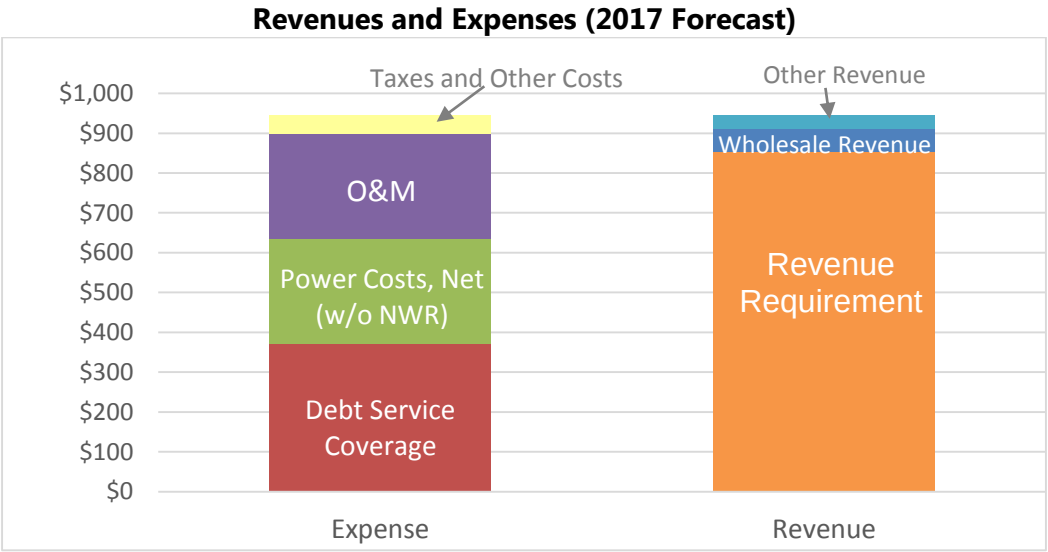
INTRODUCTION

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.



Follwing 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)

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.

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

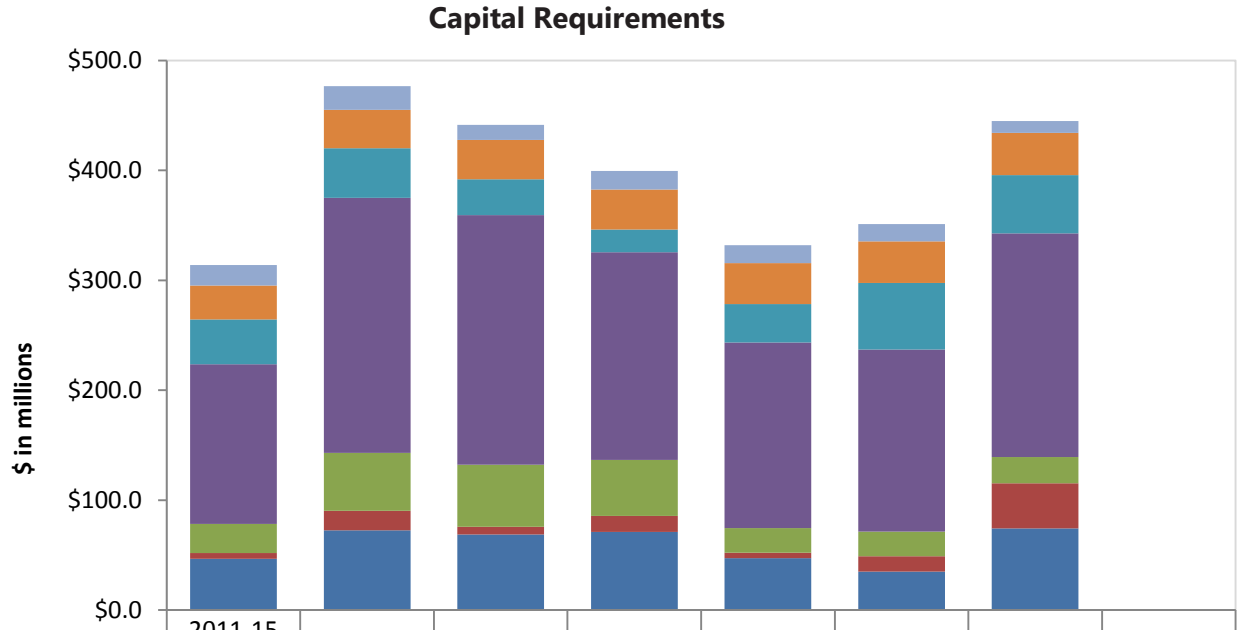
Net capital requirements are not a direct component of the revenue requirement, but determine the amount of debt (bonds) that must be issued. The principal payments on outstanding debt and associated interest expense make up debt service.

