



# 2019-2024 Strategic Plan Financial Forecast

## EXECUTIVE SUMMARY

This document details the financial assumptions behind the 4.5% average rate path established by the 2019-2024 Strategic Plan.

Average rates are derived by dividing the revenue requirement by retail sales. The primary driver for rates is the growing revenue requirement, which is increasing by a little over \$30M per year on average. However, declining volume of retail sales is also a factor contributing to increased rates.

### RATE INCREASE SUMMARY

	2018*	2019	2020	2021	2022	2023	2024	Avg
Revenue Requirement	888.3	922.7	967.5	990.2	1,019.6	1,051.1	1,089.1	
Annual Increase		3.9%	4.9%	2.3%	3.0%	3.1%	3.6%	3.5%
Retail Sales GWh	9,456	9,279	9,230	9,116	9,034	8,955	8,903	
Annual Change		-1.9%	-0.5%	-1.2%	-0.9%	-0.9%	-0.6%	-1.0%
Average Rate, ¢/kWh	9.40	9.94	10.48	10.86	11.29	11.74	12.23	
<b>Annual Increase</b>		<b>5.8%</b>	<b>5.4%</b>	<b>3.6%</b>	<b>3.9%</b>	<b>4.0%</b>	<b>4.2%</b>	<b>4.5%</b>

\*The 2018 revenue requirement is the 2018 adopted revenue requirement of \$902.1M adjusted downward for the impacts of the 2017 BPA Passthrough, which also reduces the 2018 average rate. 2018 retail sales GWh are the forecasted sales used to set the 2018 adopted rates. The 2018 average rate is based on current 2018 rates and consumption profiles based on the most recent retail sales forecast.

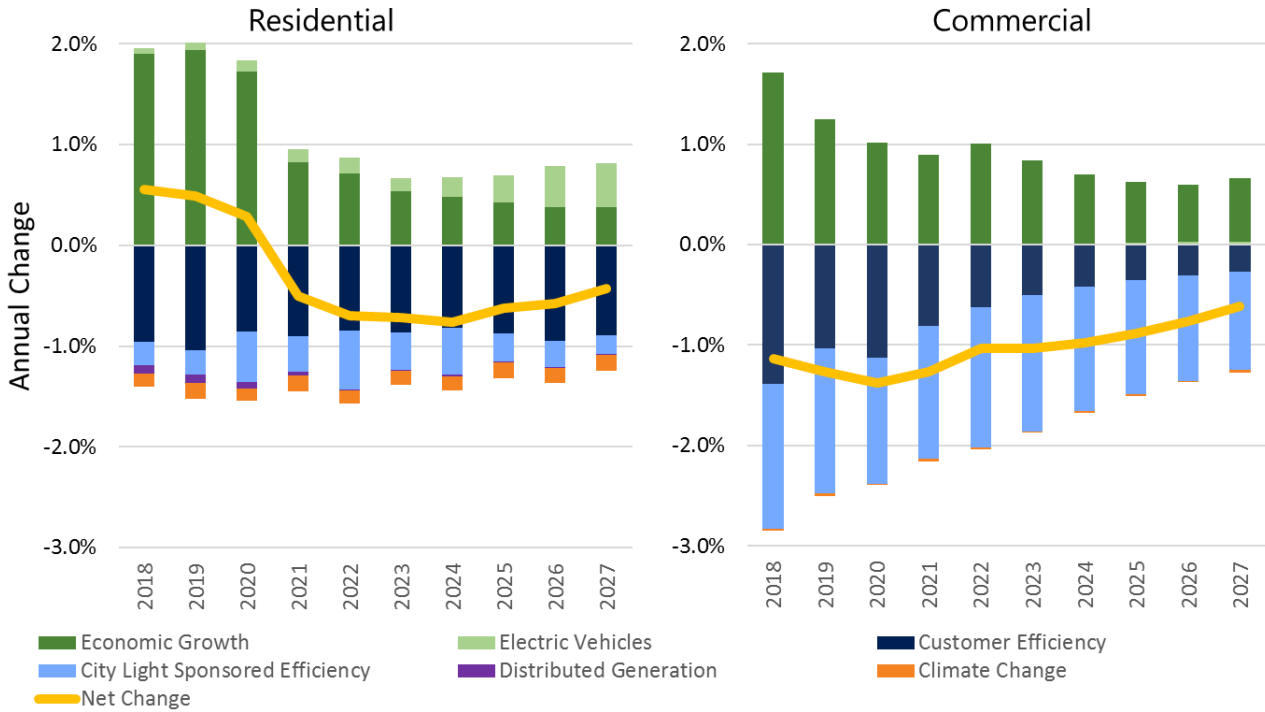
Below is a table of bill impacts assuming each customer receives the annual rate increase noted above and maintains a consistent level of consumption. These impacts are examples only and will change after the retail rate design process is completed. Customers who decrease their consumption through energy efficiency measures will experience smaller bill impacts.

