#### OFFICIAL STATEMENT

New Issue Book-Entry Only Moody's Rating: Aa2
Standard & Poor's Rating: AA
(See "Other Bond Information—Ratings on the Bonds.")

In the opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington ("Bond Counsel"), under existing statutes, regulations, rulings, and judicial decisions, and assuming the accuracy of certain representations and compliance with certain covenants and requirements described herein, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of calculating the federal alternative minimum tax imposed on individuals and corporations. See "Legal and Tax Information—Tax Matters" herein with respect to tax consequences relating to the Bonds.

#### \$160,815,000

# THE CITY OF SEATTLE, WASHINGTON MUNICIPAL LIGHT AND POWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2016C

DATED: DATE OF INITIAL DELIVERY

DUE: OCTOBER 1, AS SHOWN ON PAGE i

The City of Seattle, Washington (the "City"), will issue its Municipal Light and Power Improvement and Refunding Revenue Bonds, 2016C (the "Bonds"), as fully registered bonds under a book-entry only system, registered in the name of Cede & Co. as bond owner and nominee for The Depository Trust Company, New York, New York ("DTC").

DTC will act as initial Securities Depository for the Bonds. Individual purchases of the Bonds will be made in book-entry form, in the denomination of \$5,000 or any integral multiple thereof within a maturity of the Bonds. Purchasers will not receive certificates representing their interest in the Bonds. Interest on the Bonds is payable semiannually on each April 1 and October 1, beginning April 1, 2017. The principal of and interest on the Bonds are payable by the City's Bond Registrar, currently the fiscal agent of the State of Washington (currently U.S. Bank National Association), to DTC, which is obligated to remit such payments to its participants for subsequent disbursement to Beneficial Owners of the Bonds, as described in "Description of the Bonds—Registration and Book-Entry Transfer System" and in Appendix E.

The Bonds are being issued to finance certain capital improvements to and conservation programs for the City's municipal light and power plant and system (the "Light System"), to refund (depending on market conditions) certain of the City's outstanding Municipal Light and Power bonds, and to pay the costs of issuing the Bonds and administering the Refunding Plan. See "Use of Proceeds."

The Bonds are subject to redemption prior to maturity as described herein. See "Description of the Bonds—Redemption of the Bonds."

The Bonds are special limited obligations of the City, payable from and secured solely by Gross Revenues of the Light System and by money in the Parity Bond Fund and the Reserve Fund. The pledge of Gross Revenues constitutes a charge upon such revenues prior and superior to all other charges whatsoever except reasonable charges for maintenance and operation of the Light System. The Bonds will be issued on a parity with certain Outstanding Parity Bonds (outstanding in the stated principal amount of \$1,990,825,000 as of September 2, 2016) and any Future Parity Bonds. Of the Outstanding Parity Bonds, \$32,020,000 will be refunded with proceeds of the Bonds. Maintenance and operation charges include the unconditional obligation of the City to make payments under certain power purchase contracts, as more fully described in "Power Resources and Cost of Power—Purchased Power Arrangements." See "Security for the Bonds."

The Bonds do not constitute general obligations of the City, the State of Washington (the "State"), or any political subdivision of the State, or a charge upon any general fund or upon any money or other property of the City, the State, or any political subdivision of the State not specifically pledged thereto by the legislation authorizing the issuance of the Bonds. Neither the full faith and credit nor the taxing power of the City, nor any revenues of the City derived from sources other than the Light System, are pledged to the payment of the Bonds.

The Bonds are offered for delivery by the Underwriter of the Bonds when, as, and if issued, subject to the approving legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington, Bond Counsel. The form of Bond Counsel's opinion is attached hereto as Appendix B. It is expected that the Bonds will be available for delivery at DTC's facilities in New York, New York, or delivered to the Bond Registrar on behalf of DTC for closing by Fast Automated Securities Transfer, on or about September 28, 2016.

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

Dated: September 14, 2016

The information within this Official Statement has been compiled from official and other sources considered reliable and, while not guaranteed as to accuracy, is believed by the City to be correct as of its date. The City makes no representation regarding the accuracy or completeness of the information in Appendix E—Book-Entry Transfer System, which has been obtained from DTC's website, or other information provided by parties other than the City. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made by use of this Official Statement shall, under any circumstances, create any implication that there has been no change in the affairs of the City since the date hereof.

Information on website addresses set forth in this Official Statement is not incorporated into this Official Statement and cannot be relied upon to be accurate as of the date of this Official Statement, nor should any such information be relied upon in making investment decisions regarding the Bonds.

No dealer, broker, salesperson, or other person has been authorized by the City to give any information or to make any representations with respect to the Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by the City. This Official Statement does not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The Bonds have not been registered under the Securities Act of 1933, as amended, and the Bond Legislation has not been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon exemptions contained in such acts. The Bonds have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this Official Statement. Any representation to the contrary may be a criminal offense.

The presentation of certain information, including tables of revenues and expenses, is intended to show recent historic information and is not intended to indicate future or continuing trends in the financial position or other affairs of the City. No representation is made that past experience, as it might be shown by such financial and other information, will necessarily continue or be repeated in the future.

The information set forth in the Seattle City Light Department's Audited Financial Statements that are included in Appendix C speaks only as of the date of the those statements and is subject to revision or restatement in accordance with applicable accounting principles and procedures. The City specifically disclaims any obligation to update this information except to the extent described under "Legal and Tax Information—Continuing Disclosure Undertaking."

Certain statements contained in this Official Statement do not reflect historical facts, but rather are forecasts and "forward-looking statements." No assurance can be given that the future results shown herein will be achieved, and actual results may differ materially from the forecasts shown. In this respect, the words "estimate," "forecast," "project," "anticipate," "expect," "intend," "believe," and other similar expressions are intended to identify forward-looking statements. The forward-looking statements in this Official Statement are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in or implied by such statements. All estimates, projections, forecasts, assumptions, and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement. These forward-looking statements speak only as of the date they were prepared. The City specifically disclaims any obligation to update any forward-looking statements to reflect occurrences or unanticipated events or circumstances after the date of this Official Statement, except as otherwise expressly provided in "Legal and Tax Information—Continuing Disclosure Undertaking."

The CUSIP data herein are provided by CUSIP Global Services, managed on behalf of the American Bankers Association by Standard & Poor's. CUSIP numbers are not intended to create a database and do not serve in any way as a substitute for CUSIP service. CUSIP numbers have been assigned by an independent company not affiliated with the City and are provided solely for convenience and reference. The CUSIP number for a specific maturity is subject to change after the issuance of the Bonds. Neither the City nor the Underwriter takes responsibility for the accuracy of the CUSIP numbers.

The order and placement of materials in this Official Statement, including the Appendices, are not to be deemed to be a determination of relevance, materiality, or importance, and this Official Statement, including the Appendices, must be considered in its entirety. The offering of the Bonds is made only by means of this entire Official Statement.

The website of the City or any City department or agency is not part of this Official Statement, and investors should not rely on information presented on the City's website, or any other website referenced herein, in determining whether to purchase the Bonds. Information appearing on any such website is not incorporated by reference in this Official Statement.

## MATURITY SCHEDULE

## \$160,815,000

## THE CITY OF SEATTLE, WASHINGTON

## MUNICIPAL LIGHT AND POWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2016C

## SERIAL BONDS

SERIAL BUNDS						
Due October 1	Amounts	Interest Rates	Yields	Prices	CUS IP Numbers	
2017	\$ 2,100,000	5.00%	0.70%	104.312	812643 NA8	
2018	2,250,000	5.00%	0.78%	108.392	812643 NB6	
2019	2,360,000	5.00%	0.88%	112.205	812643 NC4	
2020	2,480,000	5.00%	1.00%	115.677	812643 ND2	
2021	12,530,000	5.00%	1.13%	118.792	812643 NE0	
2022	10,685,000	5.00%	1.26%	121.576	812643 NF7	
2023	8,800,000	5.00%	1.42%	123.801	812643 NG5	
2024	9,250,000	5.00%	1.55%	125.888	812643 NH3	
2025	3,165,000	5.00%	1.64%	128.031	812643 NJ9	
2026	3,320,000	5.00%	1.73%	129.932	812643 NK6	
2027	3,490,000	4.00%	1.90%	119.057 (1)	812643 NL4	
2028	3,625,000	4.00%	2.04%	117.662 (1)	812643 NM2	
2029	3,770,000	4.00%	2.16%	116.481 (1)	812643 NN0	
2030	3,925,000	4.00%	2.26%	115.507 (1)	812643 NP5	
2031	4,080,000	4.00%	2.31%	115.024 (1)	812643 NQ3	
2032	4,245,000	4.00%	2.40%	114.160 (1)	812643 NR1	
2033	4,415,000	4.00%	2.47%	113.493 (1)	812643 NS9	
2034	4,590,000	4.00%	2.55%	112.736 (1)	812643 NT7	
2035	4,775,000	4.00%	2.62%	112.079 (1)	812643 NU4	
2036	4,965,000	4.00%	2.66%	111.706 (1)	812643 NV2	
2037	5,165,000	4.00%	2.68%	111.520 (1)	812643 NW0	

## TERM BONDS

Due October 1	Amounts	Interest Rates	Yields	Prices	CUS IP Numbers
2042	\$ 29,085,000	4.00%	2.80%	110.410 (1)	812643 NY6
2046	27,745,000	4.00%	2.84%	110.043 (1)	812643 NX8

<sup>(1)</sup> Priced to the October 1, 2026, par call date.

## THE CITY OF SEATTLE

## CITY OFFICIALS AND CONSULTANTS

## MAYOR AND CITY COUNCIL

Edward B. Murray	Mayor		
Council Member	Term Expiration		
Sally Bagshaw	2019		
Tim Burgess	2017		
Lorena Gonzalez	2017		
Bruce Harrell	2019		
Lisa Herbold	2019		
Rob Johnson	2019		
Debora Juarez	2019		
Mike O'Brien	2019		
Kshama Sawant	2019		

#### CITY ADMINISTRATION

Glen M. Lee	Director of Finance
Peter Holmes	City Attorney

## SEATTLE CITY LIGHT DEPARTMENT

Larry Weis	General Manager and Chief Executive Officer
Paula Laschober	Chief Financial Officer
James Baggs	Customer Service, Communications, and Regulatory Affairs Officer
Michael Jones	Power Management and Strategic Planning Officer
Lynn Best	Chief Environmental Officer
Bernie Ziemianek	Transmission and Distribution Officer
Michael Haynes	Energy Generation Operations and Engineering Officer
Sephir Hamilton	Interim Engineering and Technology Innovation Officer
DaVonna Johnson	Chief Administrative Services Officer

## BOND COUNSEL

Stradling Yocca Carlson & Rauth, a Professional Corporation Seattle, Washington

## FINANCIAL ADVISOR

Piper Jaffray & Co. Seattle, Washington

## BOND REGISTRAR

Washington State Fiscal Agent (currently U.S. Bank National Association)

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#### OFFICIAL STATEMENT

#### \$160,815,000

#### THE CITY OF SEATTLE, WASHINGTON

## MUNICIPAL LIGHT AND POWER IMPROVEMENT AND REFUNDING REVENUE BONDS, 2016C

#### INTRODUCTION

The purpose of this Official Statement, which includes the cover, inside cover, and appendices, is to set forth certain information concerning The City of Seattle, Washington (the "City"), a municipal corporation duly organized and existing under and by virtue of the laws of the State of Washington (the "State"), the Seattle City Light Department (the "Department"), and its municipal light and power plant and system (the "Light System"), in connection with the offering of \$160,815,000 aggregate principal amount of its Municipal Light and Power Improvement and Refunding Revenue Bonds, 2016C (the "Bonds"). This Official Statement contains certain information related to this offering and sale concerning the City, the Bonds, the Light System, and the Department.

Appendix A to this Official Statement is a copy of the ordinance authorizing the sale of the new money portion of the Bonds. Appendix B includes the form of legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington ("Bond Counsel"). Appendix C contains the audited 2015 financial statements of the Department. Appendix D provides demographic and economic information for the City. Appendix E is a description provided on its website by The Depository Trust Company, New York, New York ("DTC"), of DTC procedures for book-entry bonds. Capitalized terms that are not defined herein have the meanings set forth in the Bond Legislation (defined below).

All of the summaries of provisions of the State Constitution and laws of the State, of ordinances and resolutions of the City, and of other documents contained in this Official Statement are subject to the complete provisions thereof and do not purport to be complete statements of such laws or documents, copies of which may be obtained from the City upon request. A full review should be made of the entire Official Statement. The offering of the Bonds to prospective investors is made only by means of the entire Official Statement.

#### **DESCRIPTION OF THE BONDS**

#### **Authorization for the Bonds**

The Bonds are to be issued by the City pursuant to the State Constitution, chapters 35.92, 39.46, and 39.53 of the Revised Code of Washington ("RCW"), the Seattle City Charter, Ordinance 124916, passed on November 23, 2015 (the "New Money Ordinance"), Ordinance 124335, passed on November 25, 2013 (as amended by Ordinance 124916) (the "Refunding Ordinance" and, together with the New Money Ordinance, the "Bond Ordinance"), and Resolution 31707, adopted on September 14, 2016 (the "Bond Resolution"). The Bond Ordinance and the Bond Resolution together are referred to in this Official Statement as the "Bond Legislation." The New Money Ordinance authorizes the issuance of a maximum par amount of \$280 million of Parity Bonds, and the new money portion of the Bonds represents the second issuance under this authorization. The City expects to issue the remainder of this authorization in a variable rate direct placement expected to close soon after the closing for the Bonds. See "Capital Requirements—Financing Plans."

#### Principal Amounts, Dates, Interest Rates, and Maturities

The Bonds will be dated the date of their initial issuance and delivery (the "Issue Date"), and will mature on the dates and in the amounts set forth on page i of this Official Statement. Interest on the Bonds is payable semiannually on each April 1 and October 1, beginning April 1, 2017, at the rates set forth on page i of this Official Statement. Interest on the Bonds will be computed on the basis of a 360-day year consisting of twelve 30-day months.

#### Registration and Book-Entry Transfer System

Book-Entry Transfer System. The Bonds will be issued initially as fully registered bonds and registered by the fiscal agent of the State (the "Bond Registrar"), currently U.S. Bank National Association in Seattle, Washington (or such other fiscal agent or agents as the State may from time to time designate), in the name of Cede & Co. as nominee for DTC, which will act as the initial Securities Depository for the Bonds. The Bonds will be held fully immobilized in book-entry form by the Securities Depository. Individual purchases and sales of the Bonds will be made in book-entry form only in denominations of \$5,000 or any integral multiple thereof within a maturity of the Bonds ("Authorized Denominations"). Purchasers ("Beneficial Owners") will not receive certificates representing their interest in the Bonds. So long as the Bonds are held in book-entry form, the Securities Depository will be deemed to be the Registered Owner of the Bonds, and all references herein to the Registered Owners will mean Cede & Co., as nominee of DTC, or its successor and will not mean the Beneficial Owners of the Bonds. For information about DTC and its book-entry system, see Appendix E—Book Entry Transfer System. The City makes no representation as to the accuracy or completeness of the information in Appendix E obtained from DTC. Purchasers of the Bonds should confirm this information with DTC or its participants.

Transfer and Exchange; Record Date. Registered ownership of any Bond registered in the name of Cede & Co., as nominee for DTC, may not be transferred except (i) to any successor Securities Depository, (ii) to any substitute Securities Depository appointed by the City or such substitute Securities Depository's successor, or (iii) to any person if the Bond is no longer held in book-entry only form. If (i) the Securities Depository resigns from its functions as depository, and no substitute Securities Depository can be obtained, or (ii) the City determines that the Bonds are to be in certificated form, the ownership of Bonds may be transferred to any person as provided in the Bond Ordinance, and the Bonds no longer will be held in book-entry form. The Bond Registrar is not obligated to exchange or transfer any Bond during the period between the Record Date and the corresponding interest or principal payment date or redemption date. Record Date means, in the case of each interest or principal payment date, the Bond Registrar's close of business on the 15th day of the month preceding the interest or principal payment date. With regard to redemption of a Bond prior to its maturity, Record Date means the Bond Registrar's close of business on the day prior to the date on which the Bond Registrar sends the notice of redemption.

#### **Payment of the Bonds**

Principal of and interest on each Bond registered in the name of Cede & Co., as nominee of DTC, are payable by wire transfer of the Bond Registrar to DTC, which is obligated to remit such principal and interest to its participants for subsequent disbursement to the Beneficial Owners of the Bonds, as further described in Appendix E–Book-Entry Transfer System.

Interest on each Bond not registered in the name of the Securities Depository is payable by electronic transfer on the interest payment date, or by check or draft of the Bond Registrar mailed on the interest payment date to the Registered Owner at the address appearing on the Bond Register on the Record Date. The City, however, is not required to make electronic transfers except pursuant to a request by a Registered Owner in writing received at least ten days prior to the Record Date and at the sole expense of the Registered Owner. Principal of each Bond not registered in the name of the Securities Depository is payable upon presentation and surrender of the Bond by the Registered Owner to the Bond Registrar.

## **Redemption of the Bonds**

Optional Redemption. The Bonds maturing on and before October 1, 2026, are not subject to redemption prior to maturity. The City reserves the right and option to redeem Bonds maturing on and after October 1, 2027, prior to their stated maturity dates at any time on and after October 1, 2026, as a whole or in part, at a price equal to 100% of the stated principal amount to be redeemed plus accrued interest to the date fixed for redemption.

Mandatory Redemption—Term Bonds. If not previously redeemed as described above or purchased or defeased under the provisions described below, the Term Bonds maturing on October 1 in the years 2042 and 2046 will be called for redemption at a price equal to 100% of the stated principal amount to be redeemed plus accrued interest to the date fixed for redemption on October 1 in the years and amounts as follows:

2042 TERM BONDS		2046 TERM BONDS		
Years	Amounts	Years	Amounts	
2038	\$ 5,370,000	2043	\$ 6,535,000	
2039	5,585,000	2044	6,795,000	
2040	5,810,000	2045	7,065,000	
2041	6,040,000	$2046^{(1)}$	7,350,000	
2042(1)	6.280.000			

<sup>(1)</sup> Maturity.

Selection of Bonds for Redemption. If fewer than all of the outstanding Bonds are to be redeemed at the option of the City, the Director of Finance will select the maturity or maturities to be redeemed. If fewer than all of the outstanding Bonds of a maturity are to be redeemed, then:

- (i) Bonds registered in the name of the Securities Depository are to be redeemed in accordance with the Letter of Representations, and
- (ii) the Bond Registrar is required to select all other Bonds to be redeemed randomly in such manner as the Bond Registrar determines.

All or a portion of the principal amount of any Bond that is to be redeemed may be redeemed in any Authorized Denomination.

If Bonds selected for optional redemption or purchase by the City are Term Bonds, the Term Bonds so redeemed or purchased (irrespective of their redemption or purchase prices) will be credited at the par amount thereof against the remaining mandatory redemption requirements as determined by the Director of Finance. If the Director of Finance does not make such a determination, credit will be allocated on a *pro rata* basis.

## **Notice and Effect of Redemption**

Notice of Redemption. The City is required to cause notice of any intended redemption of Bonds to be given not less than 20 nor more than 60 days prior to the date fixed for redemption by first-class mail, postage prepaid, to the Registered Owner of any Bond to be redeemed at the address appearing on the Bond Register on the Record Date, and that requirement will be deemed to have been fulfilled when notice has been mailed as so provided, whether or not it is actually received by the Registered Owner of any Bond. Notice of redemption of Bonds registered in the name of Cede & Co., as nominee of the Securities Depository, will be given in accordance with the Letter of Representations. See "Registration and Book-Entry Transfer System" and Appendix E.

Conditional Notice of Redemption. In the case of an optional redemption, the notice may state that the City retains the right to rescind the redemption notice and the related optional redemption of Bonds by giving a notice of rescission to the affected Registered Owners at any time prior to the scheduled optional redemption date. Any notice of optional redemption that is rescinded by the Director of Finance will be of no effect, and the Bonds for which the notice of optional redemption has been rescinded will remain outstanding.

*Effect of Redemption.* Interest on Bonds called for redemption will cease to accrue on the date fixed for redemption unless the Bond or Bonds called are not redeemed when presented pursuant to the call.

## **Purchase**

The City reserves the right and option to purchase any or all of the Bonds at any time at any price acceptable to the City plus accrued interest to the date of purchase.

#### **Failure to Pay Bonds**

If any Bond is not paid when properly presented at its maturity or redemption date, the City will be obligated to pay, solely from the Parity Bond Fund and the other sources pledged in the Bond Ordinance, interest on that Bond at the same rate provided in that Bond from and after its maturity or redemption date until that Bond, principal and

interest, is paid in full or until sufficient money for its payment in full is on deposit in the Parity Bond Fund and that Bond has been called for payment by giving notice of that call to the Registered Owner of that Bond.