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[1] 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

[1] 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.



	2011-15 Avg 2015 Dollars	2016	2017	2018	2019	2020	2021	Total 2016-2021
Other Deferred	18.6	21.4	13.7	16.8	16.3	15.6	10.7	94.5
Conservation	31.0	35.0	35.7	36.4	37.1	37.9	38.6	220.8
General Plant	40.8	45.0	32.6	20.8	35.1	60.7	53.0	247.1
Distribution	145.4	232.1	227.0	188.9	168.7	165.6	203.4	1,185.8
Substation	26.3	52.8	56.5	51.0	22.4	22.4	23.9	229.0
Transmission	5.5	17.6	6.9	14.3	5.2	14.0	41.0	99.0
Generation	46.5	72.6	68.8	71.1	47.1	35.0	74.3	368.8
Total Expenditure	313.9	476.5	441.3	399.3	331.9	351.2	444.9	2,445.0

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
Capital Contributions	(54.7)	(42.7)	(31.3)	(33.5)	(34.8)	(37.7)	(39.6)
Total	**421.8**	**398.5**	**368.1**	**298.4**	**316.4**	**407.2**	**360.8**
Capital Funding							
Operations	129.7	130.9	124.8	79.4	48.8	163.9	141.9
Bond Proceeds	292.1	267.6	243.3	218.9	267.6	243.3	218.9
Total	**421.8**	**398.5**	**368.1**	**298.4**	**316.4**	**407.2**	**360.8**
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

	Bond	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Existing[1]	**Amount**	196.9	193.5	189.2	181.0	175.2	170.1	164.3
2016 (Aug) [2]	100	0.5	3.7	4.2	4.8	5.2	5.7	5.7
2016 (Sept)[3]	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

[1] As of February 2016 [2]Variable Rate Bond Issue [3]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

$, Millions	2016	2017	2018	2019	2020	2021	2022
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
Operating Supplies	15.7	16.9	18.3	19.7	21.3	23.0	24.8
Total	**342.4**	**353.8**	**366.0**	**378.2**	**390.8**	**404.0**	**417.7**
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%

O&M Category	Annual Inflation	Notes
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

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

[1] Items that are budgeted as purchased power budget but recognized as O&M in financials.

[2] 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.

[3] Remove $10 million per year to reflect an assumption of budget under-expenditure.

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

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

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

[3] Reflects City Light's apportioned allotment of production O&M costs, growing with inflation.

[4] Reflects production O&M cost growing with inflation.

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

[6] 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.

[7] Cost inflates per contract terms.

[8] The payment required by the High Ross Treaty is greatly reduced after 2020. The amount of energy received is unchanged.

[9] No new resources are assumed, per 2014 Integrated Resource Plan.

[10] 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

$, Millions	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Net Wholesale Revenue[1]	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 Tolt	3.3	3.1	3.0	2.9	2.8	2.7	2.6
BPA Residential Exchange Credit[2]	5.7	5.7	5.7	4.3	0.0	0.0	0.0
Power Marketing Net[3]	4.4	4.0	3.3	3.3	3.3	3.3	3.3
Transmission Sales	3.4	3.4	3.4	3.4	4.9	4.8	4.5
Total Power Revenues, Net	**81.2**	**80.6**	**79.6**	**73.2**	**65.3**	**65.2**	**54.8**

[1] 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.

[2] In aggregate, revenue in this category will decline in 2020 when the lookback credit for BPA Residential Exchange expires.

[3] Power marketing revenues (net of purchases) are earned from sales of auxiliary services associated with generation and transmission assets, such 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[1]	32.6	34.5	36.1	38.1	42.7	44.1	45.2
Franchise Payments & Other Taxes[2]	6.1	6.5	6.8	7.2	7.5	7.7	8.0
Uncollectable Revenues[3]	6.1	6.4	6.8	7.2	7.5	7.7	7.9
Total Other Cost	44.8	47.3	49.7	52.5	57.7	59.5	61.1

[1] 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.