### CUSTOMER BILL IMPACT EXAMPLES

	Monthly Bill	Monthly Increase						
	2018	2019	2020	2021	2022	2023	2024	Avg
Residential-typical	\$65.00	\$3.77	\$3.72	\$2.63	\$2.93	\$3.12	\$3.42	\$3.26
UDP Residential-typical (40%)	\$26.00	\$1.51	\$1.49	\$1.05	\$1.17	\$1.25	\$1.37	\$1.31
Small Commercial-Coffee Shop	\$721	\$42	\$41	\$29	\$33	\$35	\$38	\$36
Medium Commercial-Grocery	\$16,399	\$951	\$938	\$663	\$740	\$787	\$863	\$824
Large Industrial-Metals	\$1,591,969	\$92,279	\$91,031	\$64,382	\$71,831	\$76,407	\$83,745	\$79,946

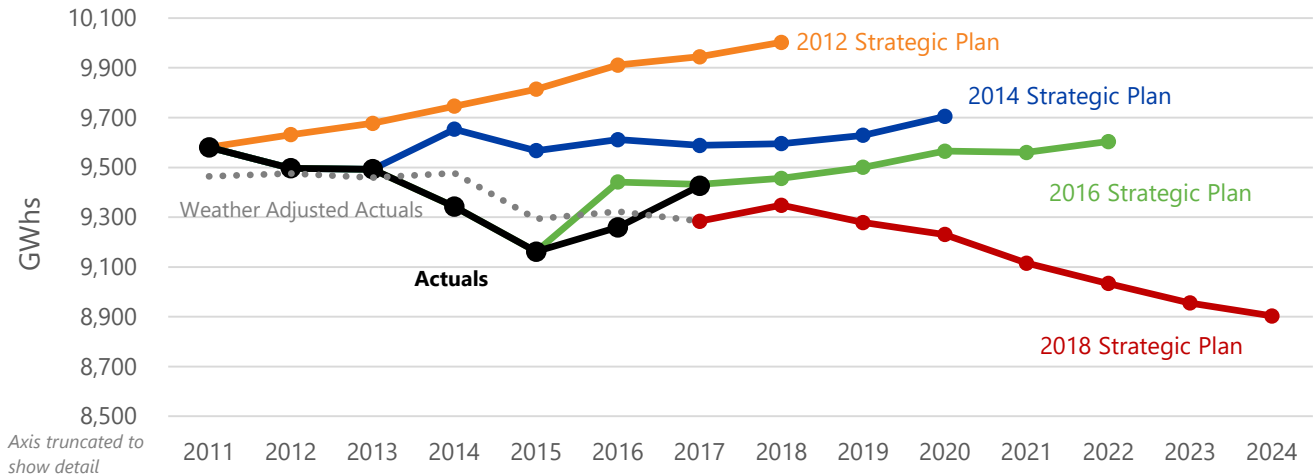
Large Commercial-Education	\$1,787,785	\$103,630	\$102,228	\$72,302	\$80,666	\$85,806	\$94,046	\$89,780
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In 2017, City Light updated its retail sales forecast methodology to better account for energy efficiency and the impacts of weather and other external drivers. Despite strong growth in residential and commercial building stock, retail sales in recent years have been relatively flat on a weather-adjusted basis. Expectations are for building growth to slow and energy efficiency improvements to continue, which will result in future downward-trending retail sales.