## Refunding or Defeasance of Bonds

The City may issue refunding bonds pursuant to the laws of the State or use money available from any other lawful source to pay when due the principal of and interest on any Bond, or any portion thereof, included in a refunding or defeasance plan, and to redeem and retire, release, refund, or defease those Bonds (the "Defeased Bonds") and to pay the costs of such refunding or defeasance. If money and/or Government Obligations (defined below) maturing at a time or times and in an amount sufficient, together with known earned income from the investments thereof, to redeem and retire, release, refund, or defease the Defeased Bonds in accordance with their terms, are set aside in a special trust fund or escrow account irrevocably pledged to such redemption, retirement, or defeasance (the "Trust Account"), then all right and interest of the Owners of the Defeased Bonds in the covenants of the Bond Ordinance and in the Gross Revenue and the funds and accounts pledged to the payment of such Defeased Bonds, other than the right to receive the funds so set aside and pledged, thereafter will cease and become void. Such Owners thereafter will have the right to receive payment of the principal of and interest or redemption price on the Defeased Bonds from the Trust Account. Notice of refunding or defeasance is to be given, and selection of Bonds for any partial refunding or defeasance is to be conducted, in the manner provided for the redemption of Bonds. See "Description of the Bonds—Notice and Effect of Redemption."

The term "Government Obligations" has the meaning given in RCW 39.53.010, currently: (i) direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America, and bank certificates of deposit secured by such obligations; (ii) bonds, debentures, notes, participation certificates, or other obligations issued by the Banks for Cooperatives, the Federal Intermediate Credit Bank, the Federal Home Loan Bank system, the Export-Import Bank of the United States, Federal Land Banks, or the Federal National Mortgage Association; (iii) public housing bonds and project notes fully secured by contracts with the United States; and (iv) obligations of financial institutions insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation, to the extent insured or to the extent guaranteed as permitted under any other provision of State law.

### USE OF PROCEEDS

#### **Purpose**

The Bonds are being issued to finance certain capital improvements to and conservation programs for the Light System, to refund certain of the City's outstanding Municipal Light and Power bonds described below under "Refunding Plan," and to pay the costs of issuing the Bonds and administering the Refunding Plan.

#### **Sources and Uses of Funds**

The proceeds of the Bonds will be applied as follows:

### SOURCES OF FUNDS

Par Amount of Bonds	\$ 160,815,000
Reoffering Premium	 24,483,136
Total Sources of Funds	\$ 185,298,136
USES OF FUNDS	
Deposit to Project Fund	\$ 148,130,000
Deposit to Refunding Escrow	36,517,493
Costs of Issuance <sup>(1)</sup>	 650,643
Total Uses of Funds	\$ 185.298.136

<sup>(1)</sup> Includes legal fees, financial advisory and rating agency fees, verification agent and refunding trustee fees, costs of printing and posting the Official Statement, underwriter's discount, and other costs of issuing the Bonds and refunding the Refunded Bonds.

#### **Refunding Plan**

With a portion of the proceeds of the Bonds, the City will refund the Municipal Light and Power Improvement and Refunding Revenue Bonds, 2010B, identified below (the "Refunded Bonds"). The refunding will be undertaken to achieve debt service savings.

#### REFUNDED BONDS

Bond	Maturity Date	Par Amount	Coupon (%)	Call Price (%)	Call Date	CUS IP Numbers
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2010B						
Serials	2/1/2021	\$ 10,445,000	5.000	100	2/1/2020	812643 DX9
	2/1/2022	8,445,000	5.000	100	2/1/2020	812643 DY7
	2/1/2023	6,395,000 (1)	5.000	100	2/1/2020	812643 DZ4
	2/1/2024	6,735,000	5.000	100	2/1/2020	812643 EA8
Total		\$ 32,020,000				

<sup>(1)</sup> Partial maturity.

The City will enter into a Refunding Trust Agreement with U.S. Bank National Association, as Refunding Trustee, upon the delivery of the Bonds, to provide for the advance refunding of the Refunded Bonds. The Refunding Trust Agreement creates an irrevocable trust fund to be held by the Refunding Trustee and to be applied solely to the payment of the Refunded Bonds. A portion of the proceeds of the Bonds will be deposited with the Refunding Trustee and will be invested in Government Obligations that will mature and bear interest at rates sufficient to pay the principal of and accrued interest as they become due and on the redemption date of the Refunded Bonds.

The Government Obligations and earnings thereon will be held solely for the benefit of the registered owners of the Refunded Bonds.

The mathematical accuracy of (i) the computations of the adequacy of the maturing principal amounts of and interest on the Government Obligations and cash on deposit to be held by the Refunding Trustee to pay principal of and interest on the Refunded Bonds as described above, and (ii) the computations supporting the conclusion of Bond Counsel that the Bonds are not "arbitrage bonds" under Section 148 of the Internal Revenue Code of 1986, as amended (the "Code"), will be verified by Causey Demgen & Moore P.C., independent certified public accountants (the "Verification Agent").

#### SECURITY FOR THE BONDS

## **Outstanding Parity Bonds**

The Bonds are being issued on a parity with the Outstanding Parity Bonds, which currently include 14 series of bonds issued since 2008. See "Department Financial Information—Debt Service Requirements."

#### **OUTSTANDING PARITY BONDS**

Bond Description	Original Par Amount	Outstanding Principal as of September 14, 2016
2008 Bonds	\$ 257,375,000	\$ 31,525,000
2010A Bonds	181,625,000	181,625,000
2010B Bonds <sup>(1)</sup>	596,870,000	340,910,000
2010C Bonds	13,275,000	13,275,000
2011A Bonds	296,315,000	239,785,000
2011B Bonds	10,000,000	10,000,000
2012A Bonds	293,280,000	261,140,000
2012C Bonds	43,000,000	43,000,000
2013 Bonds	190,755,000	181,845,000
2014 Bonds	265,210,000	239,470,000
2015A Bonds	171,850,000	167,485,000
2015B Bonds <sup>(2)</sup>	100,000,000	100,000,000
2016A Bonds	31,870,000	31,870,000
2016B Bonds	116,875,000	116,875,000
Total	\$ 2,568,300,000	\$ 1,958,805,000

- (1) Excludes the Refunded Bonds.
- (2) Issued as multimodal variable rate bonds.

Approximately simultaneously with the issuance of the Bonds, the City expects to issue approximately \$100 million aggregate principal amount of variable rate (multimodal) Parity Bonds (the "2016D and 2016E Bonds") in a direct placement transaction, the general terms of which are outlined below under "Capital Requirements—Financing Plans."

#### Pledge of Revenue

The Bonds are special limited obligations of the City, payable from and secured solely by Gross Revenues of the Light System and by money in the Seattle Municipal Light Revenue Parity Bond Fund (the "Parity Bond Fund") and the Municipal Light and Power Bond Reserve Fund (the "Reserve Fund"). The pledge of Gross Revenues constitutes a charge upon such revenues prior and superior to all other charges whatsoever except reasonable charges for maintenance and operation of the Light System. The payments that the City has pledged to pay into the Parity Bond Fund consist of amounts sufficient to pay the Parity Bonds (including principal, sinking fund redemption, redemption premium (if any), and interest) as such payments become due. The City has additionally pledged to make payments into the Reserve Fund sufficient to satisfy the Reserve Requirement. See "—Reserve Fund and Reserve Fund Requirement" below. The Bonds are issued on a parity with the Outstanding Parity Bonds and all Future Parity Bonds (which may include Parity Payment Agreements), without regard to date of issuance or authorization and without preference or priority of right or lien with respect to participation of special funds in amounts from Gross Revenues for payment thereof.

The Bond Ordinance defines "Gross Revenues" to include all income, revenues, and receipts derived through the Light System and the proceeds received by the City directly or indirectly from the sale, lease, or other disposition of any of the properties, rights, or facilities of the Light System, including the federal credit payments for Outstanding

Parity Bonds that have been issued as tax credit subsidy bonds. Bond proceeds and certain insurance proceeds are excluded from the definition. The Bond Ordinance defines "Net Revenue" as the amount determined by deducting from Gross Revenues the expenses of operation, maintenance, and repair of the Light System and further deducting any deposits into the Rate Stabilization Account ("RSA") and adding to Gross Revenues any withdrawals from the RSA and any amounts the City expects to receive from the federal government in respect of federal credit payments for Outstanding Parity Bonds that have been issued as tax credit subsidy bonds. The Bond Ordinance does not define "reasonable charges for maintenance and operation of the Light System" as used in the pledge language, nor does it define "expenses of operation, maintenance, and repair" as used in the definition of Net Revenue in the context of the test for issuing Future Parity Bonds. The Department treats these terms as interchangeable and utilizes generally accepted accounting principles applicable to similar municipal utility enterprises in order to record such expenses. See Appendix A—Bond Ordinance—Section 13(g). See also "Department Financial Information—Debt Service Requirements—Federal Sequestration" for a discussion of the impact of sequestration on federal interest payments for certain Department bonds. See the discussion of the RSA under "Security for the Bonds—Rate Stabilization Account," "Department Financial Information—Financial Policies," and Appendix A—Bond Ordinance—Section 17.

The complete definitions of the capitalized terms summarized above can be found in Appendix A—Bond Ordinance—Section 1.

The Bonds are not secured by a security interest in any physical plant or facility.

The Bonds do not constitute general obligations of the City, the State, or any political subdivision of the State, or a charge upon any general fund or upon any money or other property of the City, the State, or any political subdivision of the State not specifically pledged thereto by the Bond Legislation. Neither the full faith and credit nor the taxing power of the City, nor any revenues of the City derived from sources other than the Light System, are pledged to the payment of the Bonds.

#### **Rate Covenant**

In the Bond Legislation, the City has covenanted, among other things, to establish and maintain rates sufficient to provide for payment of debt service on the Outstanding Parity Bonds, any Future Parity Bonds, and all other obligations for which revenues have been pledged, to pay all costs of maintenance and operation, and to maintain the Light System in good order and repair. The Bond Legislation does not include a requirement that the City set rates to achieve a specific level of debt service coverage on Parity Bonds. A coverage test is included as part of the test for issuing Future Parity Bonds. See "Department Financial Information—Financial Policies" and Appendix A—Bond Ordinance—Section 13(d).

#### Reserve Fund and Reserve Fund Requirement

The City has created and is required to maintain the Reserve Fund for the purpose of securing the payment of the principal of and interest on all Parity Bonds outstanding and all amounts due under Parity Payment Agreements. The Reserve Fund is a pooled reserve. See Appendix A—Bond Ordinance—Section 13(b).

The Bond Legislation provides that, if the amount in the Reserve Fund is less than the Reserve Fund Requirement (taking into account the method of funding over five years in connection with the issuance of Future Parity Bonds), the City must transfer to the Reserve Fund money in an amount sufficient to restore the Reserve Fund to the Reserve Fund Requirement within 12 months after the date of such deficiency. Such transfers must be made, first, from money in the Light Fund (after making provision for payment of operating and maintenance expenses and for required payments into the Parity Bond Fund) and, only thereafter, from money in any construction fund or account established with respect to any issue of Parity Bonds (first taking money from the unrestricted portion thereof).

The Reserve Fund is held by the City in a "special fund" as that term is used in State law; it is not held by an independent trustee. In the context of bankruptcy proceedings, notwithstanding State law, there can be no assurance that the funds on deposit therein would be held intact for the benefit of holders of the Parity Bonds.

Reserve Fund Requirement. Under the Bond Ordinance, the aggregate Reserve Fund Requirement for all Parity Bonds is equal to the sum of the Reserve Fund Requirements established for each issue of Parity Bonds outstanding. The Bond Ordinance permits the City to establish the Reserve Fund Requirement (if any) for each issue of the Bonds or of Future Parity Bonds in the bond resolution approving the sale of that issue. Solely for purposes of setting the Reserve Fund Requirement, all series issued together under a single bond sale resolution are treated as a single "issue."

The Bond Resolution for the Bonds establishes the Reserve Fund Requirement for the Bonds as an amount equal to the additional amount necessary at the time of issuance to achieve an overall level of funding for the Reserve Fund that is equal to the maximum amount permitted by the Code as a "reasonably required reserve or replacement fund." Until the expiration of the Surety Bond (defined below under "Method of Satisfying Reserve Fund Requirement"), in 2029 unless earlier terminated, this amount is calculated based on the debt service requirements for all Parity Bonds that are outstanding as of the Issue Date (i.e., excluding the Refunded Bonds and including the Bonds). Upon the expiration or termination of the Surety Bond, this amount will be recalculated to exclude the debt service requirements of the outstanding multimodal variable rate 2015B Bonds and any other issue of Future Parity Bonds that are excluded pursuant to the legislation authorizing such Future Parity Bonds. The City expects to similarly exclude the future 2016D and 2016E Bonds (if issued) from the aggregate reserve requirement calculation upon the expiration or termination of the Surety Bond. See "Capital Requirements—Financing Plans."

Upon the issuance of the Bonds, the aggregate Reserve Fund Requirement for all Parity Bonds outstanding will be \$127,286,844. Upon the expiration or termination of the Surety Bond, the Reserve Requirements for the 2015B Bonds (and the 2016D and 2016E Bonds, if issued) will be reduced to \$0, resulting in a reduction in the aggregate Reserve Fund Requirement.

Method of Satisfying Reserve Fund Requirement. The Bond Ordinance permits the City to select the method of funding the Reserve Fund Requirement for each issue of the Bonds and for Future Parity Bonds in the applicable bond sale resolution from among the following methods: (i) depositing an amount equal to the Reserve Fund Requirement for that issue of Future Parity Bonds into the Reserve Fund out of Gross Revenues (or out of any other legally available funds, including proceeds of such Future Parity Bonds) at one time on the Issue Date, (ii) making periodic payments so that by five years from the date of such Future Parity Bonds, there will have been paid into the Reserve Fund an amount which, together with the money already on deposit therein, will be at least equal to the Reserve Fund Requirement for all Parity Bonds outstanding at the end of that five-year period, or (iii) by obtaining one or more Alternate Reserve Securities for specific amounts required to be paid into the Reserve Fund.

With respect to the Bonds, the Bond Resolution provides that the City will pay into the Reserve Fund out of Gross Revenues on the Issue Date such sums as will, together with money currently in the Reserve Fund, provide for the Reserve Fund Requirement for the Bonds will be satisfied by the amounts already on deposit and no additional deposit to the Reserve Fund will be required as a result of the issuance of the Bonds. The City also holds approximately \$18,900,000 in the Reserve Fund that is intended to be used to satisfy the Reserve Fund Requirement upon the expiration or termination of the Surety Bond, as discussed above under "Reserve Fund Requirement." A portion of this additional cash may be transferred into the Reserve Fund upon issuance of the 2016D and 2016E Bonds in order to satisfy any increase in the aggregate Reserve Fund Requirement resulting from the issuance of those bonds until the expiration or termination of the Surety Bond further described below. See "Information Regarding the Surety Bond."

Under the Bond Legislation, the City is permitted to provide for the Reserve Fund Requirement with an Alternate Reserve Security consistent with the Bond Legislation requirements. Under the Bond Legislation, a surety bond qualifies as Qualified Insurance for purposes of satisfying the Reserve Fund Requirement if the provider's ratings are in one of the top two rating categories at the time the policy is issued. See Appendix A—Bond Ordinance—Section 1. The Bond Legislation does not require that the Reserve Fund be funded with cash or an Alternate Reserve Security if the provider of qualified insurance is subsequently downgraded. The City currently has a surety bond (the "Surety Bond") purchased from Financial Security Assurance, Inc. ("FSA"), with a policy limit that, upon the issuance of the Bonds, will be equal to \$74,694,319. See "Information Regarding Surety Bond" below. This amount is used to satisfy a large proportion of the aggregate Reserve Fund Requirement. As of September 14, 2016, the remainder of the Reserve Fund Requirement was satisfied by \$52,592,525 in cash held in the Reserve Fund.

*Information Regarding the Surety Bond.* The Surety Bond was issued by FSA in 2005; FSA was acquired by Assured Guaranty Corporation in 2009. In 2009, Assured Guaranty Corporation changed the name of its FSA subsidiary to Assured Guaranty Municipal Corporation ("AGM").

The Surety Bond secures all Parity Bonds and Future Parity Bonds (including Parity Payment Agreements) and expires on August 1, 2029. The amount available to be drawn on the Surety Bond (the "Policy Limit") upon the issuance of the Bonds will be equal to \$74,694,319. However, should the Reserve Fund Requirement be reduced in the future, the Policy Limit would be reduced irrevocably by a like amount, which is expected to occur with the issuance of the Bonds. See "Method of Satisfying Reserve Requirement." The Policy Limit would also be reduced temporarily to the extent of any draw on the Surety Bond. In that event, the Policy Limit would be reinstated (up to the limit in effect prior to the draw) upon reimbursement in accordance with the terms of the reimbursement agreement. The City's reimbursement obligation is subordinate to the City's obligation to pay the principal of and interest on the Parity Bonds.

As of the date hereof, AGM is rated A2 and AA by Moody's Investors Service and Standard & Poor's Ratings Services, respectively. AGM is subject to the informational requirements of the Exchange Act and in accordance therewith files reports, proxy statements, and other information with the U.S. Securities and Exchange Commission ("SEC"). Certain SEC filings of AGM are available on the company's website, www.assuredguaranty.com. Such reports, proxy statements, and other information may also be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549.

#### **Future Parity Bonds**

The Bond Legislation authorizes the issuance of Future Parity Bonds if:

- (i) there is no deficiency in the Parity Bond Fund or in any of the accounts therein and provision has been made to meet the Reserve Fund Requirement for all Parity Bonds then outstanding plus the proposed Future Parity Bonds, and
- (ii) either:
  - (a) the Director of Finance certifies that Net Revenue in any 12 consecutive months out of the most recent 24 months preceding the issuance of the Future Parity Bonds (the "Base Period") was not less than 125% of maximum Annual Debt Service in any future calendar year on all Parity Bonds then outstanding and the Future Parity Bonds proposed to be issued (except that if any adjustment in the rates, fees, and charges for the services of the Light System will be effective at any time prior to or within six months after the delivery of the proposed Parity Bonds, the Director of Finance will reflect in his or her certificate the Net Revenue he or she calculates would have been collected in the Base Period if such new rates, fees, and charges had been in effect for the entire Base Period), or
  - (b) the City has on file a certificate of a Professional Utility Consultant stating that the Adjusted Net Revenue for the Base Period, calculated as described in the Bond Legislation, is not less than 125% of maximum Annual Debt Service in any future calendar year on all Parity Bonds then outstanding and the Future Parity Bonds proposed to be issued. The Bond Legislation permits the Professional Utility Consultant to adjust Net Revenue based on certain conditions, as described in Section 13(g) of the Bond Ordinance.

See the discussion of the RSA under "Security for the Bonds-Rate Stabilization Account," "Department Financial Information—Financial Policies," and Appendix A—Bond Ordinance—Section 17. See also the discussion of the effect of federal sequestration on the receipt of federal credit payments for the City's outstanding Tax Credit Subsidy Bonds under "Department Financial Information—Debt Service Requirements—Federal Sequestration."

The Bond Legislation authorizes the issuance of Refunding Parity Bonds without the requirement of meeting the above provisions if such issuance does not cause Annual Debt Service to increase by more than \$5,000 in any calendar year. See Appendix A—Bond Ordinance—Section 13(h).

#### **Other Covenants**

In the Bond Legislation, the City has entered into other covenants, including those with respect to the sale or disposition of the Light System and the maintenance and operation of the Light System. See Appendix A—Bond Ordinance—Section 13.

#### **Parity Payment Agreements**

The City may enter into Parity Payment Agreements that constitute a charge and lien on Net Revenue equal to that of the Parity Bonds. A Parity Payment Agreement is a written contract entered into in connection with an issue of Future Parity Bonds, between the City and a Qualified Counterparty, for the purpose of managing and reducing the City's exposure to fluctuations or levels of interest rates or for other interest rate, investment, asset, or liability management purposes that provides for an exchange of payments based on interest rates, ceilings, or floors on such payments, options on such payments, or any combination thereof or any similar device.

The prerequisites described above for the issuance of Future Parity Bonds also apply to the City's incurring obligations under any Parity Payment Agreements. See Appendix A—Bond Ordinance—Sections 1 and 13(g). The City currently has no Parity Payment Agreements in effect.

#### **Rate Stabilization Account**

The RSA has been created as a separate account in the Light Fund. The City may at any time deposit in the RSA Gross Revenues and any other money received by the Light System and available to be used for this purpose. The City may withdraw any or all of the money from the RSA for inclusion in the Net Revenue for any applicable year. Such deposits or withdrawals may be made up to and including the date 90 days after the end of the applicable year for which the deposit or withdrawal will be included as Net Revenue. Additional information about the RSA and the City's current policies regarding funding the RSA may be found under "Department Financial Information—Financial Policies" below. See also Appendix A—Bond Ordinance—Section 17.