[2] 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.

[3] 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[1]	3.8	3.9	3.9	3.9	4.4	4.5	5.5
Other Revenue[2]	21.0	21.2	21.4	21.6	21.8	22.0	22.2
Suburban Undergrounding[3]	3.3	4.1	4.1	4.1	4.1	4.1	4.1
Property Sales[4]	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest Income[5]	5.7	5.2	5.1	5.4	6.2	6.6	6.4
RSA Transfers, Net[6]	(1.4)	(1.4)	(1.4)	(1.4)	(1.5)	(1.5)	(1.5)
Total Other Revenue Sources	**33.9**	**34.4**	**34.5**	**35.1**	**36.6**	**37.2**	**38.3**

[1] 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.

[2] 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.

[3] Suburban undergrounding revenue is funds collected from customers in certain suburban cities for the repayment of discretionary undergrounding of parts of their distribution system.

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

[5] 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.

[6] These RSA transfers are the deposit of interest earnings to the RSA.

RETAIL SALES

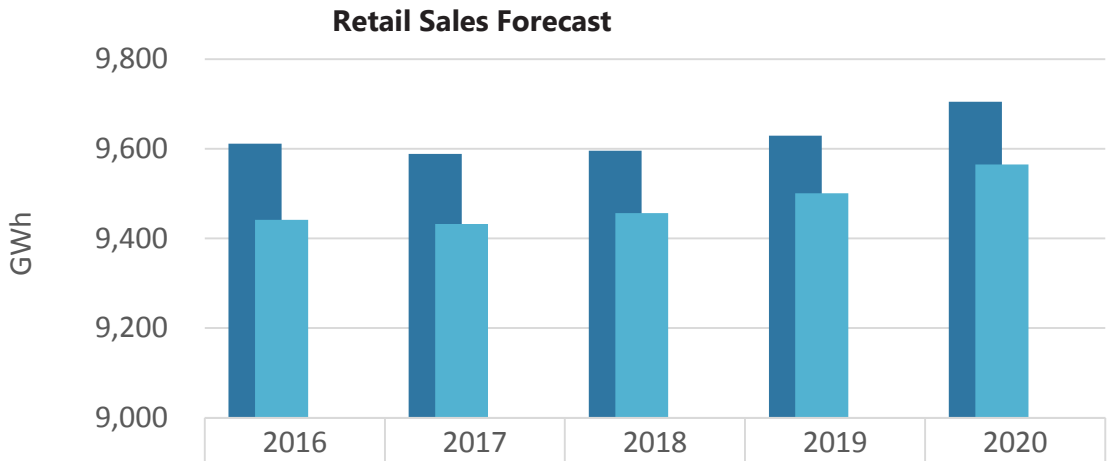
The forecast of retail sales is based on City Light's official 2015 load forecast, which shows very small growth in retail sales over the six-year period, averaging 0.3% annually.

Retail Sales Forecast

	2016	2017	2018	2019	2020	2021	2022
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
Large and High Demand	2,588	2,616	2,632	2,655	2,683	2,691	2,715
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%
Large and High Demand		1.1%	0.6%	0.9%	1.1%	0.3%	0.9%
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.



	2016	2017	2018	2019	2020
Original Forecast	9,611	9,588	9,596	9,629	9,705
New Forecast	9,441	9,432	9,456	9,501	9,565
Percent Difference	-1.8%	-1.6%	-1.5%	-1.3%	-1.4%
Rate Impact of New Forecast		1.7%	-0.2%	-0.1%	0.1%

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 2017	O&M 2018	O&M 2019	O&M 2020	O&M 2021	O&M 2022	Capital* 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	-

$, Millions	O&M 2017	O&M 2018	O&M 2019	O&M 2020	O&M 2021	O&M 2022	Capital* 2017-2021
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	-	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	5.3
2015-2016 Schedule Adjustments							15.8
Subtotal adjustments to baseline	3.3	5.6	8.2	5.3	7.4	8.0	107.8
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	
Subtotal adjustments to initiatives	5.5	7.2	9.5	7.5	7.4	7.0	(18.0)
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)	
Subtotal new savings	(7.9)	(6.7)	(2.4)	(2.0)	(2.4)	(3.1)	(3.7)
Total Strategic Adjustments	**0.8**	**6.1**	**15.2**	**10.9**	**12.4**	**11.9**	**86.1**

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