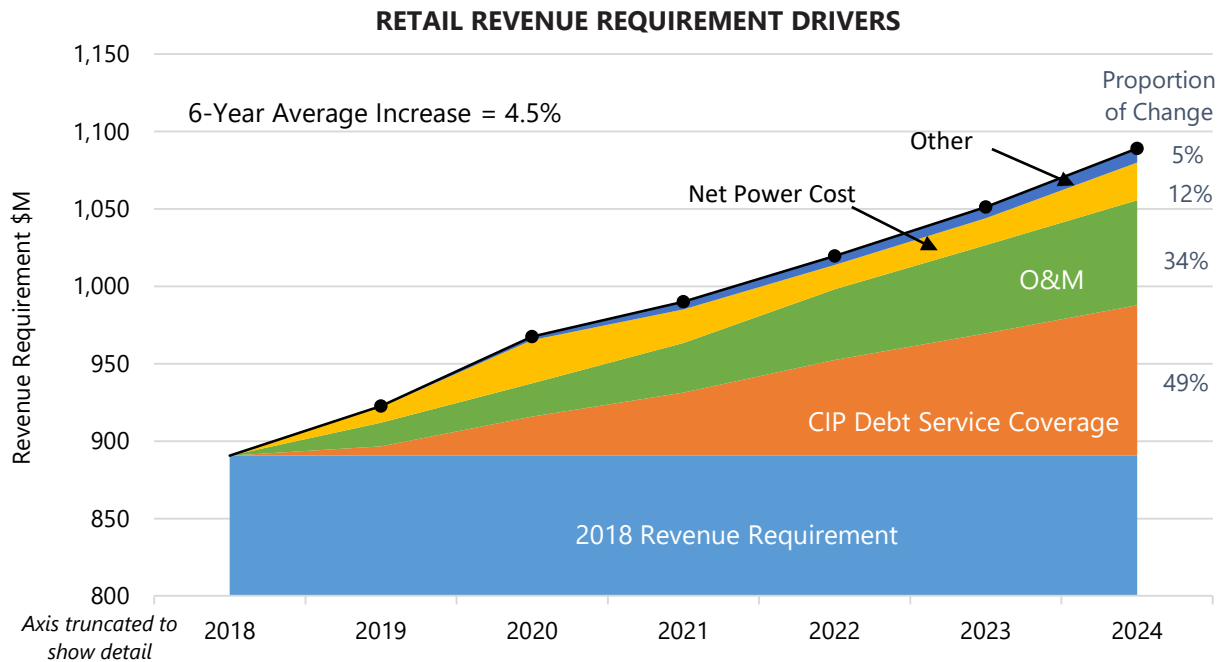


Retail sales are forecasted to decline 0.8% per year on average through 2024. The lower forecasted retail sales compared to the 2016 Strategic Plan adds rate pressure. Decreasing retail sales account for around 2% of the 5.8% 2019 rate increase and about 1% of the 4.5% average 6-year increase.

### RETAIL SALES FORECAST



The following chart and tables summarize the drivers of the change in revenue requirement over 2019-2024.



**RETAIL REVENUE REQUIREMENT SUMMARY**

\$, Millions	2019	2020	2021	2022	2023	2024
<b>Revenue Requirement</b>	922.7	967.5	990.2	1,019.6	1,051.1	1,089.1
Debt Service Coverage						
Debt Service	223.6	234.3	242.9	254.6	264.2	274.3
Additional 0.8x Coverage	178.9	187.4	194.3	203.7	211.4	219.4
Operations & Maintenance (O&M)						
Baseline 2018 O&M	294.2	294.2	294.2	294.2	294.2	294.2
Inflation and REC Growth*	12.1	21.1	31.8	46.6	55.8	66.2
Strategic Plan O&M Adjustments	(9.1)	(12.0)	(11.9)	(13.2)	(11.2)	(10.7)

Net Power Costs						
Power and Wheeling Contracts	280.9	286.6	280.4	264.1	265.6	272.4
Net Wholesale Revenue (NWR)	(55.0)	(50.0)	(50.0)	(40.0)	(40.0)	(40.0)
Power Related Revenues, Net	(18.6)	(11.6)	(11.5)	(11.2)	(10.9)	(10.8)
Other						
Taxes, Payments and Uncollectibles	50.1	52.0	55.4	56.9	58.5	60.6
Miscellaneous Revenue	(34.4)	(34.6)	(35.4)	(36.1)	(36.3)	(36.4)

\* Inflation on existing O&M, and incremental renewable energy credit (REC) investments to meet I-937 requirements.

City Light financial policy calls for retail rates to be set so the utility has sufficient revenue net of expenses to cover annual debt service obligations by 1.8 times. Debt service coverage is defined as 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 operational expenses (O&M), which are growing primarily due to inflation. 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. Miscellaneous revenue comes from a variety of fees and service charges, as well as from interest earnings; only minor growth in these revenues is anticipated.

**INTRODUCTION**

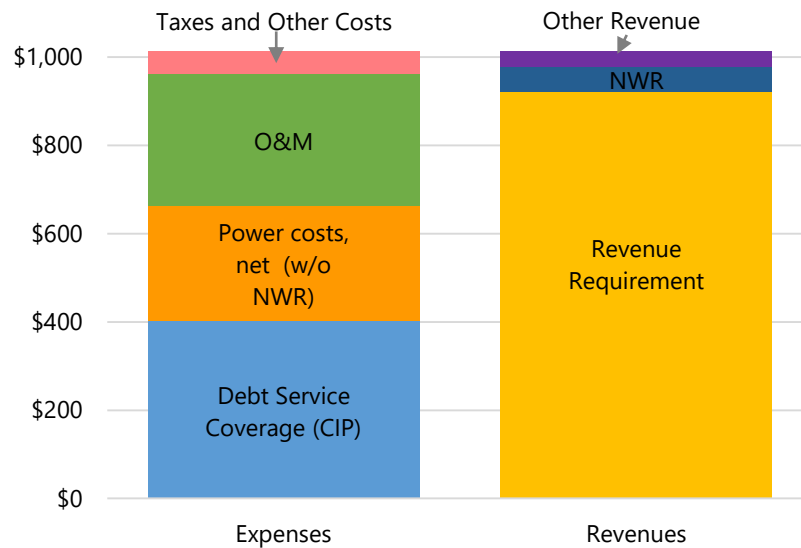
The 2019-2024 Strategic Plan builds on the 2017-2022 Strategic Plan Update (also called the 2016 Strategic Plan) and extends the horizon an additional two years to 2024.

This document details the assumptions that determine the average retail rate path for the years 2019-2024. Average retail rates are not actual billed rates but are the ratio of the revenue requirement to retail sales and represent the average impact to customer bills assuming their consumption is constant.

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

The revenue requirement is the amount of retail revenue that must be collected to balance revenue with expenses given financial policies. The chart below illustrates how the revenue requirement is sized to meet expenses.

**REVENUES AND EXPENSES (2019 FORECAST, \$MILLIONS)**



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

- 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) cash-fund 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 mitigating cost reductions.

#### 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 (e.g., Skagit, Boundary hydro projects); these are part of O&M.