### Defaults and Remedies; No Acceleration of the Parity Bonds

The Bond Legislation does not enumerate events of default or remedies upon an event of default. In the event of a default, Bond owners would be permitted to pursue remedies permitted by State law, including the right to bring action against the City to compel the setting aside and payment of the amounts pledged to be paid into the Parity Bond Fund in respect of the then-outstanding Parity Bonds.

The Parity Bonds are not subject to acceleration upon the occurrence of a default. The City is liable for principal and interest payments only as they become due. In the event of multiple defaults in payment of principal of or interest on the Parity Bonds, the registered owners would be required to bring a separate action for each such payment not made. This could give rise to a difference in interests between registered owners of earlier and later maturing Parity Bonds.

#### **Subordinate Lien Obligations**

The City has reserved the right to issue bonds or other obligations with a charge or lien upon the Gross Revenues subordinate to the payments required to be made from Gross Revenues into the Parity Bond Fund and the accounts therein.

The City is also authorized to make interfund loans to the Department for Department purposes from the City's common investment portfolio. See "Department Financial Information—City Investment Pool." Repayment by the Department of such interfund loans would be subordinate to the Parity Bonds.

## **Contingent Obligations**

The City, through the Department, has in the past and may in the future enter into various agreements, such as power purchase agreements or commodity derivative instruments, under which the City may be obligated to make payments or post collateral contingent upon certain future events within or beyond the City's control. Such contingent payment obligations may be treated as operation and maintenance charges payable from Gross Revenues

prior to the payment of principal of and interest on the Parity Bonds. See "Power Resources and Cost of Power—Purchased Power Arrangements" and "—Wholesale Energy Risk Management."

#### SEATTLE CITY LIGHT DEPARTMENT

#### Introduction

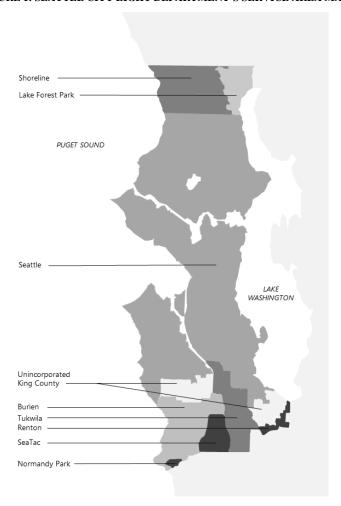
The Department is a municipally-owned electric utility. In 1905, the City began providing its customers with electricity generated by the Cedar Falls Hydroelectric Plant (the "Cedar Falls Project"), which was the first such municipally-owned facility in the nation. By 1910, operational responsibility for the City's electric system had been assigned to the Department. In 1951, the Department purchased from Puget Sound Power and Light Company certain generation, transmission, and distribution facilities serving the City's residents. The Department has operated without competition as the sole retail electricity provider in its service area since the 1951 purchase.

#### Service Area

The Department's 131-square-mile service area, depicted in the map in Figure 1, consists of all territory within the City plus areas extending three to four miles north and south of the City limits. The growth of the Department's electric load since 1951 has resulted exclusively from development within the service area. The population of the Department's service area is approximately 776,000.

Sales to customers located outside the City's boundaries but within the service area represent approximately 16% of retail power sales. See "Department Financial Information—Retail Rates—Rates for Customers Outside the City of Seattle."

FIGURE 1: SEATTLE CITY LIGHT DEPARTMENT'S SERVICE AREA MAP



Source: Seattle City Light Department, Financial Planning Unit

## Management

The Department is a department of the City and is subject to ordinances and resolutions adopted by the City Council and approved by the Mayor. The Mayor and City Council approve the Department's budget, set rates, and approve debt issuance, along with other functions set forth in the City Charter. The Department is under the direction of a General Manager and Chief Executive Officer, who is appointed by the Mayor and confirmed by the City Council, subject to reconfirmation every four years.

The City Light Review Panel (the "Review Panel") was created in March 2010 and replaced the City Light Advisory Committee and the Rates Advisory Committee. City of Seattle Ordinance 123256, which established the Review Panel, specifies the professions and qualifications that the members of the Panel should have. One is to be an economist, preferably with a background in energy economics or commodity risk management. Another is to be a financial analyst, preferably with a background in financing large capital projects. Five are to represent the Department's customer groups: residential, commercial, industrial, suburban franchise, and low income. These representatives should have knowledge and experience in areas such as the electricity industry, financial planning and budgeting, and navigating City government. The other two positions are to be filled by a representative of a non-profit or non-governmental organization whose mission is to advocate for energy efficiency and one at-large representative. Three of these positions are currently vacant.

The Mayor and City Council appoint members of the Review Panel, and the term of appointment is generally three years. The Review Panel is charged with reviewing, assessing, and providing feedback on the Department's Strategic Plan (see "Strategic Plan" below), financial policies, cost allocation, rate design, operational efficiency and

other issues requested by the Mayor or City Council, or that the Review Panel believes the Mayor and City Council should consider.

In early 2016, a new General Manager and Chief Executive Officer was appointed, following retirement of the prior General Manager. As a result, the Department has been reorganized into eight operating units: Financial Services; Customer Service, Communications and Regulatory Affairs; Power Management and Strategic Planning; Environmental; Transmission and Distribution; Energy Generation Operations and Engineering; Engineering and Technology Innovation; and Administrative Services.

Brief descriptions of the backgrounds of certain key officials of the Department are provided below:

Larry Weis, General Manager and Chief Executive Officer, was nominated to this position by Mayor Ed Murray and confirmed by the City Council in March 2016. He has more than 35 years of experience in the electric power and water utility industries, including 26 years as a General Manager and CEO. He has direct experience financing, constructing, and operating hydroelectric, gas, coal, and nuclear generation projects. In addition, he has provided strategic leadership in state and national government relations and regulatory affairs. He has direct experience in numerous FERC licensing issues and regulatory matters and has served on numerous industry boards and speaking panels.

From 2010 till 2016, Mr. Weis was General Manager of Austin Energy in Austin, Texas, a utility that is nationally regarded for its aggressive renewable energy and reliability goals and demonstrated efforts to promote new clean energy technologies, including a successful electric vehicle charging program. He was successful in rebuilding Austin Energy's financial strength and restructuring its rates to provide a sound revenue forecast and rebuild reserves. He resigned this position to join the Department.

Previously, Mr. Weis was the General Manager and CEO for Turlock Irrigation district in Central California from 2000 until 2010, and the General Manager for Pend Oreille County PUD from 1990 until 2000. He began his career in the utility industry with Snohomish PUD in 1981. Prior to his work in the utility industry, he worked for three years for the Boeing Company.

He is a graduate of the School of Engineering and Technology at Western Washington University, where he was a team member of the school's Vehicle Research Institute.

Paula Laschober, Ph.D., Chief Financial Officer, joined the Department in 1986, and served as the Department's Finance Director from 2008 until her appointment in January 2016 as Interim Chief Financial Officer. Prior to joining the Department, she spent eight years as a consultant to utilities with R.W. Beck and Associates, now part of Leidos Engineering. Dr. Laschober holds a master's degree in Business Administration and a Ph.D. in Latin American Literature from the University of Washington.

James Baggs, Customer Service, Communications, and Regulatory Affairs Officer, joined the Department in 2011 as Chief Compliance Officer. Since that time, he has also served as the Interim Power Supply and Environmental Affairs Officer and the Interim General Manager and Chief Executive Officer. Prior to joining the Department, he was the Director of Regulatory Compliance at Idaho Power Company, where he also held a variety of positions including Manager of Rates and Contracts, General Manager of Customer Service and Metering, General Manager of Regional Operations, and General Manager of Grid Operations and Planning. Mr. Baggs holds a bachelor's degree in Economics from the University of Colorado and a master's degree in Agricultural and Natural Resource Economics from the University of Arizona.

Michael Jones, P.E., Power Supply and Strategic Planning Officer, was appointed to this position in 2013. Previously, he owned his own business, CEO Focus, which provided executive coaching, management consulting, and technical consulting services to non-profit and energy industry organizations. Prior to that, he spent 12 years with The Energy Authority in both Jacksonville, Florida, and Bellevue, Washington. He began his career as an Officer with the U.S. Navy. Mr. Jones holds a bachelor's degree in Mechanical Engineering from Ohio State University and a master's degree in Business Administration from the University of North Florida.

Lynn Best, Ph.D., Chief Environmental Officer, joined the Department in 1982 as a Senior Environmental Analyst. Since that time, she has been promoted to a manager position in Environmental Affairs and then to the position of Director of Environmental Affairs and Real Estate. Dr. Best received her Bachelor of Science degree from the Massachusetts Institute of Technology and her doctorate from the University of Washington.

Bernie Ziemianek, Ph.D., Transmission and Distribution Officer, joined the Department in 2006 as Energy Delivery Operations Director. Prior to joining the Department, he was the Public Utility Director for The City of Ukiah, California, and the Director of Research and Development for the Electric Power Research Institute ("EPRI") in the areas of Transmission and Distribution, Renewables, and Advanced Grid Infrastructure Technologies. Before joining EPRI, he worked for Pennsylvania Power and Light Company, where he held a variety of positions. Mr. Ziemianek holds a bachelor's and doctorate degree in Electrical Engineering from Drexel University, a master's degree in Electrical Engineering from Lehigh University, and an Executive MBA from Duke University.

Michael Haynes, P.E., Energy Generation Operations and Engineering Officer, was appointed to this position in May 2016. He joined the Department in 2000 and previously held the title of Director of Power Production. He has an extensive background in hydroelectric power generation and engineering. Prior to joining the Department, he served in program management and engineering roles at HDR, Inc., and Puget Sound Energy. Mr. Haynes holds a bachelor's degree in Mechanical Engineering from Seattle University.

Sephir Hamilton, Interim Engineering and Technology Innovation Officer, joined the Department in 2013 as Chief of Staff. Prior to this position, he was Director of Operational Excellence at Central Hudson Gas & Electric Corp. in New York. He also worked as an engineer and investment officer at the utility. He began his career with Arthur D. Little, Inc. in Cambridge, Massachusetts, where he worked on energy-efficiency standards for the U.S. Department of Energy. Mr. Hamilton holds a master's degree in Business Administration from Cornell University, a Master of Science degree in Engineering from the Massachusetts Institute of Technology, and a Bachelor of Science degree in Engineering from Clarkson University.

DaVonna Johnson, Chief Administrative Services Officer, joined the Department in 2004 and was appointed to her current position in 2009. Prior to her appointment to this position, she served as the Talent Acquisition and Development Manager in Human Resources. Before joining the Department, she worked for the City for five years and has worked in both the public and private sectors. Ms. Johnson has bachelor's and master's degrees in Business Administration from Washington State University.

#### **Department Employment and Labor Relations**

As of May 2016, the Department had approximately 1,764 authorized full-time equivalent positions. Department employees participate in the City's pension plan and other post-employment retirement benefits. See "The City of Seattle—Pension Plans" and "—Other Post-Employment Benefits," and Appendix C—2015 Audited Financial Statements of the Department—Notes 11 and 12.

State law requires municipal agencies to bargain in good faith with the recognized bargaining agents. Approximately 91% of the Department's regular full-time employees are represented by labor unions. Most of the Department's 15 labor unions are part of the Coalition of City Unions. See "The City of Seattle—Labor Relations."

In April 2016, the new Seattle Information and Technology Department ("Seattle IT") became responsible for the delivery of information technology ("IT") services for the entire City government, including the Department. As a result of this reorganization, the Department's existing IT staff of approximately 104 full-time employees, or approximately 5% of the existing workforce, was transferred to Seattle IT. The Department continues to work with Seattle IT to execute a successful transition.

Approximately half of the Department's workforce is eligible to retire in the next five years. The Department currently has workforce development programs in place to reduce its attrition risk. The highest retirement risk is in the engineering staff, followed by skilled trades. The Department has a robust internship program that currently enrolls more than 80 high school and college students. The Department operates its own apprenticeship program to ensure that it has high voltage workers available to meet the Department's needs. Currently 80% of the existing skilled trade workers were trained through the Department's apprenticeship program.

#### Strategic Plan

The City Council unanimously approved the Department's 2017-2022 Strategic Plan Update on July 25, 2016. The fundamentals of this Strategic Plan remain unchanged from the prior Strategic Plan. The Strategic Plan Update calls for rate increases averaging 4.3% annually from 2017 to 2022, excluding any Bonneville Power Administration ("BPA") pass-throughs or RSA surcharges. Rates increases for 2017 and 2018 were higher than the average, at 5.6% per year. The rate plan is based on certain assumptions, including that demand for electricity will increase 0.3% per year during the period 2017-2022 and inflation and wholesale prices will remain low. See "Department Financial Information—Retail Rates—Rate Changes—2010-2016," "—Management Discussion of Historical Operating Results 2011-2015—Operating Revenues—2015 vs. 2014," and "Security for the Bonds—Rate Stabilization Account."

The Strategic Plan Update includes initiatives aimed at repairing aging infrastructure and acquiring new infrastructure to meet future customer needs; improving the customer's experience and rate predictability, including improving customer service interactions and customers' ability to manage their own electrical use in real time; continuing conservation and environmental stewardship leadership; meeting the increased cost of compliance with renewable energy Initiative 937 ("I-937") and mandatory North American Electric Reliability Corporation ("NERC") reliability standards; and increasing workforce performance and safety practices. These initiatives are consistent with the previous Strategic Plan Update approved in 2014 and are reflected in the Department's adopted Capital Improvement Program ("CIP") for 2016-2021. See "Capital Requirements."

The adopted Strategic Plan resolution directs the Department to study its declining retail load in efforts to stabilize financial performance. See "Management Discussion of Historical Operating Results 2011-2015," and "Expectations for 2016 Operating Results." The retail load study will help develop policy changes that would be included in the 2019-2024 Strategic Plan. Some of the areas of study would include a review of load forecasting models, impacts of appliance standards, and changes in customer end-use characteristics. Policy changes that will be evaluated may include changes to load forecasting methods, restructuring of retail rate design, expanding the RSA mechanism to include some or all of retail revenue, and utility rate decoupling.

#### **Enterprise Risk Management and Emergency Response**

The Department has an Enterprise Risk Management program designed to assess and report on the organization's strategic readiness, by tracking risk factors relating to strategic and corporate goals. All divisions of the Department provide input into the Enterprise Risk Management framework, including Emergency Response, Business Continuity, and Cyber Security.

The Department has an active Emergency Response Program that meets Federal Emergency Management Agency ("FEMA") standards and conducts semi-annual exercises and testing of its emergency response program. The Department's Continuity of Operations Plan defines the Department's program to prepare for, prevent, respond to, and recover from an emergency. It establishes a response organization structure (consistent with the National Incident Management System and Incident Command System structure) designed to enhance coordination with other agencies and improve outage restoration responses. An Incident Management Team, comprised of approximately 240 trained management and staff members, can be activated during any increased readiness mode and serves the function of managing the Department's emergency response activities.

Due to the City's known seismic risk, the Department maintains a seismic hazard assessment program for substations and facilities consistent with requirements identified in the International Building Code. As upgrades and/or improvements are made to these substations and facilities, appropriate seismic mitigation features are incorporated into the new or upgraded features. The seismic hazard assessment also includes a method for establishing priorities within the Department's service territory. Similar attention is applied to the generation facilities as part of ongoing Federal Energy Regulatory Commission ("FERC") licensing and reporting obligations.

Cyber attacks continue to become more sophisticated and are increasingly capable of impacting control systems and components. The Department, working in conjunction with the Seattle IT department, has instituted processes, training, and controls to maintain the reliability of its systems and protect against cyber threats as well as mitigate intrusions and plan for business continuity via data recovery. Steps taken by the Department include hardening

Department networks and systems, isolating command and control systems from the Internet or hardening security protocols where isolation is not feasible, network surveillance, and controlling access to systems. The Department is in compliance with the cyber security standards mandated by NERC. See "Transmission and Distribution—Federal Regulations." The Department regularly conducts voluntary cyber security assessments with the intent to identify areas for continual improvement. These findings are integrated into a work program that forms the basis of its cyber security program. A new version of Critical Infrastructure Protection Standards went into effect in July 2016. This is the next evolution of the NERC oversight of Critical Utility Infrastructure. For the Department, this latest version brought into scope additional facilities due to their level of interconnection with the Bulk Electric Transmission System. With additional facilities now subject to this set of standards comes additional documentation and controls that will be administered by various subject matter experts across the Department. The City is fully compliant as of the July 2016 deadline.

Physical attacks on critical energy infrastructure also present an increased concern to the electric utility industry. The Department's physical security program includes extensive measures for physical protection, including on-site security officers, fences, camera systems, access control, security monitoring by the Security Monitoring Center, and extensive mobile patrol presence. The Department has developed a number of security processes in collaboration with local, regional, and federal law support and actively shares best practices with national, regional and local electrical utility security departments.

The Department has formalized its information technology, business continuity, and disaster recovery program. The Department has built and currently conducts operations from an out-of-region co-located data center, and instituted various iterative processes in support of Departmental resiliency and rapid recoverability.

City hydroelectric generation and transmission equipment and certain other utility systems and equipment are not covered by a property insurance policy. See "The City of Seattle—Risk Management."

#### POWER RESOURCES AND COST OF POWER

#### **Overview of Resources**

The Department has three major power sources: the Boundary Hydroelectric Project (the "Boundary Project"), the Skagit Hydroelectric Project, which includes the Ross, Diablo and Gorge hydroelectric plants (the "Skagit Project"), and a long-term contract with BPA. Together, these three sources provide approximately 113% of the energy needed to meet the Department's retail demand under average water conditions. Under critical water conditions, the Department's owned and contracted resources are sufficient to meet 100% of retail sales on an annual basis. Critical water conditions are defined as the lowest water conditions observed for 12 consecutive months during the period 1929 to 2008. The critical period for the Boundary Project and federal dams remarketed by BPA is 1936-1937; the critical period for the Skagit Project is 1943-1944. The Boundary Project and the Skagit Project together include four large hydroelectric facilities and, combined with three small hydroelectric facilities (the Newhalem Creek Hydroelectric Project (the "Newhalem Project"), the Cedar Falls Project, and the Tolt River South Fork Hydroelectric Project (the "Tolt Project")), generated approximately 6.0 million megawatt hours ("MWh") of electrical energy in 2015, which was about 42% of the Department's total resources. Like most hydroelectric projects in the U.S., all of the Department's hydroelectric plants except the Cedar Falls Project are licensed by FERC. See Table 1—Owned and Purchased Power Resources for 2016. Output from the Department's hydroelectric plants can vary significantly from year to year due to the variability in water conditions.

The Department and 15 other public and investor-owned utilities in the Pacific Northwest have agreed to coordinate the operation of their power generation systems through the Pacific Northwest Coordination Agreement (the "Coordination Agreement"), in order to maximize the firm capability and reliability of the coordinated system. The Coordination Agreement went into effect in 1965 and terminates in 2024. The Department is also considering whether to join the California Independent System Operator's Energy Imbalance Market ("EIM"), following the collapse in 2015 of efforts to form a similar Northwest regional market.

Table 1 lists the Department's owned and contracted power resources as of December 15, 2015, and gives estimates of output under critical and average water conditions based on historical data. The owned and purchased resources comprising the Department's supply portfolio in 2016 were nearly identical to the resources in 2015. Table 2 provides actual output for power resources, including exchanges and market sales and purchases, for the past five years. Table 3 provides actual payments by the Department for contracted resources. The Department does not assign individual capital or debt service allocations to Department-owned resources and, therefore, does not calculate a comprehensive cost of power for each resource. See "Wholesale Market Sales and Purchases" for a discussion of the outlook for the 2016 water year and market prices.