#### Other

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

This document concludes with a discussion of the retail sales 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 capital spending, 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.

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

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 capital expenditures forecast is based on the 2018-2023 CIP Plan that was adopted in 2017 for the 2018 budget process, adjusted for additional funding and reductions identified in the strategic planning process. It differs from the CIP Plan (budget) in that the timing of spending is adjusted to reflect projected cash outflows, and amounts are reduced by a 10% assumed under-expenditure. For 2024, a \$300 million placeholder value was used (before any incremental changes), which will inform the development of the 2024 CIP budget. Capital expenditures also include deferred O&M, which is treated like CIP.

**CAPITAL EXPENDITURES FORECAST**

<b>\$ Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
2018-2023 Adopted CIP	394.6	364.2	319.0	420.4	384.9	271.2	
2024 Placeholder							300.0
CIP Additions and Changes*		-20.7	7.0	-80.9	-57.6	57.6	46.8
Deferred O&M	49.7	49.1	49.9	41.3	48.7	49.8	50.8
<b>Total Capital Expenditures</b>	<b>444.3</b>	<b>392.6</b>	<b>376.0</b>	<b>380.8</b>	<b>376.1</b>	<b>378.6</b>	<b>397.6</b>

\*See Appendix 1 for details

The next table 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). Bond issuances totaling about \$1.6 billion to support 2018-2024 capital requirements will bring total outstanding debt to just above \$3.0 billion by 2023.

<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.

Per financial policy, the six-year CIP should be funded with at least 40% operating cash. Due to the CIP having several unusually large one-time projects, cash funding is expected to be 34% for the 2018-2023 CIP and 37% for 2019-2024 CIP.

**CAPITAL REQUIREMENTS AND FUNDING**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Capital Requirements, net							
CIP	394.6	343.5	326.1	339.5	327.4	328.8	346.8
Deferred O&M	49.7	49.1	49.9	41.3	48.7	49.8	50.8
Capital Contributions	(60.1)	(34.0)	(35.7)	(38.9)	(40.5)	(35.9)	(35.8)
<b>Total</b>	<b>384.3</b>	<b>358.6</b>	<b>340.4</b>	<b>341.9</b>	<b>335.6</b>	<b>342.8</b>	<b>361.8</b>
Capital Funding							
Operations	116.2	110.4	134.1	72.3	127.4	155.3	160.6
Bond Proceeds	268.1	248.2	206.2	269.6	208.1	187.4	201.2
<b>Total</b>	<b>384.3</b>	<b>358.6</b>	<b>340.4</b>	<b>341.9</b>	<b>335.6</b>	<b>342.8</b>	<b>361.8</b>
<b>Total Debt Outstanding</b>	<b>2,506</b>	<b>2,642</b>	<b>2,735</b>	<b>2,888</b>	<b>2,968</b>	<b>3,017</b>	<b>3,086</b>

Capital requirements determine the size of future 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 2020 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>Debt Service</b>						
	<b>Bond Size</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Existing <sup>1</sup>		214.4	206.8	201.5	196.5	190.8	187.3	185.0
2018 (Jul) <sup>2</sup>	275		16.8	16.8	16.8	16.8	16.8	16.8
2019 (Jul) <sup>2</sup>	255			15.6	15.6	15.6	15.6	15.6
2020 (Jul)	289			0.4	14.0	14.0	14.0	14.0
2021 (Aug)	303					17.5	18.1	18.1
2022 (Sep)	220						12.5	13.8
2023 (Sep)	192							11.1
2024 (Sep)	200							
<b>Total</b>		<b>214.4</b>	<b>223.6</b>	<b>234.3</b>	<b>242.9</b>	<b>254.6</b>	<b>264.2</b>	<b>274.3</b>
Debt Service Coverage (1.8x)		386.0	402.5	421.7	437.1	458.3	475.6	493.7

<sup>1</sup> As of March 2018, <sup>2</sup> Fixed Rate Bond Issue (30 year at 4.5%)



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

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 as 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 2019-2024 O&M forecast is the 2018 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 2.8% and represents the increased cost of providing the same level of services as in 2018. The table below lists the inflation assumption for each O&M cost category.

**BUDGET O&M INFLATION BY CATEGORY**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Labor	144.4	148.7	152.4	156.0	159.5	163.1	166.9
Labor Benefits	75.8	78.5	81.2	84.1	87.0	90.0	93.2
Non-Labor	81.2	82.8	84.9	86.9	88.8	90.8	93.0
Transfers to City	69.7	71.8	74.0	76.2	78.5	80.8	83.3
Operating Supplies	12.9	13.5	14.2	14.9	15.7	16.5	17.3
<b>Total Inflated Budget</b>	<b>384.0</b>	<b>395.3</b>	<b>406.7</b>	<b>418.0</b>	<b>429.4</b>	<b>441.3</b>	<b>453.6</b>
Labor Increase		3.0%	2.5%	2.3%	2.2%	2.3%	2.4%
CPI Growth*		2.0%	2.5%	2.3%	2.2%	2.3%	2.4%
Avg Growth All O&M		2.9%	2.9%	2.8%	2.7%	2.8%	2.8%