TABLE 1
OWNED AND PURCHASED POWER RESOURCES FOR 2016
(as of December 15, 2015)

	Nameplate	<b>Energy Available Under</b>	<b>Energy Available Under</b>		
	Capability	Critical Water	Average Water	Year FERC	Year
_	(MW)	Conditions (MWh) <sup>(1)</sup>	Conditions (MWh) <sup>(2)</sup>	License Expires	Contract Expires
Department-Owned Resources					
Boundary Project <sup>(3)</sup>	1,048	2,610,772	3,423,010	2055	N/A
Skagit Project					
Gorge	173	698,908	985,370	2025	N/A
Diablo	169	583,618	818,494	2025	N/A
Ross	460	556,352	828,565	2025	N/A
Small Hydro Projects <sup>(4)</sup>	48	121,000	135,264	Varies	N/A
Department's Share of Purchased R	Resources				
BPA Block	(5)	2,349,845	2,349,845	N/A	2028
BPA Slice	(5)	2,324,862	2,682,195	N/A	2028
Priest Rapids (6)	6	16,540	23,470	2052	2052
CBH <sup>(7)</sup>	64	233,598	240,039	2030/2032	2022/2027
High Ross <sup>(8)</sup>	72	310,225	310,271	N/A	2066
Lucky Peak (9)	113	236,817	293,359	2030	2038
Stateline (10)	175	N/A	371,162	N/A	2021
Small Renewables (11)	20	N/A	205,772	N/A	Various

- (1) Critical water conditions represent the lowest sequence of streamflows experienced in the Pacific Northwest over a historical period of record (1929-2008). The firm energy capability of hydroelectric resources is the amount of electrical energy produced under critical water conditions, current operating constraints, generation technology, and availability. Actual water conditions would be expected to be better than critical water conditions about 95% of the time.
- (2) Figures in this column represent the average historical amount of electrical energy that would be produced over all of the water conditions in the period 1929-2008.
- (3) Amounts are net of the 48 megawatts ("MW") obligated to Public Utility District No. 1 of Pend Oreille County ("Pend Oreille PUD") under contract between the Department and Pend Oreille PUD. See "Department-Owned Resources—Boundary Project."
- (4) Includes the Newhalem Project (FERC license expires in 2027), the Cedar Falls Project (not subject to FERC licensing requirements), and the Tolt Project (FERC license expires in 2029).
- (5) The Department does not own a fixed percentage of nameplate capacity. See "Purchased Power Arrangements—Bonneville Power Administration." Figures reflect the percentage of the Federal System allocated to the Department in the current two-year BPA rate period. This percentage may vary from rate period to rate period, but such variances typically are not substantial.
- (6) Priest Rapids is comprised of the Priest Rapids and Wanapum dams on the Columbia River and is owned and operated by Public Utility District No, 2 of Grant County ("Grant PUD").
- (7) Columbia Basin Hydropower ("CBH") (formerly Grand Coulee Project Hydroelectric Authority), the Department's 50% share of installed capacity of five hydroelectric plants, has varying FERC license expiration dates. The plants are part of an irrigation project and do not provide capacity in the Department's winter peak period.
- (8) The Department's contract with British Columbia provides capacity from November through March in an amount equal to 532 MW minus the actual peak capability of the Ross Plant for each week, which varies between 50 and 150 MW depending on water conditions.
- (9) The project is part of an irrigation project and does not provide capacity in the Department's winter peak period.
- (10) The project is not a hydroelectric project; therefore, average output is based on historic performance under the contract.
- (11) Small renewables are Columbia Ridge, SPI-Burlington, and King County West Point. See "Purchased Power Arrangements." Average output is based on historic performance under the contract.

Source: Seattle City Light Department, Power Production Division and Power Contracts and Resource Acquisition Division

TABLE 2
HISTORICAL ENERGY RESOURCES
(MWh)

	2011	2012	2013	2014	2015
Department-Owned Generation					
Boundary Project	4,499,134	3,802,251	3,465,890	4,249,957	3,469,855
Skagit Hydroelectric Project					
Gorge	1,094,529	1,081,349	955,265	1,057,865	953,628
Diablo	920,969	937,646	828,200	857,757	775,025
Ross	870,310	939,943	726,560	796,513	684,687
Cedar Falls/Newhalem	111,959	122,615	77,397	65,687	47,571
South Fork Tolt	50,004	63,284	55,596	63,589	49,118
Subtotal	7,546,905	6,947,088	6,108,908	7,091,368	5,979,884
Energy Purchases					
Bonneville	6,214,839	5,633,906	5,079,991	5,155,271	4,971,459
Priest Rapids	32,285	36,381	33,205	21,961	23,698
CBH (formerly GCPHA)	237,785	255,569	254,568	272,842	258,678
High Ross	313,817	308,365	312,350	307,873	310,102
Lucky Peak <sup>(1)</sup>	388,786	401,400	215,587	308,334	278,001
Stateline Wind Project	413,697	365,192	363,099	357,325	299,551
Columbia Ridge <sup>(2)</sup>	50,120	49,779	51,577	68,920	94,271
Seasonal and Other Exchange <sup>(3)</sup>	276,656	100,782	69,940	411,555	664,887
Wholesale Market Purchases <sup>(4)</sup>	1,696,861	2,592,354	2,072,066	900,527	1,379,168
Subtotal	9,624,846	9,743,728	8,452,383	7,804,608	8,279,815
Total Department Resources	17,171,751	16,690,816	14,561,291	14,895,976	14,259,699
Minus Offsetting Energy Sales					
Firm Energy Sales and Marketing Losses <sup>(5)</sup>	439,013	491,724	421,375	393,844	331,897
Seasonal and Other Exchange <sup>(3)</sup>	476,488	491,980	236,864	507,117	692,073
Wholesale Market Sales <sup>(6)</sup>	6,053,258	5,625,088	3,854,352	4,083,391	3,548,507
Total Net Energy Resources <sup>(7)</sup>	10,202,992	10,082,024	10,048,700	9,911,624	9,687,222

<sup>(1)</sup> Purchases from Lucky Peak were lower in 2013 due to an outage.

Source: Seattle City Light Department, Accounting Division

<sup>(2)</sup> The Columbia Ridge project was expanded in August 2014, effectively doubling the output.

<sup>(3)</sup> Includes exchange contracts such as those involving the Northern California Power Agency ("NCPA"), Sacramento Municipal Utility District ("SMUD"), Grant County, and Lucky Peak exchange.

<sup>(4)</sup> Purchases to compensate for low water conditions and to balance loads and resources.

<sup>(5)</sup> Energy provided to Pend Oreille PUD under an agreement to support the Boundary Project's FERC license. Figures on this line also include incremental transmission losses due to expanded activity in the wholesale market.

<sup>(6)</sup> Wholesale market sales are highly dependent on regional hydro flows. Regional hydro flows measured at The Dalles Dam on the Columbia River between January and July were 133% in 2011, 121% in 2012, 96% in 2013, 104% in 2014, and 89% in 2015.

<sup>(7)</sup> Effective for 2014, total energy net resources represent system load vs. net load, to align with industry practice. Accordingly, prior years presented have been revised.

TABLE 3
COST OF CONTRACTED POWER SUPPLY RESOURCES
(\$000)

	2011	2012	2013	2014	2015
BPA (1)	\$ 151,607	\$ 145,986	\$ 146,832	\$ 152,282	\$ 153,176
Priest Rapids	3,126	2,981	2,977	3,174	3,163
CBH (formerly GCPHA)	4,444	5,360	5,441	6,047	6,642
High Ross	13,423	13,430	13,430	13,439	13,445
Lucky Peak	6,809	7,255	5,186	6,289	6,278
State Line Wind Project	21,844	24,256	23,830	23,686	20,787
Columbia Ridge - Biogas	2,685	2,720	3,063	5,469	6,929
SMUD - Biomass	2,379	1,731	1,464	1,628	1,810
Seasonal and Other Exchange (2)	3,821	2,873	4,640	4,330	9,421
Total	\$ 210,138	\$ 206,592	\$ 206,863	\$ 216,344	\$ 221,651
Contracted Resources (MWh)	7,927,985	7,151,374	6,380,317	6,904,081	6,900,647
Average Unit Cost (Dollars/MWh) (3)	\$ 26.96	\$ 28.89	\$ 32.05	\$ 32.66	\$ 32.71

<sup>(1)</sup> Net of billing credits received from BPA for the Tolt Project.

Source: Seattle City Light Department, Accounting Division

#### **Department-Owned Resources**

The Department owns and operates the Boundary Project in northeastern Washington, the Skagit Project in western Washington, and three smaller hydroelectric plants in western Washington: the Newhalem Project, the Cedar Falls Project, and the Tolt Project.

Dam Safety. The Department intends to operate, manage, and maintain its dams in a safe manner as described in FERC's Owners Dam Safety Program. The Department regularly inspects all its projects to ensure safety, and has current Emergency Action Plans, Monitoring Plans, and Safety Plans for all its dams. FERC requirements apply at the Boundary, Skagit, and Tolt Projects.

The Boundary Project. The Boundary Project is located on the Pend Oreille River in northeastern Washington near the British Columbia and Idaho borders, approximately 250 miles from Seattle. The plant was placed in service in 1967 and is a significant contributor to the Department's ability to meet its load requirements. The Boundary Project has a current nameplate capability of 1,048 MW and expected power output of 3.4 million MWh under average water conditions. The Department proposed to amend the FERC license and revise the annual charges due to recent efficiency upgrades to two of the generating units, which are expected to be complete in 2017 and to increase the nameplate to 1,144 MW. The Department delivers up to 48 MW of energy to Pend Oreille PUD. Net of this obligation, the nameplate capability of the Boundary Project is 1,096 MW and the expected power output is more than 3.6 million MWh, under average water conditions. The Boundary Project provides between 20% and 30% of the Department's total resource requirements and supplied approximately 24% of the Department's total resources in 2015.

The Department received a new license from FERC for the Boundary Project in 2013. The new license has a 42-year term and incorporates the terms and conditions of a settlement filed by the Department in 2010 (the "Settlement") among the Department, the Bureau of Indian Affairs, the National Park Service, the U.S. Fish and Wildlife Service ("USFWS"), the U.S. Forest Service, the Kalispel Tribe, the Washington State Department of Fish and Wildlife ("WDFW"), the Washington State Department of Ecology ("Ecology"), The Lands Council, American Whitewater, the Selkirk Conservation Alliance, and Pend Oreille PUD (collectively referred to as the "Settlement").

<sup>(2)</sup> Includes exchanges with NCPA, SMUD, Grant PUD, and Lucky Peak exchange.

<sup>(3)</sup> Average cost of contracted power supply resources excluding exchanges and wholesale market purchases.

Parties"). Pend Oreille PUD is the licensee for the Sullivan Lake Hydroelectric Project (the "Sullivan Lake Project"), which is adjacent to the Boundary Project. As part of the Settlement, Pend Oreille PUD agreed to surrender to FERC the license for the Sullivan Lake Project, and the Department and Pend Oreille PUD will decommission the Sullivan Lake Project. The Settlement and new license conditions made no material changes to previous operations at Boundary Dam, which is a significant benefit to the Department's customers, given the load-following nature of operations at the Boundary Project described below. Pursuant to the Settlement and FERC license conditions, the Department will build facilities at the Boundary Project to improve Boundary Dam survival of target species (Bull Trout, Westslope Cutthroat Trout, and Mountain Whitefish) or implement appropriate non-operational measures to improve survival of target species, construct upstream passage, improve the habitat condition and function of tributaries draining to Boundary Reservoir, acquire land for wildlife habitat restoration and management, construct a native fish propagation facility, and construct improvements to improve water quality. The levelized cost of these measures over the license term is estimated to be less than \$4/MWh in 2009 dollars. A portion of the Department's CIP includes the environmental and other improvements to the Boundary Project that meet the requirements of the Settlement and FERC license. The various mitigation provisions included in the FERC license will be implemented over the term of the license. See "Capital Requirements."

The Settlement also seeks to minimize the impact of the Sullivan Lake Project surrender proceeding on the Pend Oreille PUD ratepayers, while at the same time preserving the Department's operational flexibility at the Boundary Project. An important aspect of the Boundary Project's value to the Department and the region is its flexibility and reliability; the Boundary Project can ramp up or down quickly within the hour and in immediate response to customer demand. The tributary restoration measures that the Department proposes to undertake in Sullivan Creek, the most important tributary to Boundary Reservoir, together with other protection, mitigation, and enhancement measures described in the Settlement, will provide substantial natural resource benefits.

The Department has historically delivered up to 48 MW of energy to Pend Oreille PUD at the Boundary Project's production cost. The Department has agreed to continue delivery to Pend Oreille PUD at this level through the term of the new FERC license for the Boundary Project.

In 2010, the Department and Pend Oreille County reached agreement on impact payments related to the Boundary Project for 2010-2019. The Department will pay a total of \$19 million, to be paid in quarterly payments over a tenyear period that began in 2010, to Pend Oreille County and other affected local governments and school districts. Pend Oreille County supported FERC's issuance of a license consistent with the Settlement.

As authorized in the High Ross Agreement (described below under "Skagit Project"), British Columbia Hydro ("B.C. Hydro") increased the reservoir elevation of its Seven Mile Project on the Pend Oreille River in 1988, thereby extending its reservoir across the international border to the tail-race of the Boundary Project. A contract between the City and B.C. Hydro was signed in 1989 to provide energy to the Department in the amount of the encroachment of Seven Mile Reservoir on the Boundary Project concurrent with the High Ross Agreement. In 2015, this encroachment amounted to 0.5% of the Boundary Project's electrical energy output.

By December 2015, the Department had completed the FERC-required five-year and annual dam safety inspections at the Boundary Project and identified new Potential Failure Modes ("PFMs") to focus surveillance, monitoring, and prioritized improvements. The dam was determined to be safe for operations. The Department will continue to work with FERC and an independent consultant team on future studies and analysis to ensure continued safe operations of the Boundary Project. Daily, weekly, and monthly visual inspections and quarterly manual readings of all instruments are conducted by the Department's dam safety staff. Annual dam safety inspections are performed by FERC.

See "Environmental Matters—Endangered Species Act" for a discussion of the impact of the Endangered Species Act on the Boundary Project. See "Purchased Power Arrangements—Columbia River Treaty" for a discussion of potential impacts to Boundary Project operations.

*Skagit Project.* The Gorge, Diablo, and Ross hydroelectric plants, which comprise the Skagit Project, began operation in 1924, 1936, and 1952, respectively. The Skagit Project is located on a ten-mile stretch of the Skagit River above Newhalem, Washington, approximately 120 miles northeast of Seattle. Power is delivered to the

Department's service area via two double-circuit Department-owned 230,000-volt transmission lines. The Ross Plant, located upstream of the other two projects, has a reservoir with usable storage capacity of 1,052,000 acre-feet. Because the Diablo Plant, with usable storage capacity of 50,000 acre-feet, and the Gorge Plant, with usable storage capacity of 6,600 acre-feet, are located downstream from the Ross Dam, their operation is coordinated with water releases from the Ross Reservoir, and the three plants are operated as a single system. The combined nameplate capability of the three plants is 802 MW. Expected power output under average water conditions is 2.6 million MWh. The Skagit Project supplied approximately 17% of the Department's total resources in 2015.

The three plants that comprise the Skagit Project are licensed as a unit by FERC under a license that expires in 2025. The Department expects to begin the relicensing process in 2017. As a condition of the FERC license, the Department has taken and will continue to take various mitigating actions relating to fisheries, wildlife, erosion control, archaeology, historic preservation, recreation, and visual quality resources. Independent safety inspections of the Skagit Project in 2011 required by the FERC license revealed no dam safety issues and provided a few minor maintenance items to be addressed prior to the next inspection scheduled for 2016. In 2016, the Department began the FERC-required five-year independent consultant inspection of the Skagit Project, with a focus on new PFMs. Daily, weekly, and monthly visual inspections and quarterly manual readings of all instruments are conducted by the Department's dam safety staff. Annual dam safety inspections are performed by FERC.

Although the original plans for the Skagit Project included raising the height of Ross Dam by 122.5 feet to maximize the hydroelectric potential of the plant, the Canadian province of British Columbia protested on environmental and other grounds. After a protracted period of litigation and negotiation, an agreement (the "High Ross Agreement") was reached under which British Columbia agreed to provide the Department, for 80 years commencing in 1986, with power equivalent to the planned increase in the output of the Ross Plant in lieu of the Department's construction of the addition in exchange for payments from the City, as described in the following paragraph. The agreement is subject to review by the parties every ten years. The most recent review concluded in 1998 and did not result in any changes to the agreement. All parties mutually waived the 2009 periodic review.

The Department's annual payments to British Columbia include a fixed charge of \$21.8 million annually through 2020, which represents the estimated debt service costs that would have been incurred had the addition been constructed and financed with bonds. In 2000, the Department began deferring \$9.1 million of the total \$21.8 million annual payment, and will start amortizing the deferred portion over 15 years starting in 2021. Payment of equivalent maintenance and operation costs and certain other charges began in 1986 and will continue for 80 years. The power delivered from B.C. Hydro under this agreement amounted to 310,102 MWh in 2015. The Department's contract with British Columbia provides capacity from November through March in an amount equal to 532 MW minus the actual peak capability of the Ross Plant, which fluctuates with reservoir levels and the number of units in service, and from April through October in an amount up to 150 MW minus system losses.

If British Columbia discontinues power deliveries, the High Ross Agreement authorizes the Department to proceed with the originally proposed construction and obligates British Columbia to return to the Department sufficient funds to permit the Department to increase the height of Ross Dam and make other improvements as originally proposed. This obligation has been guaranteed by the government of Canada.

In August 2015, the Goodell Creek wildfire burned approximately 8,000 acres over several days and threatened the Skagit Project. Department employees in the town of Diablo were temporarily evacuated, and thick smoke in the air caused arcing which forced the shutdown of major 230 kV transmission lines connected to the Skagit Project. The Department spilled and purchased supplemental power and reserves. The fire never reached the project, but damage was sustained to a distribution tower, feeder and communication lines, and a portion of the wooden penstock. As of July 2016, costs for repairs, firefighting, evacuation, and emergency management are estimated at \$2.5 million. FEMA reimbursements are expected to offset approximately 75% of this cost, with insurance and State funds covering a portion of the remaining cost. Supplemental energy purchases to make up for stranded generation and capacity due to the fire are estimated at about \$1.0 million. All costs associated with the fire were expensed in 2015. Prior to and since this wildfire incident, the Department has been integrating best management practices for reducing wildfire risk in areas within and adjacent to company towns, generation sites, and transmission rights of way. These practices are designed to reduce the potential wildfire risk for the Department's remote infrastructure.

Small Hydro.

CEDAR FALLS PROJECT. The Cedar Falls Project, built in 1905, is located on the Cedar River, approximately 30 miles southeast of Seattle. The Cedar Falls Project was constructed before the adoption of the Federal Water Power Act of 1920 and is not subject to licensing by FERC, making it a State-jurisdictional project under Ecology. Cedar Falls Project power is delivered through an interconnection with Puget Sound Energy. The nameplate capability of the plant is 30 MW. Power production in 2015 at the Cedar Falls Project was 47,571 MWh. As a State-jurisdictional project, the Cedar Falls Project is not required to have independent inspections. However, the Department chose to conduct an independent inspection in 2013 and received the final report on the project in August 2014. The report concluded that the project is suitable for continued safe and reliable operation, with some recommendations that the Department is implementing. The most recent periodic inspection by the State was conducted in 2011 and concluded that the project was in good condition and safe for operations. The next inspection is planned for 2018. Daily, weekly, and monthly visual inspections, and drain measurements are performed by the Department and Seattle Public Utilities ("SPU") crews.

NEWHALEM PROJECT. The Newhalem Project is located on Newhalem Creek, a tributary of the Skagit River, and was built in 1921 to supply power for the construction of the Skagit Project. The plant was rebuilt and modernized in 1970. It is operated under a FERC license that expires January 31, 2027. The plant's power is delivered over Department-owned transmission lines. The nameplate capability of the plant is 2.3 MW. The Newhalem Project did not generate in 2015, due in part to the Goodell Creek fire. Plans to repair the facility and return it to operations are underway. Five-year inspections by FERC are not required of the Newhalem Project, due to its size and low criticality. In-house review of the project is performed annually, and the project is in good condition.

TOLT PROJECT. The Tolt Project is located approximately 30 miles east of Seattle on the south fork of the Tolt River and was placed in commercial operation in 1995. The Tolt Project operates under a 40-year FERC license which expires in 2029. The nameplate capability of the installed unit is 16 MW. Power production at the Tolt Project in 2015 was 49,118 MWh. To reduce its cost of power from the Tolt Project, the Department entered into a Billing Credits Generation Agreement with BPA in 1993, under which BPA makes payments to the Department that have the effect of making the cost of power from the Tolt Project approximately equal to the cost of equivalent power from BPA. This agreement expires in 2028. Payments to the Department under the agreement commenced in 1996 and amounted to \$3.4 million in 2015. Without this agreement, the cost of power would still be very low, as debt service has been paid off and the only expenses are associated with operations and capital refurbishment. The most recent FERC-mandated dam safety inspections, completed in 2012, concluded that the Tolt Project was in good condition. The next inspection is scheduled for 2017. Daily, weekly, and monthly visual inspections and manual readings of all instruments are conducted by SPU dam safety staff. Annual dam safety inspections are performed by FERC.

## **Purchased Power Arrangements**

In 2015, the Department purchased approximately 48% of its total resources from other utilities and energy suppliers in the region, including BPA, under long-term purchase contracts. Some of these contracts obligate the Department to pay its share of the costs of the generating facilities providing the power, including debt service on bonds issued to finance construction, whether or not it receives any power. The Department treats payment of such costs as part of its purchased power expense and includes such costs in its operating and maintenance expenses. See "Security for the Bonds—Pledge of Revenue."