\*From IHS Economics – Dec 2017 Forecast for the Seattle Metro area

<b>O&amp;M Category</b>	<b>Annual Inflation</b>	<b>Notes</b>
Labor	see above	2019 higher than CPI to account for higher 2017 CPI (3.3%), which is not reflected in 2018 labor rates
Labor Benefits	3.5%	Based on history, assumed to remain above CPI
Non-Labor	CPI	
Transfers to City	3.0%	Assumed to grow at slightly higher than CPI Inflation
Operating Supplies	5.0%	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 2018 O&M budget to make it consistent with financial policies and reflect changes to plans and programs. The following table details these changes. It shows the relationship between the inflated 2018 O&M budget and the O&M baseline forecast; it also shows the cost impact of inflation separated from cost impact of discretionary adjustments (strategic plan adjustments).

**O&M ADJUSTMENTS DETAIL**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Inflated 2018 Budget	384.0	395.3	406.7	418.0	429.4	441.3	453.6
Adjustments							
REC Expense <sup>1</sup>	2.4	5.8	5.8	7.8	13.9	13.9	15.2
Intertie Expense <sup>1</sup>	0.9	0.8	0.8	0.8	0.8	0.8	0.8
PNCA Payment <sup>1</sup>	1.8	1.9	1.9	1.9	1.9	1.9	1.5
Capital Loadings <sup>2</sup>	(85.0)	(87.5)	(90.0)	(92.6)	(95.2)	(98.0)	(100.8)
Under Expenditure <sup>3</sup>	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
O&M Baseline with Inflation	294.2	306.3	315.2	325.9	340.8	349.9	360.4
2018 Baseline	294.2	294.2	294.2	294.2	294.2	294.2	294.2
Inflation and REC growth		12.1	21.1	31.8	46.6	55.8	66.2
Strategic Plan Adjustments <sup>4</sup>	-	(9.1)	(12.0)	(11.9)	(13.2)	(11.2)	(10.7)
<b>Total O&amp;M</b>	<b>294.2</b>	<b>297.2</b>	<b>303.3</b>	<b>314.0</b>	<b>327.6</b>	<b>338.7</b>	<b>349.7</b>

<sup>1</sup> Items that are budgeted as purchased power budget but recognized as O&M in financial statements:

- Renewable Energy Credits (RECs), the increase in 2022 reflects the purchase of Stateline RECs after the current purchase power contract expires.
- Maintenance costs associated with ownership of the 3rd AC intertie
- Payments for the Pacific Northwest Coordination Agreement (PNCA) related to the compensation for the benefits of upstream storage at the Boundary project.

<sup>2</sup> Remove capital loadings and overhead expenses associated with the CIP from the O&M budget and include these expenses as capital requirements. CIP and deferred overheads are expected to increase at a rate of 2.9% 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> Changes to O&M outside of inflation. See Appendix A for details.

**POWER COSTS, NET**

This category includes all costs and revenue associated with the purchase and sale of electricity, wheeling (transmission) and associated ancillary power management services.

City Light’s power portfolio is a relative constant. Except for expiration of the Stateline contract in 2022, no major contract changes and no new resources are expected. Below is a table outlining long-term power and wheeling costs.

**LONG-TERM POWER AND WHEELING CONTRACTS**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
BPA Power <sup>1</sup>	170.0	172.8	176.9	178.9	183.9	186.0	191.3
Priest Rapids <sup>2</sup>	2.1	2.0	1.9	1.9	1.8	1.8	1.7
Grand Coulee <sup>3</sup>	6.8	7.1	7.3	7.4	7.6	7.8	7.5
Lucky Peak <sup>4</sup>	8.2	8.4	8.6	8.9	9.1	9.3	9.5
Stateline <sup>5</sup>	24.7	24.8	25.0	25.0	1.7	0.0	0.0
Columbia Ridge <sup>6</sup>	6.5	6.6	6.7	6.9	7.0	7.1	7.3
King County West Point <sup>6</sup>	2.1	2.2	2.3	2.3	2.4	2.4	2.5
High Ross <sup>7</sup>	12.8	13.1	13.1	0.1	0.1	0.1	0.1
BPA Wheeling <sup>1</sup>	42.2	43.0	43.9	44.3	45.7	46.1	47.5
Other Wheeling <sup>8</sup>	0.9	0.9	0.9	4.7	4.8	4.9	5.0
<b>Total Power and Wheeling</b>	<b>276.4</b>	<b>280.9</b>	<b>286.6</b>	<b>280.4</b>	<b>264.1</b>	<b>265.6</b>	<b>272.4</b>

<sup>1</sup> Assumes increases of 4% biennially, effective October 1 of odd-numbered years.

<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> 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>6</sup> Cost inflates per contract terms.

<sup>7</sup> Expenses for the High Ross contract will decrease significantly after 2020 to reflect the end of the 25-year debt service payments outlined in the contract. The amount of energy received is unchanged.

<sup>8</sup> Other Wheeling reflects an exchange agreement for the Lucky Peak output for 2018-2020 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.