The Department regularly purchases power under the WSPP Inc. (formerly Western Systems Power Pool) Agreement and the Block and Slice Power Sales Agreement with BPA, described below under "Bonneville Power Administration." Some of those agreements include an obligation on the part of the Department to post collateral contingent upon the occurrence or nonoccurrence of certain future events, such as future credit ratings or payment defaults. The Department also has entered into, and may in the future enter into, agreements that include an obligation on the part of the Department to make payments or post collateral contingent upon the occurrence or nonoccurrence of certain future events that are beyond the control of the Department. Such contingent obligations

are permitted to be characterized as maintenance and operation charges and would be payable from Gross Revenues of the Department prior to the payment of Parity Bond debt service.

Bonneville Power Administration. BPA markets power from the Federal Columbia River Power System (the "Federal System"), comprised of 31 federal hydroelectric projects, several non-federally-owned hydroelectric and thermal projects in the Pacific Northwest region, and various contractual rights. Currently, under low water conditions, approximately 8,136 average annual megawatts are available annually for sale, at BPA's lowest cost rate to preference customers, including the Department. One average annual megawatt ("aMW") is the number of megawatt hours of electric energy used, transmitted, or provided over the course of a year and is equal to 8,760 MWh. The federal hydroelectric projects are built and operated by the U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers (the "Corps"), and are located primarily in the Columbia River basin. The Federal System currently produces more than 33% of the electric power consumed in the region. BPA's transmission system includes over 15,000 circuit miles of transmission lines and provides about 75% of the high-voltage bulk transmission capacity in the Pacific Northwest. Its service area covers over 300,000 square miles and has a population of about 12 million.

Federal law requires BPA to meet certain firm loads in the Pacific Northwest placed on BPA by contract by various preference customers. BPA sells electric power at cost-based wholesale rates to more than 125 utility, industrial, and governmental customers in the Pacific Northwest. In its wholesale power sales, BPA is required by law to give preference to consumer- or publicly-owned utilities and to customers in the Pacific Northwest region.

The Department's Power Sales Agreement with BPA provides for purchases of power by the Department over the 17-year period beginning October 1, 2011. Power is delivered in two products: a shaped block product ("Block"), which is power provided in pre-determined amounts at pre-determined times, and a slice of the system product ("Slice"), which is a proportionate amount of power if, as, and when generated by the Federal System. The Department's Slice and Block deliveries are approximately equal on an annual basis. Currently, the Department receives 269 aMW of the Block power annually, reduced by the amount of conserved energy savings purchased by BPA from the Department. See "Conservation." The Department's Slice product provides it with a fixed 3.62643% of the actual output of the Federal System for federal fiscal year ("FFY") 2016 and obligates the Department to pay the same percentage of the actual costs of the Federal System. Under critical water conditions, the Slice purchase amounts to 265 aMW over the year. Power available under the Slice product varies with water conditions, federal generating capabilities, and fish and wildlife restoration requirements. The Department may resell output from the Slice product under specified conditions and may use the Slice product to displace Department generation. The BPA contract requires prior notice by the Department before the Department may use, or discontinue using, a generating resource to serve the Department's own firm loads.

Under the BPA Block and Slice contract, the Department expects to be able to purchase annually approximately 534 aMW under critical water conditions and 591 aMW under average water conditions. BPA purchases accounted for approximately 35% of the Department's resources in 2015. The Department has an option under the Power Sales Agreement to switch products, and has requested a switch to 100% Block and that the change be made effective October 1, 2017, which is earlier than the contract specified date. BPA is considering the Department's request, although the timing of its decision is not known. BPA will consider the product switch in the BP-18 rate case.

Under the BPA contract, the amount of power that BPA's preference customers (including the Department) may purchase under BPA's lowest cost rate (the "Tier 1 Rate") is limited to an amount equal to the generating output of the current Federal System, with some limited amounts of augmentation. Any incremental purchases by preference customers from BPA above this base amount of power would be purchased at a higher rate (the "Tier 2 Rate") reflecting the incremental cost to BPA of obtaining additional power to meet such incremental load. Each preference customer's right to purchase power at Tier 1 Rates is determined based in part on the proportion that its net requirements bore to all preference customers' net requirements placed on BPA in a defined period prior to FFY 2011. The Department currently purchases all of the power it receives under the BPA contract at the Tier 1 Rate. Preference customers have the option to purchase additional power from BPA above their Tier 1 loads at a Tier 2 Rate. The Department made two separate decisions not to purchase additional energy from BPA during the contract periods 2012-2014 and 2015-2019, and will evaluate future purchases based on need and cost.

BPA Rates. BPA is required by federal law to recover all of its costs through the power and transmission rates it charges its customers. As of October 1, 2015, BPA's average net cost for Tier 1 power was \$33.75 per MWh, excluding delivery charges. BPA conducts a rate case every two years, but the rates are subject to a cost recovery adjustment clause that allows power rates to increase during a two-year rate period if certain events occur. In July 2015, BPA adopted rates for FFY 2016-2017. The Tier 1 average net cost increase was 7.1%. In November 2016, BPA will begin the BP-18 Rate Process to set power and transmission rates for the period October 1, 2017, to September 30, 2019. BPA bills Slice customers their respective shares of the estimated cost of the Federal System, which is subject to a true-up at the end of the year. See "Department Financial Information—Retail Rates—Automatic BPA Rate Pass-Through."

There are many factors that have impacted and could impact BPA's cost of service and rates, including federal legislation, BPA's obligations regarding its outstanding federal debt, number of customers, water conditions, fish and other environmental regulations, capital needs of the Federal System, outcome of various litigation, regional transmission issues, natural gas prices, and the economy. See "Department Financial Information—Retail Rates—Automatic BPA Rate Pass-Through."

*Energy Northwest.* The City is a member of Energy Northwest, a municipal corporation and joint operating agency organized under State law, whose members currently include 27 public utility districts and cities, all located within the State. Energy Northwest has the authority to acquire, construct, and operate plants, works, and facilities for the generation and transmission of electric power.

Energy Northwest was originally engaged in the construction of five nuclear generating facilities (Projects 1 through 5), of which one (Columbia Generating Station, formerly Project 2) was placed in commercial operation in 1984. Construction of the others was terminated in the 1980s and 1990s. The Department, Energy Northwest, and BPA entered into separate Net Billing Agreements with respect to Projects 1, 2 and 3 (the "Net Billed Projects"), under which the Department purchased a share of the Net Billed Projects from Energy Northwest and assigned that share to BPA. The Department's share of each is as follows: 8.605% of Project 1, 7.193% of the Columbia Generating Station, and 7.206% of Project 3.

Under the Net Billing Agreements, the Department is obligated to pay Energy Northwest its share of the total annual costs of the Net Billed Projects, including debt service on approximately \$5.1 billion of bonds outstanding on the Net Billed Projects, and accept assignment of the shares of defaulting participants, subject to a cap of 25% of the Department's share. BPA is obligated to credit the Department the same amount of the Department's share (plus any assigned shares) under any power sales agreement between BPA and the Department. These obligations exist regardless of the status, operability, or output of the Net Billed Projects. To the extent that BPA cannot credit the Department because the Department's obligations under a power sales agreement are not sufficient to allow BPA to credit the Department its full share, BPA is obligated, after certain assignment procedures, to pay the uncredited and unassigned amount to the Department, subject to available appropriations.

Subsequently, in 2006, Energy Northwest and BPA executed agreements with respect to the Net Billed Projects (the "Direct Pay Agreements") pursuant to which BPA agreed to pay directly to Energy Northwest all costs (including the debt service on the outstanding bonds) for the Net Billed Projects, including the Department's share. Since 2006, this has resulted in no payments by or credits to the Department under the Net Billing Agreements. If BPA fails to make a payment or the parties terminate the Direct Pay Agreements, the original obligations of the Net Billing Agreements would resume. BPA has always met all of its obligations to Energy Northwest.

Columbia River Treaty. The U.S. and Canada entered into the 1964 Columbia River Treaty (the "Treaty") to increase reservoir capacity in the Canadian reaches of the Columbia River basin for the purposes of power generation and flood control. Although the Treaty does not expire by its own terms, either the U.S. or Canada may elect to terminate it by providing not less than ten years' notice. The Treaty impacts stream flow and power generation in the Columbia River and some of its tributaries. The Treaty's computation of energy benefits that result from the Canadian improvements to upstream storage is of particular interest to utilities because it creates an energy return obligation (the "Canadian Entitlement") for U.S. operators of Columbia River dams, including BPA. Treaty modernization (described further below) could impact energy received under the Department's BPA and

Priest Rapids contracts, as well as stream flows and generation at the Boundary Project. See "Purchased Power Arrangements—Bonneville Power Administration" and "—Priest Rapids" and "Department-Owned Resources—Boundary Project."

In 2013, the United States Entity (which includes BPA and the Corps) sent a final regional recommendation concerning the future of the Treaty to the U.S. Department of State (the "State Department"), which includes modernizing the Treaty to more fairly reflect the distribution of operational benefits between the U.S. and Canada, to ensure that flood risk management and other key river uses are preserved, and to address key ecosystem functions in a way that complements the significant investments made to protect Columbia River basin fish and wildlife since 1964. The Department has been an active participant in the U.S. Entity's regional review process leading up to the final regional recommendation and supports that recommendation. The State Department is expected to begin negotiations with Canada before the end of 2016.

*Priest Rapids*. Under two agreements effective through 2052, the Department purchases a portion of the output of Priest Rapids. As of November 2009, the Department is obligated to purchase 6.14% of Priest Rapids' output after Grant PUD meets its retail load. As Grant PUD's retail load increases, less electrical energy is available for the Department. The Department currently receives only about 2 aMW from these contracts. The Department also receives a portion of the revenues from an auction of 30% of Priest Rapids' power, totaling \$5.0 million in 2011, \$4.5 million in 2012, \$5.2 million in 2013, \$5.5 million in 2014, and \$3.9 million in 2015. Under the contracts, the Department is responsible for its percentage share of the costs of Priest Rapids, including debt service on bonds issued to finance improvements to Priest Rapids.

Columbia Basin Hydropower (formerly Grand Coulee Project Hydroelectric Authority). The Department, in conjunction with the City of Tacoma Department of Public Utilities, Light Division ("Tacoma Power"), has power purchase agreements with three Columbia River basin irrigation districts for the acquisition of power from five hydroelectric plants under 40-year contracts expiring between 2022 and 2027. These plants, which utilize water released during the irrigation season, are located along irrigation canals in eastern Washington. The plants generate power only in the summer and thus have no winter peak capability. Plant output and costs are shared equally between the Department and Tacoma Power. In 2015, the Department received 258,678 MWh from the project.

High Ross Agreement. See "Department-Owned Resources—Skagit Project."

Lucky Peak. The Lucky Peak Hydroelectric Power Plant ("Lucky Peak") was developed by three Idaho irrigation districts and one Oregon irrigation district (the "Districts") and began operation in 1988. Its FERC license expires in 2030. The plant is located on the Boise River, approximately ten miles southeast of Boise, Idaho, at the Lucky Peak Dam and Reservoir. Power generation was 278,001 MWh in 2015. The nameplate capacity is 113 MW, but the plant operates only during the irrigation season, so it provides no peak capacity during the Department's winter peak period.

In 1984, the Department entered into a power purchase and sales contract with the Districts under which the Department purchases all power generated by Lucky Peak, in exchange for payment of costs associated with the plant and royalty payments to the Districts. The Department also signed a transmission services agreement with Idaho Power Company ("Idaho Power") to provide for transmission of power from Lucky Peak to a point of interconnection with the BPA transmission system.

Stateline. An agreement with J.P. Morgan Ventures Energy Corp. ("J.P. Morgan"), which became effective on January 1, 2002, provides for the Department's purchase of wind-generated power and associated renewable energy credits ("RECs") from the Stateline Wind Project ("Stateline") in eastern Washington and Oregon. In March 2016, J.P. Morgan finalized the sale of its interest in Stateline to Exelon Corporation, subject to the Department's consent, and the Department has consented to the sale. Wind power received by the Department has a maximum delivery rate of 175 MW per hour; historical output has been about 27% of the maximum delivery rate. The project contributes to the Department's I-937 compliance. See "Washington's Renewable Portfolio Standard (Initiative 937)." The contract ends in 2021; the Department has not currently exercised a renewal or extension of the contract but has the option to do so in the future. However, the Department agreed to buy RECs from Stateline

for the period 2022-2026, which will extend the I-937 compliance component of the project. The Department received 299,551 MWh of wind-generated power under the Stateline purchase contract in 2015.

The Department also entered into a related ten-year agreement with PacifiCorp to purchase integration and exchange services for all of the Department's 175 MW share of Stateline output. Under this agreement, PacifiCorp delivers the Department's share of Stateline output to the Mid-Columbia market hub two months after it is generated. The integration and exchange agreement with PacifiCorp terminates after final delivery in February 2022.

#### Small Renewables.

BURLINGTON RENEWABLE BIOMASS. In 2007, the Department began an arrangement with SMUD. SMUD purchases the output from the Sierra Pacific Industries Burlington Biomass Facility, which burns wood waste and produces electrical energy. The Department provides scheduling and delivery services to SMUD for up to 15 MW of power at the California-Oregon border and receives financial compensation for these services. The Department purchases from SMUD all of the renewable energy and environmental attributes associated with the resource output in excess of 15 MW. The arrangement expires in July 2017; discussions about a modified agreement with SMUD are underway.

COLUMBIA RIDGE LANDFILL GAS. In December 2009, the Department began taking delivery from Columbia Ridge in Arlington, Oregon, under a 20-year agreement. The plant, which has a nameplate capacity of 6.4 MW and generates an average of 50,500 MWh per year, burns methane produced by the decomposition of solid waste in the landfill. The City sends its solid waste to the landfill. Waste Management Renewable Energy ("WMRE") is the developer, owner, and operator of the project. The Department has firm transmission for project output to the Department's retail load. WMRE added six MW of additional generation in summer 2014, and the Department is buying the output from the expansion under contract. The Department received 94,271 MWh of power under the Columbia Ridge purchase contract in 2015.

KING COUNTY WEST POINT TREATMENT PLANT. In 2010, the Department executed a power purchase agreement with King County (the "County") for the output of a cogeneration plant at the West Point Wastewater Treatment Facility in Seattle, which began commercial operation in 2014. The 4.6 MW plant is providing about 2 aMW of electrical energy and associated renewable energy credits. The contract has specific prices and annual escalation and extends until 2034.

*Seasonal and Other Exchanges*. The NCPA exchange agreement provides for the Department to deliver 60 MW of capacity and 90,580 MWh of power to NCPA in the summer. In return, NCPA delivers 46 MW of capacity and 108,696 MWh of power to the Department in the winter. Deliveries to NCPA started in 1995 and will end in 2018.

Since 2007, the Department has entered into agreements to exchange the entire output of the Lucky Peak project for a fixed amount of firm winter energy. For 2014 and 2015, the Lucky Peak exchange counterparty was Shell Energy. For the calendar years 2016 and 2017, the counterparty is Morgan Stanley Capital Group, which will also take on and pay for the associated transmission services from Idaho Power.

#### **Wholesale Market Sales and Purchases**

The Department has historically bought and sold power in wholesale power markets to balance its loads and resources. The amount of wholesale power purchased or sold has varied with water conditions and with changes in the Department's loads and firm resource base. On an annual basis, the Department expects to be a net seller of power in the wholesale market, even under adverse water conditions. See "Integrated Resource Plan." Market sales are the highest during the spring and early summer, when river flows and runoff are the highest. Market sales are the lowest, and the Department may purchase power, in the late summer and early fall, when river flows and runoff are the lowest.

In 2015, hydro flows were below average on rivers where the Department's primary generation hydro facilities are located. The hydro flows at Boundary Project and Ross Dam were 80% and 87% of the historical average, respectively. Regionally, flows at The Dalles Dam were 83% of the historical average. As a result, the Department had less surplus power to sell to the wholesale market than in most recent years. The average revenue per MWh

realized from surplus sales in 2015 was \$21.65/MWh. Net wholesale revenue in 2015 was \$39.2 million, significantly lower than the budgeted amount of \$65 million. As of July 8, 2016, net wholesale revenue for 2016 is forecast to be \$44.6 million, \$15.4 million lower than the budget. This variance will be supplemented with the transfers from the RSA. See "Department Financial Information—Management Discussion of Historical Operating Results 2011-2015" and "—Expectations for 2016 Operating Results" and "Security for the Bonds—Rate Stabilization Account."

Table 4 displays the Department's purchases and sales of power in the wholesale market over the 2011-2015 period.

TABLE 4
SUMMARY OF WHOLESALE MARKET SALES AND PURCHASES

	2011	2012	2013	2014	2015
Cost of Wholesale Purchases (\$000)	\$ 26,667	\$ 22,805	\$ 31,063	\$ 23,404	\$ 37,658
Wholesale Market Purchases (MWh in 000s)	1,697	2,592	2,072	901	1,379
Average Cost (\$/MWh)	\$ 15.71	\$ 8.80	\$ 14.99	\$ 25.98	\$ 27.31
Revenue from Sales (\$000) <sup>(1)</sup> Wholesale Market Sales (MWh in 000s) Average Revenue (\$/MWh)	\$ 125,117 6,053 \$ 20.67	\$ 86,728 5,625 \$ 15.42	\$ 82,628 3,854 \$ 21.44	\$ 111,993 4,083 \$ 27.43	\$ 76,819 3,549 \$ 21.65
Net Revenue (\$000) <sup>(1)</sup> Sales Net of Purchases (MWh in 000s)	\$ 98,450 4,356	\$ 63,923 3,033	\$ 51,565 1,782	\$ 88,589 3,182	\$ 39,161 2,170

<sup>(1)</sup> Shown as gross, prior to netting of bookouts. Audited financial statements are shown net of bookouts. Bookouts occur when energy is financially settled net without physical delivery, upon agreement among the counterparties, because sales and purchases were separately transacted for delivery at the same time and point of delivery.

Source: Seattle City Light Department, Accounting Division

Federal Energy Market Legislation. The Energy Policy Act of 2005 ("EPAct") implemented additional regulations that prohibit electric energy market manipulation. The catalyst for these regulations was the market manipulation associated with the 2000-2001 western energy crisis. FERC Order 690 implemented final anti-market manipulation rules, which became effective January 19, 2006. The regulations and rules broadly apply to and affect municipal utilities such as the Department. The Department requires annual classroom training for employees with responsibilities associated with the purchase and sale of energy and transmission, system operations, finance/risk management, and compliance. Federal legislation allows the Commodity Futures Trading Commission to regulate clearing and exchange requirements for the purchase and sale of commodity derivatives, including energy derivatives, which legislation affects entities that transact with municipal utilities.

#### Wholesale Energy Risk Management

The Department sells its surplus power in the wholesale power markets, and the revenue generated is used to offset costs that would otherwise be borne by the Department's retail ratepayers. The Department's wholesale energy marketing activities are managed by the Power Management Division, and the Department's risk management activities are carried out by the Risk Oversight Division. Additionally, the Department's Risk Oversight Council ("ROC") serves as the primary body with the authority and responsibility for overseeing and implementing the Department's Wholesale Energy Risk Management ("WERM") Policy, which is approved by the Mayor and City Council, and leading the Department's energy risk management efforts. The ROC is comprised of three voting and three non-voting members: the Department's Chief Financial Officer (Voting), Power Supply and Strategic Planning Officer (Voting), Director of Risk Oversight (Voting), Director of Power Management, Director of Power Contracts, Resource Acquisitions, and Regional Affairs, and Financial Planning Manager. The ROC meets at least twice per

month to review recent events in the wholesale power markets and review the Department's market positions, exposures, WERM Policy compliance, and portfolio balancing strategies and plans.

To limit energy risk exposure, the Department is not authorized to buy or sell physical energy and associated products in the wholesale energy market more than 24 months prior to the hour of delivery. For longer term transactions, City Council approval is required. The Department's principal objective is to ensure that the Department meets retail customer demand in a way that generates additional value from its generation portfolio, with due consideration of risk. Risk tolerance levels are documented in the WERM Policy.

Under the WERM Policy, the Department has the authority to enter into agreements to manage various risks associated with power transactions as long as any agreements are not purely speculative and can be tied to managing an underlying power purchase, asset, or price risk. The policy contains limits on the dollar amount and volume for physical calls and puts. The Department has not entered into any hedging agreements under an International Swaps and Derivatives Master Agreement. The Department has entered into certain forward purchase and sale of electricity contracts that meet the Governmental Accounting Standards Board ("GASB") definition of a "derivative instrument," although they are intended to result in the purchase or sale of electricity delivered and used in the normal course of operations. See Appendix C—2015 Audited Financial Statements of the Department—Note 16.

*Energy Market Risk*. For the Department, energy market risk is the risk of adverse water conditions and fluctuations in the price of wholesale electricity. Factors that contribute to energy market risk include: regional planned and unplanned generation plant outages, transmission constraints or disruptions, the number of active creditworthy market participants willing to transact, and environmental regulations that influence the availability of generation resources.

The Department's exposure to variable output from its hydroelectric resources and market price risk is managed by the Director of Power Management under the supervision of the Power Supply and Strategic Planning Officer, with oversight and approval from the ROC. The Department engages in market transactions to meet its load obligations and to realize earnings from surplus energy resources. Except for limited intraday and interday transactions to take advantage of the ability to store water at certain of the Department's generating facilities and owned hydro storage, the Department does not take speculative market positions in anticipation of generating revenue.

With a significant portion (historically about 9% to 20%) of the Department's revenue from wholesale energy market sales, the Department emphasizes the management of risks of this activity. Policies, procedures, and processes have been established to manage, control, and monitor these risks and ensure proper segregation of duties.

*Credit Risk.* If a counterparty fails to perform on its contractual obligation, the Department may find it necessary to procure or sell electricity at current market prices, which may be unfavorable compared to the contract price. If a counterparty fails to pay its obligation in a timely manner, this has an impact on the Department's revenue and cash flow. As with market risk, the Department has policies in place to mitigate credit risk.

Wholesale counterparties are assigned credit limits based on evaluations of their financial condition that include consideration of liquidity, cash flow, credit ratings, and other indicators from debt and capital markets as deemed appropriate. Credit limits are also used to manage counterparty concentration risk. There is potential for the concentration of credit risk related to geographic location, as a large number of counterparties with which the Department transacts are in the western U.S. This concentration of counterparties and of geographic location may impact the Department's overall exposure to credit risk, either positively or negatively, because counterparties may be similarly affected by changes in conditions.

Credit limits, exposures, and credit quality are actively monitored. Despite such efforts, defaults by counterparties may occur. The Department's risk policies and some of its contracts require either party to post collateral if certain conditions occur. Posted collateral may be in the form of cash or letters of credit and may represent prepayment or credit exposure assurance. The Department is not currently posting collateral under any of its contracts and does not expect to do so.

#### Washington's Renewable Portfolio Standard (Initiative 937)

I-937 was approved by State voters in November 2006. Under I-937, utilities such as the Department with more than 25,000 retail customers in the State are required to serve certain percentages of retail load with eligible renewable resources and/or purchase equivalent RECs. This requirement increases over time: 3% of load by January 1, 2012, 9% by January 1, 2016, and 15% by January 1, 2020. I-937 also requires utilities to pursue all available conservation that is cost-effective, reliable, and feasible, and imposes deadlines for meeting conservation targets. I-937 has been codified as "The Energy Independence Act" (chapter 19.285 RCW).

The law is specific about what types of renewable generation are eligible to meet the renewable portfolio standard. Existing hydropower is not considered a renewable resource, but incremental hydropower is considered renewable if it is the result of efficiency improvements completed after March 30, 1999. The City considers I-937 during the preparation of its Integrated Resource Plans ("IRP") and the potential for cost-effective, reliable, and feasible conservation measures that could be derived from more efficient energy use by customers and by the Department's production and distribution facilities. Planned turbine replacements at the Boundary Project are incremental hydropower projects eligible under I-937, and will provide the Department with additional renewable resources when the projects are on-line and the efficiency increases are documented, currently planned for 2017.

The Department met I-937's 3% renewable energy target for 2012 to 2015, and has under contract adequate eligible RECs and resources to ensure compliance with the 9% target in effect from 2016 to 2020. The Department estimates that, with the current renewable resources and recent acquisitions of RECs, it will be in compliance with I-937's January 1, 2020, target. The Department continues to evaluate compliance options, and will comply with I-937 using a combination of RECs and resources. I-937 allows for alternative compliance options if a utility has no load growth or if the utility reaches a cost cap on spending for eligible resources.

#### Conservation

The Department measures energy conservation results in terms of cost, amount, and duration of savings using regionally and nationally recognized methods. In 2015, the Department achieved 18.32 aMW (160,557 MWh) of energy savings from completed projects, which cost the Department \$39.0 million in incentives and expenditures associated with the delivery of the energy savings. Total savings in place in 2015 amounted to approximately 164.6 aMW (1,441,704 MWh), representing more than 10% of the Department's total energy needs in 2015. The Department's retail load has been declining since 2011, due in part to its robust conservation program. See "Department Financial Information—Management Discussion of Operating Results 2011-2015."

Under I-937, the Department is required to establish two-year conservation targets. For the 2014-2015 biennium, the I-937 total energy savings target was 23.68 aMW. The Department recently reported a total energy savings of 39.62 aMW for the 2014-2015 biennium, surpassing the target by 15.94 aMW. The Department recently completed an updated conservation potential assessment that establishes a new energy savings target for 2016-2017 of 25.62 aMW (or 12.81 aMW per year). The Department's Strategic Plan has identified a slightly more aggressive annual energy savings target of 14 aMW per year for 2017-2022 and has identified budgets and resources necessary to meet this energy savings target.

The Department's Conservation Resources Division has a long-standing relationship with BPA. Through various contractual agreements over a 30-year period, BPA has provided funding for energy conservation activities. BPA provided \$9.7 million for energy conservation activities over FFY 2014 and 2015, which funded approximately 15% of the Department's total energy savings delivered during this time period. In addition to the current funding, BPA is providing technical assistance for industrial projects and is offering regional conservation programs to the Department. For FFY 2016 and FFY 2017 (BPA's next rate period), the Department has an adjusted energy efficiency incentive budget of \$10.45 million. The majority of this will be received in calendar year 2016.

## **Integrated Resource Plan**

The Department's IRP evaluates a range of resource portfolios that are designed to meet the Department's future resource needs and the State's I-937 renewable portfolio standard. A key objective of the IRP is to ensure that expected long-term customer demand can be met with firm resources under variable hydro and weather conditions. The IRP preferred resource portfolio is selected after being evaluated against four criteria: reliability, cost,

environmental impact, and risk. The main feature of the preferred portfolio is typically conservation. Aligned with the Strategic Plan, the Integrated Resource Plan, and the need to meet its I-937 energy conservation target, the Department continues to make investments in energy conservation that help to delay the need for new, higher cost generating resources.

The Department's 2016 IRP affirms its conservation-centered resource strategy. The IRP considers conservation as its first-choice resource in meeting expected load growth, which is forecasted to average 0.4% on an annual basis over the course of the 20-year study. Continued regional economic and related population growth are key contributors to demand within the service area. Sufficient RECs have been acquired to meet forecasted State renewable portfolio standard requirements through 2023. Modest gains in generation efficiency of about 39 MW each are expected at the Boundary Project's Units 55 and 56 in 2016 and 2017, respectively. Given the gains in resources and the current load forecast, the Department expects to be net surplus in resources for more than a decade.

The resource strategy continues to be:

- (i) Acquire cost-effective conservation;
- (ii) Acquire RECs and/or renewable resources, whichever is more cost-effective, for compliance with I-937;
- (iii) Make increased use of the flexibility available in existing power contracts for meeting seasonal variability in supply and demand; and
- (iv) Manage second-quarter hydro surpluses and, using the Department's seasonal exchange contracts, provide spring and summer energy in return for winter energy to enhance reserves for serving peak demand and reduce price risk in the second quarter, due to concurrent high hydro flows and high regional wind output.

The recommended resource strategy continues the Department's policy of obtaining low-cost power with low environmental impacts for its ratepayers while making the most of its existing resources. Conservation is the first choice resource, followed by purchases and sales of 24 months or less that reshape seasonal resources to better match seasonal changes in customer demand.

The IRP action plan is complete; it was endorsed by City Council Committee in July 2016 and by the full City Council on August 1, 2016. The IRP filing with the State will be submitted by the September 1, 2016, deadline.

#### TRANSMISSION AND DISTRIBUTION

#### Introduction

The Department owns transmission facilities for the delivery of energy from the Skagit Project to the Department's service territory. The Department also owns transmission lines interconnecting the Boundary and Cedar Falls Projects to other utilities' transmission systems that allow delivery to the Department's customers or to wholesale markets. See "Transmission Contracts—Transmission Arrangements with BPA" and "—Other Transmission Contracts." In addition, the Department has entered into contracts with BPA and others to provide additional transmission capacity for the Boundary Project and all contracted resources that require transmission. These owned facilities and contracted transmission capacity provide the Department with sufficient capacity for meeting its projected winter peak load and delivering the maximum output from all remote resources.

## **Department-Owned Transmission**

The Department owns and operates 656 miles of transmission facilities. The principal transmission lines are the generation interconnection lines transmitting power from the Skagit Project to the Department's service area. Other important facilities include the tie lines connecting the Boundary and Cedar Falls Projects with BPA's transmission grid and transmission within the Department's service area.

In 1994, the Department signed an agreement with BPA for the acquisition of ownership rights to one-thirtieth (160 MW at full rating) of the transmission capability over BPA's share of the Third AC Intertie, which connects the

Pacific Northwest with California. The benefits from this investment include avoidance of BPA's transmission charges associated with power sales and the ability to conduct exchanges over the Intertie and enter into long-term firm contracts with out-of-State utilities.

#### **Transmission Contracts**

Transmission Arrangements with BPA. The bulk of the Department's remote generation (the Boundary Project, BPA products, and other long-term contracts) and other market transactions utilize BPA's point-to-point ("PTP") transmission service agreement. See "Power Resources and Cost of Power—Department-Owned Resources—Boundary Project." The agreement with BPA provides the Department with 1,962 MW of transmission capacity through 2025. This capacity amount ensures that the Department can deliver the maximum output of the Boundary Project and the BPA purchase contract to its customers. Effective October 1, 2015, BPA raised its transmission and other associated rates by a cumulative 3.1% for the rate period FFY 2016 and FFY 2017.

Power supplied to the Department by B.C. Hydro under the High Ross Agreement is transmitted over BPA's lines under a separate PTP transmission service agreement extending through 2035. This agreement has been assigned to Powerex Corporation, a British Columbia corporation tasked with carrying out certain responsibilities of B.C. Hydro with respect to the High Ross Agreement, including the delivery of High Ross power. Under the provisions of the transmission assignment agreement, Powerex pays BPA directly for all costs associated with the High Ross PTP contract. See "Power Resources and Cost of Power—Department-Owned Resources—Skagit Project."

Other Transmission Contracts. The Department transmits power under contracts with Idaho Power for the transmission of power from Lucky Peak, with Avista and Grant PUD for transmission of power from Columbia Basin Hydropower, with Puget Sound Energy for transmission of power from the Cedar Falls and Tolt Projects, and with other utilities. The Department also has a contract with PacifiCorp for integration and exchange of output from Stateline.

The Department may require additional purchases of transmission in the future to accommodate the delivery of power from additional resource acquisitions to the Department's retail customers. The Department may purchase short-term and/or non-firm transmission for its sales of power in the wholesale market and may sell excess transmission that is not needed to serve load and balance resources.

## ColumbiaGrid

In 2006, a group of investor-owned and public utilities, including the Department, joined together with BPA to form ColumbiaGrid. ColumbiaGrid currently provides inter-utility regional transmission planning services to members in the Pacific Northwest. ColumbiaGrid is not a Regional Transmission Organization under FERC policies but provides services on a bilateral, contractual basis. ColumbiaGrid's planning role enables the Department to meet federal requirements for regional transmission planning.

## **Open Access Transmission Services**

The Department currently has no open access transmission customers but is committed to offering comparable service upon receiving a valid transmission service request. In 2009, the City Council approved legislation authorizing the Department to implement and administer an open access transmission tariff. The Department periodically updates its open access transmission tariff, which is not filed with FERC but is publicly available on the City Clerk's website.

#### **Retail Service**

The Department owns, operates, and maintains overhead and underground transmission and distribution facilities within its 131-square-mile service territory. The distribution system consists of 2,556 miles of overhead and underground wiring. The Department operates 15 major substations throughout the service area, which supply power to the distribution system's primary feeders and ultimately to the Department's retail customers. Most of the distribution system is looped radial design, which means that a single feeder provides electrical energy to customers. Customers in the downtown Seattle, University District, and First Hill neighborhoods are served by a considerably more reliable multiple-feeder network.

## **Operation and Maintenance**

The Department updates its load forecast periodically to track changes in electricity consumption throughout the distribution system. Based on this forecast, the Department makes provisions and recommendations for capacity projects related to transmission, substation, communications, and distribution facilities to serve the system loads.

The Department's System Control Center controls dam operations and monitors delivery of power to the service area. Staff uses a real-time distributed computer system that provides information about loads and resources to the power dispatchers so they can properly balance load and resources.

In 2010, the Department implemented an Outage Management System designed to improve operational efficiencies while responding to service interruptions. The Department installed a work and asset management system, the foundational technology for an asset management practice, to assist in work scheduling, asset cost tracking, and data repository.

The Department inspects the vaults through which transmission lines run, and future maintenance programs are being established for steel lattice tower and monopole transmission equipment. The Department conducts periodic inspections and maintenance on batteries that supply protection for certain higher capacity transmission lines. Relays are tested and maintained on a periodic basis to satisfy NERC requirements.

## **Federal Regulations**

The Department's Regulatory Compliance Office oversees the Department's efforts to comply with FERC reliability standards, foster a culture of compliance, and support the Department's mission to deliver reliable power to its customers. The Director of Regulatory Compliance leads regulatory compliance, reports to the Customer Service, Communications, and Regulatory Affairs Officer, and has direct access to the General Manager and Chief Executive Officer. Regulatory Compliance has seven employees and functions independently of the Department's operating divisions.

The Internal Compliance Program Policy documents the Department's regulatory compliance program for FERC reliability standards, providing the framework and key elements of the Department's Internal Compliance Program and describing the responsibilities of the Department's officers and employees. The program incorporates a compliance framework of five interdependent elements, including policies and operating procedures, communication and training, assessment, processes for addressing and remedying compliance concerns, and periodic operating division review, and is designed to ensure compliance and prevent, detect, and correct noncompliance.

Regulatory Compliance conducts assessments on both a regular and periodic basis. Assessments may be performed internally or through external consultants. Regulatory Compliance uses a risk-assessment to determine when a periodic assessment should occur, along with which FERC reliability standards to evaluate in the assessment. Risk criteria include substantially complex standards, standards with a Department compliance violation history, or standards affected by changes in Department operational practices and/or personnel. Regular assessments occur triennially and annually. Regulatory Compliance engages a consultant to perform the triennial assessment for both due diligence and independence, and to aid Department preparation for its regulatory compliance audit. Annual assessments occur as part of the Department's Self-Certification process. An example of a periodic assessment is the evidentiary assessment of PRC-005-2 (a new and complex reliability standard) performed by Regulatory Compliance in December 2015.

The Western Electricity Coordinating Council ("WECC") audits the Department triennially; WECC completed its last audit of the Department on August 8, 2014. A 17-member WECC Audit Team reviewed Department compliance for 36 reliability standards (28 Operations and Planning Standards and eight Cyber Security Standards), which comprise 245 individual requirements and sub-requirements.

WECC found no possible violations in its review of the Operations and Planning Standards and identified violations of three requirements associated with the Cyber Security Standards. The violations were all low impact and posed

minimal risk to the Department and the region; the Department corrected the non-compliance and implemented process improvements to protect against future occurrences. Finally, WECC awarded a zero penalty to one violation, and the other two violations received a consolidated nominal penalty award.

In 2012, the WECC Reliability Coordinator issued a System Operating Limit Methodology that changed the way entities are required to operate the system. Entities now are required to operate within the facility ratings assuming that one element is out of service, in preparation for the possibility of an unplanned outage. This reduced the operating limit on the 230 kV transmission lines that connect the Skagit Project to equal the combined rating of three out of the four transmission lines when all lines are in service. During the summer, the transmission capacity may limit the generation output from the Skagit Project. To address this limitation, a project is underway to uprate the Skagit transmission lines to no longer limit the output of the Skagit Project when all lines are in service. The project is expected to be completed in 2017.

The Department has started preparations for its next WECC Compliance audit, which is scheduled for June 2017.

Evolving and changing reliability standards are a fixture for the FERC reliability compliance program. As such, Regulatory Compliance establishes review and coordination practices to ensure Department compliance prior to a standard's effective date. The Version 6 Cyber Security Standard suite was of particular import to the Department because these standards represent significant change, from both an operational and a regulatory standpoint. Regulatory Compliance, together with the responsible Department operating divisions, established structured and coordinated processes to ensure Department compliance by the standard's enforcement date. The Department is preparing for similar transitions in 2017 associated with the Transmission Operations and Interconnection Reliability Operations and Coordination standard families. See "Seattle City Light Department—Enterprise Risk Management and Emergency Response" and "Power Resources and Cost of Power—Wholesale Energy Risk Management."

#### DEPARTMENT FINANCIAL INFORMATION

## **Historical Sales**

Residential customers make up roughly one third of total customer sales. Retail power sales in the Department's service area are most affected by economic growth and weather conditions, mainly temperature. Annual peak load occurs in the winter season, due to the use of electricity for residential space heating. Short winter days also increase the consumption of power for both residential and nonresidential lighting. Increased load on hot summer days is due to nonresidential air conditioning. Summer peak load is well below winter peak load.

Table 5 shows that the number of residential and non-residential customers has been increasing during the last five years, at an average annual growth rate of 1.2%. Retail load largely varied with weather between 2011and 2015. There was a 2% decrease in retail load in 2014 due to an unusually warm winter and another 2% decrease in 2015 due to unseasonably warm weather throughout most of the year. The peak load for the period 2011-2015 was 1,867 MW in February 2014 compared to the record peak load of 2,055 MW recorded in December 1990 due to unusually cold weather.

TABLE 5
RETAIL CUSTOMER ACCOUNTS, POWER SALES AND ENERGY REQUIREMENTS

	2011	2012	2013	2014	2015
Average Number of Customer Accounts					
Residential	360,442	362,658	367,837	374,619	381,419
Non-Residential	39,909	39,950	40,218	40,437	41,391
Total Customer Accounts	400,351	402,608	408,055	415,056	422,810
Energy Sales (MWh) (1)					
Residential	3,217,101	3,098,745	3,158,629	2,987,711	2,914,563
Non-Residential	6,383,131	6,367,897	6,347,771	6,352,873	6,242,931
Total Energy Sales	9,600,232	9,466,642	9,506,400	9,340,584	9,157,494
Peak Demand (MW) (2)	1,749	1,805	1,841	1,867	1,689
Energy Requirements (MWh)					
Total Energy Sales	9,600,232	9,466,642	9,506,400	9,340,584	9,157,494
Energy Used in Operation	32,752	31,072	30,910	29,717	25,195
System Losses <sup>(3)</sup>	570,008	584,310	511,390	541,323	504,533
Total Energy Requirements <sup>(4)</sup>	10,202,992	10,082,024	10,048,700	9,911,624	9,687,222

<sup>(1)</sup> Amounts include an allocation for the net change in unbilled revenues. Effective in 2013, the allocation of the net change in unbilled revenue excludes retail customer voluntary payments for conservation and solar energy. Prior years presented were not revised.

Source: Seattle City Light Department, Accounting Division

<sup>(2)</sup> Effective for 2014, peak demand represents system load vs. firm load to align with industry practice. Accordingly, prior years presented have been revised.

<sup>(3)</sup> Includes transmission and distribution losses.

<sup>(4)</sup> Firm energy required in the Department's service area.

## **Largest Customers**

Table 6 provides a list of the Department's ten largest customers in 2015.

TABLE 6
TOP TEN CUSTOMERS

Customer	Customer Profile	Annual Dollars Billed	% Total Retail Revenue
University of Washington	Higher Education	\$ 23,160,245	3.17%
City of Seattle <sup>(1)</sup>	Government	22,152,557	3.03%
Nucor Corporation	Steel Manufacturer	21,868,836	2.99%
Boeing Company	Airplane Manufacturer	16,142,389	2.21%
King County	Government	10,590,520	1.45%
International Gateway/Sabey	Data Center Operator/Developer	9,371,816	1.28%
U.S. Government	Government	7,195,474	0.98%
2001 Sixth LLC	Data Center	6,645,666	0.91%
Saint-Gobain	Building Materials Manufacturer	6,369,177	0.87%
Martin Selig	Developer	5,467,914	0.75%
Total		\$ 128,964,593	

Includes street lighting, which covers both the costs to provide electricity to street lights and the costs to install, service, repair, and replace street lights.

Source: Seattle City Light Department, Finance Division

#### **Financial Policies**

In 2010, the City Council established revised financial policies and additional parameters for the RSA within the Light Fund. The financial policies include three main elements: (i) additional parameters for the funding, operation, and expenditure of amounts in the RSA, together with the creation of automatic rate surcharges to replenish the RSA, (ii) a rate-setting guideline to maintain debt service coverage, and (iii) a requirement for revenue funding a portion of the Department's capital program. Each provision is discussed in greater detail below.