City Light’s largest contract is with the Bonneville Power Administration (BPA). In 2017 City Light converted its prior combination of Block and Slice products to an all Block product. BPA power and wheeling rates are assumed to increase at 4% every 2 years, effective in October of odd years. After BPA

announces its final rates for fiscal year 2020, any differences between fiscal year 2020 actual costs and the costs based on the assumptions below will be passed-through or credited to City Light customers via the BPA pass-through mechanism (SMC 21.49.081).

**BPA DETAIL**

\$ Millions	2018	2019	2020	2021	2022	2023	2024
Block Power	170.0	172.8	176.9	178.9	183.9	186.0	191.3
Wheeling	42.2	43.0	43.9	44.3	45.7	46.1	47.5
<b>Total BPA Costs</b>	<b>212.3</b>	<b>215.8</b>	<b>220.8</b>	<b>223.2</b>	<b>229.6</b>	<b>232.1</b>	<b>238.8</b>
Annual Change		1.7%	2.3%	1.1%	2.9%	1.1%	2.9%

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

**POWER REVENUES, NET DETAIL**

\$, Millions	2018	2019	2020	2021	2022	2023	2024
Net Wholesale Revenue <sup>1</sup>	44.8	55.0	50.0	50.0	40.0	40.0	40.0
Power Contracts <sup>2</sup>							
Article 49 to PO County	2.1	2.2	2.2	2.3	2.3	2.4	2.4
Priest Rapids	1.8	1.6	1.5	1.4	1.4	1.3	1.2
BPA Credit for South Fork Tolt	3.2	3.1	3.1	3.0	2.9	2.9	2.8
BPA Residential Exchange Credit	5.7	4.3	-	-	-	-	-
Power Marketing, Net <sup>3</sup>	4.5	4.0	1.4	1.4	1.4	1.4	1.4
Transmission Sales <sup>4</sup>	5.0	3.4	3.4	3.4	3.3	3.0	3.0
Total Power Related Revenues, Net	22.3	18.6	11.6	11.5	11.2	10.9	10.8
<b>Total Power Revenues, Net</b>	<b>67.1</b>	<b>73.6</b>	<b>61.6</b>	<b>61.5</b>	<b>51.2</b>	<b>50.9</b>	<b>50.8</b>

<sup>1</sup> Net Wholesale Revenue (NWR) is the revenue from selling surplus energy on the wholesale market, net of purchases for load balancing. 2019-2022 NWR planning values were adopted as part of prior strategic plans 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 the energy surplus.

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

<sup>3</sup> Power marketing revenues (net of purchases) are earned from sales of ancillary services associated with generation and transmission assets, such reserve capacity sales. Revenues are expected to decline in 2020 primarily because of lower Lucky Peak exchange premiums. The current 2-year exchange contract goes through 2019 and the premium is \$2.1 million per year. No exchange premium is assumed for 2020 onward.

<sup>4</sup> Starting in 2019, excess BPA 3<sup>rd</sup> AC transmission capacity will be marketed in the Western Energy Imbalance Market (WEIM) and revenues will contribute to NWR.

**OTHER COSTS AND MISCELLANEOUS REVENUES**

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

**OTHER COSTS (TAXES, PAYMENTS AND UNCOLLECTIBLES) DETAIL**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
State Taxes <sup>1</sup>	35.4	36.4	37.6	40.8	41.8	42.9	44.4
Franchise Payments & Other Taxes <sup>2</sup>	6.4	6.8	7.0	7.2	7.4	7.7	7.9
Uncollectible Revenue <sup>3</sup>	6.6	7.0	7.3	7.5	7.7	7.9	8.2
<b>Total Other Costs</b>	<b>48.4</b>	<b>50.1</b>	<b>52.0</b>	<b>55.4</b>	<b>56.9</b>	<b>58.5</b>	<b>60.6</b>

<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 assumed to be 0.75% of retail revenues.

**MISCELLANEOUS REVENUE SOURCES DETAIL**

<b>\$, Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Non-Base Rate Retail Revenue <sup>1</sup>	3.9	3.9	4.4	4.5	4.5	4.6	4.6
Other Revenue <sup>2</sup>	19.4	19.5	19.6	19.7	19.8	19.9	20.0
Suburban Undergrounding <sup>3</sup>	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Property Sales <sup>4</sup>	1.0	1.1	1.2	1.2	1.2	1.2	1.3
Interest Income <sup>5</sup>	5.8	5.8	7.0	8.1	8.7	8.8	8.7
RSA Transfers, Net <sup>6</sup>	14.9	(0.1)	(1.7)	(2.1)	(2.2)	(2.2)	(2.3)
<b>Total Miscellaneous Revenues</b>	<b>49.1</b>	<b>34.4</b>	<b>34.6</b>	<b>35.4</b>	<b>36.1</b>	<b>36.3</b>	<b>36.4</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 items are expected to increase gradually over time.

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

<sup>4</sup> Property sales based on historical averages. No large sales are assumed in this forecast.

<sup>5</sup> Interest income assumes City Cash Pool cash holdings accrue interest at an annual rate of 1.5%-2.0% on average. The increases reflect higher average cash balances, primarily from a growing bond reserve fund and a gradual increase in interest rates.