Rate Stabilization Account. The RSA is drawn down to supplement revenues when surplus power sales revenues are below the budgeted amount (due to low water or lower wholesale prices, for example), and deposits are made to the RSA if surplus power sales exceed expectations. The budgeted amount of net wholesale revenues is known as the RSA baseline. The financial policies specify the target size of the RSA between \$100 million and \$125 million and authorize the collection of a temporary automatic surcharge on electric rates in the event the RSA drops to \$90 million or below. Pursuant to City ordinance, the City Council is required to take action to bring the RSA balance down to \$125 million within a period of 12 or fewer months if, at any time, the balance exceeds \$125 million. See "Security for the Bonds—Rate Stabilization Account" and "Retail Rates—Rate Changes 2010-2016."

The RSA has been in use since January 1, 2011. As of June 30, 2016, the RSA balance was \$89.1 million, which falls below the surcharge trigger of \$90 million. Consequently, a 1.5% surcharge was automatically implemented on August 1, 2016. See "Department Financial Information—Expectations for 2016 Operating Results."

## TABLE 7 AUTOMATIC SURCHARGES

RSA Balance	Action
Less than or equal to \$90 million but greater than \$80 million	Automatic 1.5% surcharge
Less than or equal to \$80 million but greater than \$70 million	Automatic 3.0% surcharge
Less than or equal to \$70 million but greater than \$50 million	Automatic 4.5% surcharge
Less than or equal to \$50 million	City Council must initiate rate review within
	45 days and determine actions to replenish
	RSA to \$100 million within 12 months

The Strategic Plan includes a transition to less dependence on sales of surplus wholesale power that aligns with lower expected net wholesale volumes and market prices. The reduction is being implemented gradually over the period 2013-2020. See "Seattle City Light Department—Strategic Plan."

Debt Service Coverage. The Department's financial policies require setting rates designed to achieve a debt service coverage ratio (Net Revenue divided by Debt Service) of 1.80x based on the annual Department budget. See Table 12—Historical Debt Service Coverage. The Bond Legislation requires that Gross Revenues be sufficient to pay the Department's maintenance and operation expenses and provide for the payments required to be made into the Parity Bond Fund.

Funding of Capital Improvement Program. The Department's policy is to fund its CIP so that on average, over the term of any given six-year CIP, 40% of the expenditures will be funded with cash from operations, including contributions to fund connections or extensions. The percentage of cash from operations available to fund the CIP in a given year varies, depending on the Department's revenues and expenses. See "Capital Requirements."

#### **City Investment Pool**

The City's Finance Department invests the Department's funds. See "The City of Seattle—Investments" and Appendix C—2015 Audited Financial Statements of the Department—Note 4. The City's Director of Finance is authorized to make loans to individual funds participating in the City's common investment portfolio (the "Investment Pool"), including the Light Fund, by carrying such funds in a negative cash position for a period of up to 90 days, or for a longer period upon approval by the City Council by ordinance, to the extent such loans can be supported prudently by the Investment Pool and the borrowing fund is reasonably expected to be able to repay the loan. Such loans bear interest at the Investment Pool's rate of return. Currently there are no Investment Pool loans to the Department. See "The City of Seattle—Investments—Interfund Loans."

#### **Taxation and Intergovernmental Payments**

The Department pays a utility tax to the City equal to 6% of Gross Revenues from retail sales, less certain adjustments. The proceeds of this tax are deposited into the City's General Fund. The City Charter does not permit the Department to pay taxes to the City's General Fund "until ample provision has been made for the servicing of the debts and obligations of the utility and for necessary betterments and replacements for the current year." A State public utility tax is paid at a rate of 3.8734% of Gross Revenues from sales within the State, less certain adjustments.

Certain contractual payments are made to Pend Oreille and Whatcom Counties in Washington for services rendered by these jurisdictions where the Department has generating facilities. In addition, under the terms of franchise agreements with several suburban cities, the Department makes monthly payments to the cities of Shoreline, Burien, Lake Forest Park, SeaTac, and Tukwila in amounts ranging from 4% to 6% of the revenue from rates charged to customers residing in those cities. The Department incorporates expected payments to the suburban cities into the retail rates that it charges retail customers residing in those cities. See "Retail Rates."

#### **Retail Rates**

*Rate Setting.* The City Council has exclusive jurisdiction with respect to establishing and revising the Department's retail rates. State law requires that rates be fair, nondiscriminatory and fixed to produce revenue that is adequate to

pay operation and maintenance expenses of the Department and to meet all debt service requirements payable from such revenue. In its retail rate-setting capacity, the City Council is not subject to control by the Washington Utilities and Transportation Commission, but it is subject to certain rate-making provisions of the Public Utility Regulatory Policies Act of 1978 ("PURPA"). The Department has never been cited for failing to comply with PURPA, and believes that it is operating in compliance with PURPA's requirements.

Since 1980, the City Council has conducted periodic reviews of the Department's rate levels and rate structure, normally at intervals of two or three years. In the course of its rate reviews, the City Council holds public meetings to consider the Department's proposed operating budget, capital improvements plan, load forecast, and resource plans. Based on these planning documents, as approved by the City Council, the Department's staff estimates the Department's revenue requirements and develops a rate proposal that is expected to produce the required amount of revenue and will allocate the revenue requirement among the various rate classes in accordance with adopted City policies. The City Council makes final decisions regarding rates through passage of a rate ordinance.

The current rate-setting objectives recommended by the Review Panel and adopted by the City Council include encouraging the efficient use of resources needed to provide electrical service, achieving rate predictability in an orderly way so as to avoid large changes for some customers or customer classes, providing for public involvement, achieving consistency with the Strategic Plan and financial policies, establishing rates sufficient to meet annual revenue requirements, basing rates on the marginal cost to customers, fairly apportioning costs of providing service among customer classes, and allocating the costs of conservation and providing low-income residential service to all customer classes.

Automatic BPA Rate Pass-Through. The City Council passed an ordinance in 2001 that allows the Department to pass-through to its customers the financial impact of any increase or decrease in rates charged by BPA. The pass-through was amended by City Council ordinance in 2013 to clarify that the pass-through applies to both power and transmission rate changes. These rate changes take effect without passage of a new ordinance by the City Council. See "Power Resources and Cost of Power—Purchased Power Arrangements."

Rate Changes 2010-2016. Table 8 summarizes the Department's rate changes for the period 2010-2016. In adopting the Strategic Plan Update for 2017-2022, the City Council approved a projected average annual rate increase of 4.3% over the period, including projected annual rate increases of 5.6% in 2017 and 2018 (exclusive of BPA pass-throughs and RSA surcharges, if any), with projected increases between 2.5% and 5.0% annually for the remainder of the period covered by the Strategic Plan Update. Actual rates for 2017 and 2018 are expected to be approved by the City Council in early October 2016.

TABLE 8
RATE CHANGES, 2010-2016

Effective Date	Percent Change	Туре
January 1, 2010	13.8%	Base Rate Increase
May 1, 2010 <sup>(1)</sup>	4.5%	RSA Surcharge
October 1, 2010	0.5%	BPA Pass-Through
January 1, 2011	4.3%	Base Rate Increase
January 1, 2012	3.2%	Base Rate Increase
January 1, 2013	4.4%	Base Rate Increase
October 1, 2013	1.2%	BPA Pass-Through
January 1, 2014	5.6%	Base Rate Increase
January 1, 2015	4.2%	Base Rate Increase
October 1, 2015	1.0%	BPA Pass-Through
January 1, 2016	4.9%	Base Rate Increase
August 1, 2016 <sup>(2)</sup>	1.5%	RSA Surcharge

<sup>(1)</sup> Temporary surcharge to help initially fund the RSA; lifted as of December 31, 2010.

Rates for Customers Outside the City of Seattle. The Department provides electric service to the residents and businesses in the cities of Shoreline, Burien, Lake Forest Park, SeaTac and Tukwila (the "Franchise Cities") and unincorporated parts of the County, under individual franchise agreements with the Franchise Cities and the County. The agreements grant the Department a non-exclusive franchise to operate within the Franchise Cities' and the County's right-of-way, and establish terms and conditions under which the Department works with the Franchise Cities and the County on a variety of related issues, including rates as established by the Seattle City Council, fees, and operational requirements. Rates for Department customers in the Franchise Cities and unincorporated parts of the County are up to 8% higher than rates for customers located within the Seattle city limits. The exact rate difference varies and depends on the terms of the franchise agreement.

Fifteen-year franchise agreements are currently in place for all five Franchise Cities. Recently renewed agreements expire in 2029 (Shoreline) and 2030 (Lake Forest Park, SeaTac, and Burien), while one (Tukwila) expires in March 2018. Tukwila's franchise renewal discussions are expected to commence in 2017, in advance of the agreement expiry. The Department has two franchise agreements with the County that have expired, but services are continuing to be provided to those unincorporated areas under the expired contracts. The Department is in negotiations with the County to renew its expired agreements. The Franchise Cities represented approximately 85.6% of the Department's retail power sales outside the City but within the service area in 2015; the unincorporated areas of the County represented 14.0%.

The franchise agreements include provisions for payment for service levels that exceed the standard levels normally provided by the Department. The Department currently collects revenue from suburban franchise customers to reimburse the capital costs of six completed undergrounding projects: four in Shoreline and two in Burien. These undergrounding charges will be in effect for approximately 25 years, or until the Department has been reimbursed with interest for the capital cost of the projects.

The Department's service area also includes portions of the cities of Normandy Park and Renton, which represent the remaining 0.4% of sales outside the City's boundaries. These areas are charged the suburban rates but do not have franchise agreements with the Department.

*Voluntary Green Power Program.* Pursuant to State law, since 2002 the Department has provided customers the option of making voluntary payments to fund new renewable resources. Currently, there is one voluntary green power program for residential and non-residential customers, Green Up, which allows customers to purchase green

<sup>(2)</sup> Temporary surcharge effective until the fiscal quarter ending RSA balance is above \$90 million or below \$80 million. See "Financial Policies—Rate Stabilization Account."

power at a retail rate of \$15 per MWh. Green Up revenues are used to acquire RECs, to administer and market the program, and to invest in local solar projects and education programs. Monthly payments for residential customers are \$3, \$6, or \$12 (for 200, 400, or 800 kWh per month). Suggested (marketed) monthly payments for non-residential customers are \$15 or \$150, although non-residential customers may participate at any level they choose. They may also purchase RECs separately from their bill, for example, to earn LEED (Leadership in Energy and Environmental Design) credits, or to purchase green power for events. As of December 31, 2015, 12,772 customers participated in Green Up through payments on their bill. Green Up revenue in 2015 totaled \$1.35 million. REC purchases on behalf of Green Up customers totaled 92,623 MWh in 2015.

Rate and Bill Comparisons. Table 9 shows average rates and bills paid by the various customer classes, and Table 10 compares annual amounts paid by the Department's customers and the customers of neighboring utilities. In addition to being competitive within the Puget Sound region, the Department's rates are among the lowest of any major city in the United States.

# TABLE 9 AVERAGE RATE IN CENTS PER KWH AND MONTHLY BILLS (AS OF JULY 1, 2016)

	Average Revenue in Cents per kWh				Average Monthly Bills (\$)									
	City	City		City of	City of	City of	City of	City	City		City of	City of	City of	City of
	Standard	Network	Suburban <sup>(2)</sup>	Burien	Shoreline	Tukwila	SeaTac	Standard	Network (1)	Suburban <sup>(2)</sup>	Burien	Shoreline	Tukwila	SeaTac
Residential								·						
500 kWh per month	8.2		8.5	8.5	8.9	8.3	8.9	41		43	43	45	42	45
1,000 kWh per month	10.4	(3)	10.7	10.7	11.1	10.8	11.1	104	(3)	107	107	111	108	111
2,000 kWh per month	11.5		11.8	11.8	12.1	12.1	12.1	230		236	236	243	242	243
Small General Service														
10,000 kWh per month (40kW)	8.5	(3)	8.7	8.7	8.9	8.8	8.9	848	(3)	871	871	887	882	887
Medium General Service														
20,000 kWh per month (60kW)	7.4	9.7	7.5	7.8	8.1	8.1	8.1	1,489	1,936	1,495	1,567	1,617	1,613	1,617
200,000 kWh per month (500kW)	7.3	9.5	7.4	7.7	8.0	8.0	8.0	14,660	18,910	14,720	15,440	15,940	15,900	15,940
Large General Service														
400,000 kWh per month (1,000kW)	7.2	9.1	7.8	7.8	8.0	7.8	8.0	28,888	36,317	31,246	31,326	31,805	31,399	31,805
1,800,000 kWh per month (5,000kW)	7.3	9.2	7.9	7.9	8.0	7.9	8.0	131,034	165,451	141,646	142,009	144,162	142,337	144,162
High Demand General Service														
6,000,000 kWh per month (20,000kW)	7.0	(4)	(4)	(4)	(4)	7.2	(4)	417,666	(4)	(4)	(4)	(4)	433,164	(4)
18,000,000 kWh per month (60,000kW)	7.0					7.2		1,252,998					1,299,491	

<sup>(1)</sup> City Network includes Medium and Large General Service customers in downtown Seattle that are serviced by an underground, interconnected distribution network, which provides a higher level of reliability than typical radial distribution. City Network's higher rates reflect the higher costs of building and maintaining this type of distribution service.

Source: Seattle City Light Department, Finance Division

<sup>(2)</sup> All jurisdictions outside the City of Seattle, except the cities of Burien, Shoreline, and Tukwila.

<sup>(3)</sup> Residential and Small General Service customers receiving network service are charged City standard rates.

<sup>(4)</sup> All High Demand General Service customers are located in Seattle or Tukwila.

TABLE 10
ANNUAL BILL COMPARISONS WITH OTHER PUGET SOUND UTILITIES
(AS OF JULY 1, 2016)

Monthly Use		Seattle City Light (\$) <sup>(1)</sup>	Puget Sound	Snohomish	Tacoma	
kWh	kW		<b>Energy</b> (\$) (2)	County PUD (\$) (3)	Power (\$) (4)	
Residential						
100		126	216	197	215	
500		495	678	628	571	
1,000		1,249	1,351	1,257	1,016	
3,000		4,266	4,141	3,770	2,795	
Small General Service	;					
300	1	305	495	474	506	
3,000	10	3,053	3,784	3,490	3,003	
12,000	40	12,211	14,747	13,541	11,330	
Medium General Serv	vice					
150,000	500	135,420	187,890	161,480	119,746	
200,000	500	175,920	226,021	205,237	144,461	
360,000	900	316,656	405,714	368,154	259,549	
Large General Service	e					
300,000	1,000	266,228	374,375	321,370	238,891	
1,000,000	5,000	929,026	1,484,939	1,162,925	944,904	
2,500,000	7,500	2,197,765	2,989,333	2,618,729	1,911,360	
High Demand Genera	l Service					
6,000,000	20,000	5,011,991	7,460,795	6,397,205	4,766,424	
18,000,000	60,000	15,035,972	22,379,574	19,188,437	14,298,072	
24,000,000	60,000	19,548,763	26,955,339	24,439,253	17,263,896	
Last Rate Change		01/01/16	05/01/16	10/01/15	04/01/15	

<sup>(1)</sup> The Department's electric rates includes municipal taxes, and are subject to a 1.5% surcharge effective August 1, 2016.

Source: Seattle City Light Department, Finance Division

## **Billing and Collection Processes**

The City's utility billing function is co-managed by both SPU and the Department. SPU provides customer service through the call center and walk-in center. The Department operates and manages the billing system. SPU and the Department bill and reimburse each other for these services. A joint project is underway between SPU and the Department to replace the current customer information and billing system. The new system will provide utility customers new self-service features while improving operational efficiencies. The system was originally expected to be operational in late 2015 but completion has been delayed until September 2016. Additionally, due to the increased scope and implementation timeline, the projected cost of this system has increased from the original budgeted amount of \$64 million to approximately \$109 million. The Department's allocated share of the cost of this project is included in the Department's capital improvement plan, and the increased cost will result in a reallocation between components of the adopted capital improvement plan. See "Capital Requirements—Adopted CIP and Conservation and Other Capital Improvements."

<sup>(2)</sup> Puget Sound Energy's Large Demand General Service is compared to the Department's Medium, Large, and High Demand General Service. Bills are adjusted by 6% to reflect city taxes.

<sup>(3)</sup> Snohomish PUD's General Service, Medium Load, is compared to the Department's Medium, Large, and High Demand General Service. Bills are adjusted by 4.5% to reflect the City of Everett's utility tax rate.

<sup>(4)</sup> Tacoma Power's Small General Service is compared to the Department's Small General Service. Electric rates include municipal taxes.

The Department currently bills the majority of its residential customers and some small commercial customers bimonthly and all other customers monthly. All bills are due within 21 days of receipt.

The Department has established various payment programs for its customers, including a levelized payment program to allow for monthly payments and an Automatic Bill Payment program. The majority of the customers on the levelized payment program are billed bi-monthly with an option to pay one half of the amount by the bill due date and the remainder in the following month. An exception is made when a customer is enrolled in both the levelized payment plan and the automatic bill payment program, in which case all of the billed amount is drafted from the customer's bank account by the bill due date.

If the customer is not able to pay the entire amount of the billed charges by the due date, the Department allows the customer to make payment arrangements. Customers also have the option to either make a one-time online payment or sign up for recurring automatic online payments using debit/credit cards or bank account information, as long as the account is in good standing.

Accounts receivable write-offs by the Department in 2015 were \$2.6 million, or 0.37%, of retail electrical energy sales revenue, compared to write-offs of \$3.9 million, or 0.53%, in 2014. The Department's collection policy provides for disconnection of power for nonpayment of amounts due the Department.

## **Historical Operating Results 2011-2015**

Table 11 presents information on operating results for the period 2011-2015, along with revenue available for debt service. Revenue available for debt service is then used in Table 12 to calculate the debt service coverage ratio in each of those years.

The financial statements of the Light Fund as of and for the fiscal year ended December 31, 2015, included herein as Appendix C, have been audited by Baker Tilly Virchow Krause, LLP ("Baker Tilly"), independent accountants, as stated in its report appearing herein. The City has not requested that Baker Tilly provide consent for inclusion of its audited financial statements in this Official Statement, and neither the City's independent auditors nor the State Auditor nor any other independent accountants have compiled, examined, or performed any procedures with respect to this Official Statement or any financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information, and they assume no responsibility for, and disclaim any association with, this Official Statement and such information.