<sup>6</sup> Rate Stabilization Account (RSA) transfers are the deposit into the RSA net of any RSA surcharge revenue. They primarily reflect interest earned by the RSA.

**RETAIL SALES**

The forecast of retail sales is based on the 2017 official load forecast, which projects declining sales at an average rate of -0.8% per year.

**RETAIL SALES FORECAST**

	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
GWh							
Residential	3,132	3,147	3,165	3,140	3,119	3,096	3,081
Small and Medium	3,618	3,568	3,530	3,476	3,441	3,406	3,383
Large and High Demand	2,599	2,563	2,536	2,499	2,474	2,452	2,439
<b>Total</b>	<b>9,348</b>	<b>9,279</b>	<b>9,230</b>	<b>9,116</b>	<b>9,034</b>	<b>8,955</b>	<b>8,903</b>
Annual Change							
Residential		0.5%	0.6%	-0.8%	-0.7%	-0.7%	-0.5%
Small and Medium		-1.4%	-1.1%	-1.5%	-1.0%	-1.0%	-0.7%
Large and High Demand		-1.4%	-1.1%	-1.5%	-1.0%	-0.9%	-0.5%
<b>Total</b>		<b>-0.7%</b>	<b>-0.5%</b>	<b>-1.2%</b>	<b>-0.9%</b>	<b>-0.9%</b>	<b>-0.6%</b>

The forecast of retail sales has decreased since the 2017-2022 Strategic Plan. Most retail 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 2017-2022 Strategic Plan.

**RETAIL SALES FORECAST AND IMPACT ON AVERAGE RATES**

	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Revenue Requirement, \$M		922.7	967.5	990.2	1,019.6	1,051.1	1,089.1
Retail Sales Forecast, GWh							
2019-2024 Plan	9,348	9,279	9,230	9,116	9,034	8,955	8,903
2017-2022 Plan	9,456	9,501	9,565	9,560	9,604		
Average Rate cents/kWh							
2019-2024 Plan	9.40	9.94	10.48	10.86	11.29	11.74	12.23
2017-2022 Plan	9.40	9.71	10.12	10.36	10.62		
Annual Rate Increase							
2019-2024 Plan		5.8%	5.4%	3.6%	3.9%	4.0%	4.2%
2017-2022 Plan		3.3%	4.1%	2.4%	2.5%		

**APPENDIX A: STRATEGIC PLAN ADJUSTMENTS**

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**O&M**

This section details changes to O&M outside of inflation. These changes were determined as part of the strategic planning process. The top section of the table shows changes that are carried over from past strategic plans; this new plan contains no incremental O&M funding. The next section shows reinstated one-time reductions originally intended to mitigate 2018 rates.

This strategic plan also includes mitigating O&M reductions of \$18 million in 2019, growing with inflation to \$20.3 million in 2024. Note that as of the date of this document, the exact nature of these O&M reductions has not been determined. It is possible that O&M reductions will offset either partially or in full some of the additions listed in this table.

**O&M STRATEGIC PLAN ADJUSTMENTS DETAIL**

<b>\$, Millions</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Past initiatives and new funding						
Advanced metering initiative	0.9	-1.2	-1.5	-1.9	-1.9	-1.9
Customer service initiatives	1.6	-0.8	-0.4	0.2	1.4	2.5
Power supply, generation facilities	0.9	2.8	2.6	1.5	2.7	2.6
Asset management, testing, and switches	0.4	0.6	1.1	1.1	1.1	1.1
Seismic upgrades, security and safety	0.3	0.4	0.4	0.4	0.4	0.4
Restoring temporary 2018 budget reductions						
Asset and project management	2.0	2.0	2.0	2.0	2.0	2.0
Internships, memberships, and services	0.4	0.4	0.5	0.5	0.5	0.5
Fuel costs, training and facilities	0.8	0.8	0.8	0.8	0.8	0.8
Line clearance and operations overtime	0.9	0.9	0.9	0.9	0.9	0.9
Greenhouse gas offsets	0.7	0.7	0.7	0.7	0.7	0.7
O&M Reductions	-18.0	-18.5	-18.9	-19.3	-19.8	-20.3
<b>Total Adjustments to O&amp;M</b>	<b>(9.1)</b>	<b>(12.0)</b>	<b>(11.9)</b>	<b>(13.2)</b>	<b>(11.2)</b>	<b>(10.7)</b>

**CIP**

The following table details the changes in capital expenditures that were not in the 2018-2023 CIP Plan.

**CIP ADDITIONS AND CHANGES**

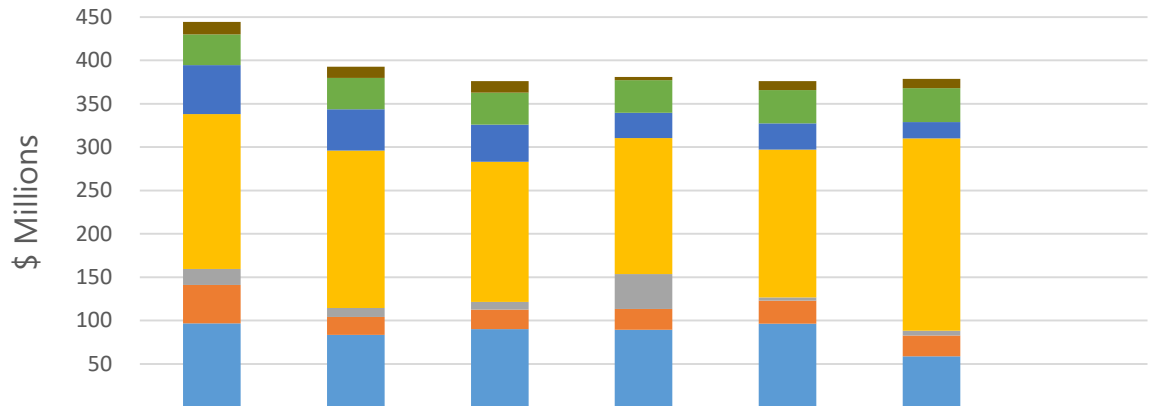
<b>\$, Millions</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
Boundary Facilities Master Plan		0.7	2.3	2.3	2.7	1.4	9.2
Skagit Facilities Master Plan Phase 2		4.4	6.7	6.4	9.2	1.8	28.6
Powerhouse Systems		2.7					2.7
Power Plant Controller Replacement		2.3	2.3				4.5
Boundary Native Salmonid Hatchery		-0.5	-0.5	-0.5	-0.5	-0.5	-2.6
Energy Mgmt System SCADA Upgrade		1.8					1.8
Cable Replacement		5.4	16.2	32.4	32.4	32.4	118.8
Enterprise Software Upgrades					11.7	9.9	21.6
UW Underground Capacity Additions		1.8	9.5	10.8	10.8	9.0	41.9
Sound Transit 3 (ST3)		0.6	0.3	0.5	0.5	0.5	2.6
UW and ST3 Reimbursements <sup>1</sup>		-2.1	-7.9	-9.2	-9.2	-7.7	-36.0
<b>Total Additions (Net)</b>		<b>17.0</b>	<b>28.8</b>	<b>42.7</b>	<b>57.6</b>	<b>46.8</b>	<b>192.9</b>
Cancel Master Service Center			-59.7	-40.3			-100.0
Cancel Technical Training Center	-10.7						-10.7
CIP Reductions <sup>2</sup>	-10.0	-10.0	-50.0	-60.0			-130.0
<b>Total Reductions</b>	<b>-20.7</b>	<b>-10.0</b>	<b>-109.7</b>	<b>-100.3</b>			<b>-240.7</b>
<b>Total CIP Additions and Changes</b>	<b>-20.7</b>	<b>7.0</b>	<b>-80.9</b>	<b>-57.6</b>	<b>57.6</b>	<b>46.8</b>	<b>-47.8</b>
<sup>1</sup> The UW project is expected to be 80% reimbursable, and the Sound Transit 3 project is expected to be 100% reimbursable. <sup>2</sup> Target reductions for rate mitigation, which will be identified as a part of the 2019-2024 CIP budget process. (This table documents budget development status as of mid-May.) Reductions may reduce or eliminate additions listed in this table.							

The following bar chart is a graphical depiction of capital expenditures, incorporating the additions and reductions listed in the table above. In the chart, the “CIP Reductions” still in the process of being identified are all categorized as “Distribution” for simplicity. The year 2024 is not shown because a comprehensive CIP plan has not yet been developed for that year.

Several key infrastructure projects are currently in progress including the Denny Substation, Advanced Metering and Alaskan Way Viaduct Infrastructure Relocation. As a result, current capital requirements are significantly larger than historical levels. Capital spending is expected to peak in 2018 and then decline to more typical levels.



**CAPITAL REQUIREMENTS FORECAST: BASED ON 2018-2023 ADOPTED CIP**



	2018	2019	2020	2021	2022	2023	Total 2018-2023
Other Deferred O&M	14	13	13	4	10	11	65
Conservation	35	36	37	38	38	39	223
External Projects	56	47	43	29	30	19	225
Distribution	179	182	162	157	170	222	1,071
Transmission	18	10	9	40	4	5	87
Central Utility Projects	45	20	23	24	26	24	162
Power Supply	97	84	90	89	96	59	515
<b>Total Expenditure</b>	<b>444</b>	<b>393</b>	<b>376</b>	<b>381</b>	<b>376</b>	<b>379</b>	<b>2,348</b>

**MAJOR CIP PROJECTS 2018-2024 SPENDING, \$MILLIONS**

*Included in 2018-2023 Adopted CIP Budget*

8351: Overhead Equipment Replacements	152.4
6987: Boundary - Licensing Mitigation	104.3
8366: Medium Overhead and Underground Services	94.4
8353: Underground Equipment Replacements	86.9
6986: Skagit - Relicensing	58.2
7125: Denny Substation Transmission Lines	50.3
8307: Alaskan Way Viaduct and Seawall Replacement - Utility Relocs	82.4
8452: Pole Attachments	62.6
8404: Denny Substation - Network	65.7
9101: Equipment Fleet Replacement	57.0
9969: Enterprise Software Solution Replacement Strategy	46.8
8363: Network Additions and Services: Broad Street Substation	51.6