TABLE 11 SUMMARY OF HISTORICAL OPERATING RESULTS (\$000)

	2011	2012	2013	2014	2015
OPERATING REVENUES:					
Retail power revenues	\$ 655,984	\$ 664,263	\$ 697,696	\$ 720,777	\$ 736,582
Short-term wholesale power revenues	102,663	70,402	63,035	96,815	61,219
Other power-related revenues (1)(2)(3)	54,696	29,305	40,439	50,825	36,833
Transfers from/(to) RSA (4)	(62,225)	13,219	18,285	(4,369)	23,363
Other operating revenues	21,039	23,085	22,774	22,395	24,860
<b>Total Operating Revenues</b>	\$ 772,157	\$ 800,274	\$ 842,229	\$ 886,443	\$ 882,857
OPERATING EXPENSES:					
Long-term purchased power—Bonneville and other	\$ 206,852	\$ 204,133	\$ 203,126	\$ 214,262	\$ 213,621
Short-term wholesale power purchases	11,433	11,764	19,759	14,912	26,812
Other power expenses	48,523	50,378	66,325	65,843	59,597
Transmission (5)	47,878	46,979	48,213	52,833	54,289
Distribution	58,311	60,855	59,568	59,753	65,052
Customer service	43,120	31,296	39,177	37,621	38,302
Conservation	19,128	20,763	21,504	27,271	29,122
Administrative and general	57,727	66,114	71,751	75,774	92,108
Taxes	73,613	74,885	79,321	80,007	81,114
Depreciation and amortization	88,805	94,810	102,261	105,813	112,000
<b>Total Operating Expenses</b>	\$ 655,390	\$ 661,977	\$ 711,005	\$ 734,089	\$ 772,017
Net Operating Revenue (6)	\$ 116,767	\$ 138,297	\$ 131,224	\$ 152,354	\$ 110,840
Adjustments to Net Operating Revenue (7)					
City taxes (8)	\$ 40,031	\$ 40,950	\$ 42,834	\$ 44,608	\$ 45,534
Depreciation and amortization	88,806	94,811	102,261	105,813	112,000
Depreciation and amortization included in	20,943	21,518	22,250	24,679	27,132
Operating and Maintenance Expenses (9)					
Pension expense (10)	-	-	-	-	27,912
Pension contributions (10)	-	-	-	-	(24,883)
Valuation on exchange power, net (2)(3)	190	240	(251)	271	634
BPA Conservation Augmentation/Agreement revenue (11)	(14,302)	(187)	(464)	(722)	(946)
Investment income (12)	5,582	4,390	4,724	5,430	6,746
Non-cash expenses (13)	6,491	2,828	10,796	1,935	(320)
Other (14)	5,354	3,292	6,192	7,004	1,943
Total Adjustments	\$ 153,095	\$ 167,842	\$ 188,342	\$ 189,018	\$ 195,752
Net Revenue Available for Debt Service	\$ 269,862	\$ 306,139	\$ 319,566	\$ 341,372	\$ 306,592

#### NOTES TO TABLE:

- (1) Includes conservation and renewable credits under the power sales contract with BPA, the recognition of payments from BPA for the purchase of conservation savings, revenue from deliveries of power to Pend Oreille PUD pursuant to the Boundary Project's FERC license, and other energy credits.
- (2) Effective in 2012, the Department adopted GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. Non-monetary transactions are measured at fair value in accordance with GASB No. 62.
- (3) Includes significant activity for the valuation of energy delivered under seasonal exchanges, basis sales, and other power exchange contracts. Energy exchanges have both revenue and expense components; therefore, a net revenue or expense adjustment is made for a given year.
- (4) Transfers from/(to) the RSA in accordance with Ordinance 123260, primarily to address fluctuations in surplus power sales.
- (5) Includes revenue from the short-term sale of excess transmission capacity.
- (6) Operating income per audited financial statements.
- (7) Significant non-cash transactions are adjusted from Net Operating Revenue to calculate Revenue Available for Debt Service. Furthermore, some types of revenue in addition to Operating Revenue are included to calculate Revenue Available for Debt Service. These adjustments are listed in the remaining lines in this table, and are unaudited.
- (8) City taxes are excluded because the lien on such taxes is junior to debt service in accordance with the Bond Legislation.
- (9) The majority of the depreciation and amortization (non-cash) expenses included in Operating and Maintenance Expense are for amortization of conservation expenses that are recognized over a 20-year period.
- (10) Pension expense is the amount recorded for compliance with GASB 68, implemented in 2015, a non-cash item. Pension contributions are the Department's 2015 cash contributions to the Seattle City Employees' Retirement System ("SCERS").
- (11) Payments received for conservation measures are initially recorded as unearned revenue. The adjustment represents the amount of revenue amortized and recognized over future periods for financial reporting, a non-cash transaction.
- (12) Investment income is not included in Total Revenue in this table; therefore, an adjustment is made to Net Operating Revenue, consisting primarily of interest earnings from the City's cash pool and interest receipts from suburban underground charges. This amount excludes unrealized gains and losses, which are non-cash adjustments.
- (13) Primarily claim expenses and capital project expenditures from prior years which were determined not to be capital expenditures.
- (14) Includes proceeds from sale of properties, principal receipts from suburban underground charges from local jurisdictions, and miscellaneous items. In 2014, the line item labeled Other included a one-time true-up downward adjustment to unbilled revenue of \$4.1 million, a non-cash transaction recorded in 2014. Prior years were not revised. In 2013, the line item labeled Other included operating grants totaling \$3.2 million.

Source: Audited Financials (except as noted in footnote 7), Seattle City Light Department, Accounting Division

Historical Debt Service Coverage. The Bond Legislation does not define a "coverage requirement" other than the rate covenant to maintain rates and charges sufficient to pay "all costs of operation and maintenance and to pay all bonds, warrants and indebtedness" of the Light System. See "Security for the Bonds—Rate Covenant" and Appendix A— Bond Ordinance—Section 13(d). The test for the issuance of Future Parity Bonds requires coverage equal to 125% of maximum Annual Debt Service on all Parity Bonds then outstanding and the proposed series of Parity Bonds, with certain permitted adjustments. See "Security for the Bonds—Future Parity Bonds" and Appendix A— Bond Ordinance—Section 13(g).

Furthermore, the Bond Legislation does not specifically define "reasonable charges for maintenance and operation of the Light System" as used in the pledge language, nor does it define "all costs of operation and maintenance" (as used in the rate covenant) or "expenses of operation, maintenance, and repair" (as used in the definition of Net Revenue in the context of the test for issuing Future Parity Bonds). However, the Department treats these terms as interchangeable and the operating expenses listed in Table 11 are recorded in accordance with applicable Generally Accepted Accounting Principles ("GAAP").

The debt service coverage calculations set forth below are intended to reflect compliance with the rate covenant and the Future Parity Bond covenant contained in the Bond Legislation and described under "Security for the Bonds" and for no other purpose. Such calculations reflect the application of generally accepted accounting principles as applied to financial results and may reflect non-recurring or extraordinary accounting transactions permitted under the Bond Legislation.

In providing a rating on the Bonds, certain rating agencies may have performed independent calculations of coverage ratios using their own internal formulas and methodology which may not reflect the provisions of the Bond Legislation. See "Other Bond Information—Ratings on the Bonds." The City makes no representation as to any such calculations, and such calculations should not be construed as a representation by the City as to past or future compliance with any bond covenants or the availability of particular revenues for the payment of debt service, or for any other purpose.

TABLE 12 HISTORICAL DEBT SERVICE COVERAGE (\$000)

	2011	2012	2013	2014	2015
Revenue Available for Debt Service (1)	\$ 269,862	\$ 306,139	\$ 319,566	\$ 341,372	\$ 306,592
Debt Service <sup>(1)</sup> Parity Bonds	\$ 146,688	\$ 169,124	\$ 172,800	\$ 184,756	\$ 189,573
Debt Service Ratios-Times Covered Parity Bonds (2)	1.84	1.81	1.85	1.85	1.62

<sup>(1)</sup> In accordance with a change in Department policy in 2012, federal subsidy payments received in respect of outstanding Build America Bonds, Recovery Zone Economic Development Bonds, and New Clean Renewable Energy Bonds are excluded from Revenue Available for Debt Service effective beginning in 2012. Federal subsidy payments excluded were \$4.6 million, \$5.2 million, \$5.1 million, and \$5.0 million, respectively, for years 2012, 2013, 2014, and 2015. Federal subsidy payments were also received in 2011, but are not netted from the debt service amount shown. For a description of the effect of the federal sequestration that began in March 2013 on these federal direct-pay tax credit bond programs, see "Department Financial Information—Debt Service Requirements—Federal Sequestration."

Source: Seattle City Light Department, Accounting Division

## **Management Discussion of Historical Operating Results 2011-2015**

This section provides a discussion of operating results for the period 2011-2015, based on information in Tables 11 and 12, and an expanded discussion for the period 2014-2015, based on a summary of the Management's Discussion and Analysis included in Appendix C—2015 Audited Financial Statements of the Department.

Summary 2011-2015. Retail revenues increased from \$656.0 million in 2011 to \$736.6 million in 2015, primarily due to the Department's average system rate increases during this time period (see "Retail Rates"). This increase in retail revenues also reflects the increase in the number of customers, from 400,351 in 2011 to 422,810 in 2015.

Net wholesale revenues varied during this period, ranging from a high of \$91.2 million in 2011 to a low of \$43.3 million in 2013. This variability is primarily due to fluctuations in hydro volumes, wholesale power market prices, and retail load. The RSA has been in place since January 1, 2011, and less-than-budgeted net wholesale revenue in 2015 resulted in a net transfer from the RSA to operating cash.

Debt service on Parity Bonds increased from \$146.7 million in 2011 to \$189.6 million in 2015. Debt service coverage ranged from a high of 1.85x in 2013 and 2014 to a low of 1.62x in 2015, reflecting the effect of revenue \$39.3 million lower than planned retail revenue. Approximately half of this variance was attributed to warmer than normal weather during the heating season. The Department's financial policies require the Department to set electric rates designed to achieve a debt service coverage ratio of 1.80x, based on the annual Department budget. Table 12 shows that, historically, the Department has been able to achieve this level of coverage in the four years prior to 2015.

The Department's retail load has been declining since 2011. While the number of customers has been growing, the use per customer has been declining. While some of this is attributed to warmer than normal weather, energy efficiency adoption including LED lighting, appliance standards, and improved building standards are all helping customers use less energy. The Department's robust conservation program is also contributing to declining retail

<sup>(2)</sup> Revenue Available for Debt Service (see Table 11) divided by Parity Bond Debt Service.

load. See "Conservation." The Department's adopted load forecast projects a modest growth. As part of adopting the 2017-2022 Strategic Plan Update, the City Council has directed the Department to study its retail load and consider policy changes that mitigate and prepare for the financial impacts of flat or declining load. See "Strategic Plan."

*Operating Revenues*—2015 vs. 2014. Retail revenues in 2015 were \$736.6 million, \$15.8 million or 2.1% higher than in 2014, primarily due to a 4.2% average system rate increase effective January 1, 2015, and a 1.0% BPA pass-through effective October 1, 2015, even with the lower energy consumption in 2015 compared to 2014 because of the warmer weather experienced throughout the year in 2015. The number of retail customers also increased to 422,810 in 2015, a 1.9% increase from 2014.

The decrease in net wholesale revenues in 2015 from 2014 was \$47.5 million, or 138.0%. Wholesale power sales were \$61.2 million in 2015, a decrease of \$35.6 million from 2014, whereas wholesale power purchases increased by \$11.9 million to \$26.8 million. The decrease in net wholesale revenues was due to earlier snowmelt in the mountains, lower than normal spring precipitation, and above average temperatures since May 2015. As a consequence, less power was generated and, along with the lower wholesale energy prices in 2015 compared to 2014, contributed to the unfavorable net wholesale revenues. The average peak Mid-Columbia Hub electricity price for 2015 was \$25.72 per MWh, compared to \$38.72 per MWh in 2014.

Other power-related revenues, which includes power exchanges decreased by \$14.0 million to \$36.8 million. Other power-related expenses, which includes generation and power exchanges, decreased by \$6.2 million to \$59.6 million in 2015, resulting in net other power-related expenses of \$22.8 million in 2015, a 34.0% increase from net other power-related expenses of \$15.0 million in 2014. The decrease in both power-related sales and power-related purchases in 2015 was due to the lower volume of surplus power available for sale and lower market prices compared to 2014.

In 2015, net transfers from the RSA were \$23.4 million; in 2014, net transfers to the RSA were \$4.4 million.

Revenues from other sources increased by \$2.3 million, totaling \$24.9 million in 2015.

Operating Expenses—2015 vs. 2014. In 2015, long-term purchased power (Bonneville and other) incrementally decreased by \$0.6 million to \$213.6 million, due in part to higher BPA power charges and an increased block load-shaping rate. These were offset primarily by lower generation at Stateline.

Other power expenses, including generation, power exchanges, and other at \$59.6 million, were \$6.2 million lower than in 2014. The decrease was due for the most part to lower fair valuation of the Lucky Peak power exchange resulting from the lower market prices. Transmission expenses, including wheeling, were \$54.3 million, an increase of \$1.5 million from 2014, due to an increase in Skagit tree clearing and other expenses related to the costs incurred for the Goodell Creek wildfire near one of the Department's Skagit facilities. See "Department-Owned Resources—Skagit Project." Distribution expenses increased by \$5.3 million to \$65.1 million in 2015 as a result of higher labor and benefits for system maintenance, tree trimming, outage maintenance, COLA accruals, and an increase in costs to repair billable damages to Department property.

Other operating and maintenance expenses at \$159.5 million increased by \$18.9 million from 2014, for customer service, conservation, and administrative and general. The significant increase was for administrative and general, in the amount of \$16.3 million. The implementation of GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27 ("GASB 68"), increased pension expense by \$7.5 million. Other administrative and general increases were incurred for administrative, general, and engineering salaries and related benefits resulting from lower vacancy rates and for COLA and furlough accruals. These were partially offset by higher overhead applied to capital projects as a result of higher rates, focus on capital work, and an increase in allocated pension costs as a result of implementing GASB 68. Taxes in 2015 were \$81.1 million, an increase of \$1.1 million from 2014, primarily due to higher revenues. Depreciation and amortization increased by \$6.2 million to \$112.0 million.

Net Operating Revenue—2015 vs. 2014. Net operating revenue in 2015 was \$110.8 million, \$41.5 million lower than in 2014, due to higher retail energy sales as a result of the overall rate increase in January 2015, the BPA pass-

through in October 2015, and higher transfers-in from the RSA, offset by significant lower net wholesale revenues and higher operating expenses.

Although not included in Table 11, changes in nonoperating revenues and expenses provide additional information on the financial condition of the Department. Nonoperating revenues decreased by \$1.8 million, to \$16.7 million in 2015 from \$18.5 million in 2014. The major reasons were due to unrealized losses from the change in fair value of the Department's share of investments from the City's investment pool, lower sales of properties, and an increase in FEMA grants, specifically for the Goodell Creek wildfire.

Nonoperating expenses decreased by \$1.4 million to \$76.5 million in 2015. Higher interest expense for outstanding bonds were offset by higher interest charged to construction projects, which is an offset to interest expense, as the focus continued on capital work in 2015.

Capital contributions and grants were \$39.4 million in 2015, an increase of \$11.0 million from 2014, due primarily to capital contributions for energization of underground electrical infrastructure for a local suburban jurisdiction within the service territory and in part for service connections for larger construction projects.

Effect of GASB 68 Implementation. Effective January 1, 2015, the Department adopted GASB 68, which required the Department to record its proportionate share of net pension liability ("NPL") and pension expense in its financial statements, and expanded note disclosures and supplementary information. Previously, the Department did not record NPL and only pension contributions were recorded as pension expense.

To comply with the reporting requirements, the Department recognized a one-time adjustment to beginning net position as of January 1, 2015, for its proportionate share of NPL in the amount of \$233.8 million, net of 2014 contributions of \$22.1 million. For the year ended December 31, 2015, the Department recorded pension expense totaling \$29.5 million and deferred \$24.9 million in 2015 pension contributions for a net effect of \$7.5 million increase in pension expense. There was an additional \$1.6 million of 2015 pension expense deferred for allocation to capital projects. Therefore, the net pension expense recorded for 2015 was \$27.9 million. There was no restatement of 2014 financial statements as a result of implementing GASB 68. The debt service coverage ratio was not affected by the new accounting standard because pension expense continued to be based on contributions for the purposes of calculating the debt service coverage ratio. For further information, see the 2015 audited financial statements of the Department attached as Appendix C.

## **Expectations for 2016 Operating Results**

As of July 15, 2016, the full-year forecast indicates that the Department's debt service coverage ratio is expected to be 1.64x, which is below the City Council-adopted financial policy target of 1.80x. The primary reason for below-target coverage expectations is lower than expected retail sales, due in part from mild winter weather and customer adoption of energy efficiency measures, similar to 2015. In the adoption of the Strategic Plan 2017-2022 Update, the City Council has instructed the Department to study its retail load. See "Strategic Plan." Generation volumes for the calendar year are forecasted to be 94% of the average of the past five years. Net wholesale revenue is forecasted to be \$44.0 million, \$16.0 million lower than the budgeted amount of \$60 million. As of June 30, 2016, the RSA balance was \$89.1 million, which is lower than the \$90 million dollar surcharge trigger. As a result, a 1.5% RSA surcharge has been implemented, effective August 1, 2016. See "Security for the Bonds—Rate Stabilization Account." Net income for 2016 is expected to be approximately \$113.5 million.

## **Debt Service Requirements**

As of September 14, 2016, the principal amount of Outstanding Parity Bonds totaled \$2,119,620,000, including the Bonds and excluding \$32,020,000 refunded with a portion of the proceeds of the Bonds. Principal and interest payments due on the Department's Outstanding Parity Bonds are shown in Table 13. See "Capital Requirements—Financing Plans" for a discussion of the Department's future financing plans

Federal Sequestration. The sequestration provisions of the Budget Control Act of 2011 went into effect on March 1, 2013. The only direct impact of sequestration on the Department for 2016 is expected to be a 6.8% reduction in the amount the Department expects to receive from the federal government in connection with its Municipal Light and Power Revenue Bonds, 2010A (Taxable Build America Bonds—Direct Payment); Municipal Light and Power Revenue Bonds; 2010C (Taxable Recovery Zone Economic Development Bonds—Direct Payment); Municipal Light and Power Improvement Revenue Bonds, 2011B (Taxable New Clean Renewable Energy Bonds—Direct Payment); Municipal Light and Power Improvement Revenue Bonds, 2012C (Taxable New Clean Renewable Energy Bonds—Direct Payment); and Municipal Light and Power Revenue Bonds, 2016A (Taxable New Clean Renewable Energy Bonds—Direct Payment). Because of this reduction, the Department will receive approximately \$398,000 less in interest subsidies than originally anticipated for 2016. The Department has sufficient revenues to pay the interest without these subsidies. Sequestration was originally in effect through FFY 2021 and has subsequently been extended through FFY 2024.

TABLE 13
DEBT SERVICE REQUIREMENTS

	Outs	tanding Parity Bo	onds <sup>(1)</sup>	The l	Bonds	Total Parity Bonds		
Year	Principal	Interest <sup>(2)(3)</sup>	Total	Principal	Interest	Principal Interest <sup>(2)</sup>		Total
2016	\$ 107,450,000	\$ 94,886,155	\$ 202,336,155	\$ -	\$ -	\$ 107,450,000	\$ 94,886,155	\$ 202,336,155
2017	109,130,000	88,694,190	197,824,190	2,100,000	7,060,350	111,230,000	95,754,540	206,984,540
2018	109,590,000	84,011,850	193,601,850	2,250,000	6,897,000	111,840,000	90,908,850	202,748,850
2019	106,210,000	79,180,522	185,390,522	2,360,000	6,784,500	108,570,000	85,965,022	194,535,022
2020	105,305,000	74,287,059	179,592,059	2,480,000	6,666,500	107,785,000	80,953,559	188,738,559
2021	94,275,000	69,955,244	164,230,244	12,530,000	6,542,500	106,805,000	76,497,744	183,302,744
2022	95,610,000	65,198,548	160,808,548	10,685,000	5,916,000	106,295,000	71,114,548	177,409,548
2023	99,295,000	60,347,189	159,642,189	8,800,000	5,381,750	108,095,000	65,728,939	173,823,939
2024	101,910,000	55,307,450	157,217,450	9,250,000	4,941,750	111,160,000	60,249,200	171,409,200
2025	97,260,000	50,081,615	147,341,615	3,165,000	4,479,250	100,425,000	54,560,865	154,985,865
2026	93,590,000	45,414,205	139,004,205	3,320,000	4,321,000	96,910,000	49,735,205	146,645,205
2027	67,605,000	41,398,842	109,003,842	3,490,000	4,155,000	71,095,000	45,553,842	116,648,842
2028	68,865,000	38,126,826	106,991,826	3,625,000	4,015,400	72,490,000	42,142,226	114,632,226
2029	62,215,000	35,150,061	97,365,061	3,770,000	3,870,400	65,985,000	39,020,461	105,005,461
2030	46,955,000	32,498,689	79,453,689	3,925,000	3,719,600	50,880,000	36,218,289	87,098,289
2031	48,750,000	30,270,605	79,020,605	4,080,000	3,562,600	52,830,000	33,833,205	86,663,205
2032	50,640,000	27,962,042	78,602,042	4,245,000	3,399,400	54,885,000	31,361,442	86,246,442
2033	52,610,000	25,546,653	78,156,653	4,415,000	3,229,600	57,025,000	28,776,253	85,801,253
2034	54,805,000	23,025,907	77,830,907	4,590,000	3,053,000	59,395,000	26,078,907	85,473,907
2035	57,170,000	20,469,013	77,639,013	4,775,000	2,869,400	61,945,000	23,338,413	85,283,413
2036	64,795,000	17,657,960	82,452,960	4,965,000	2,678,400	69,760,000	20,336,360	90,096,360
2037	52,300,000	15,047,842	67,347,842	5,165,000	2,479,800	57,465,000	17,527,642	74,992,642
2038	54,220,000	12,722,275	66,942,275	5,370,000	2,273,200	59,590,000	14,995,475	74,585,475
2039	56,215,000	10,310,311	66,525,311	5,585,000	2,058,400	61,800,000	12,368,711	74,168,711
2040	58,305,000	7,784,096	66,089,096	5,810,000	1,835,000	64,115,000	9,619,096	73,734,096
2041	46,460,000	5,532,715	51,992,715	6,040,000	1,602,600	52,500,000	7,135,315	59,635,315
2042	31,660,000	3,936,762	35,596,762	6,280,000	1,361,000	37,940,000	5,297,762	43,237,762
2043	32,990,000	2,611,085	35,601,085	6,535,000	1,109,800	39,525,000	3,720,885	43,245,885
2044	23,380,000	1,227,252	24,607,252	6,795,000	848,400	30,175,000	2,075,652	32,250,652
2045	15,155,000	278,355	15,433,355	7,065,000	576,600	22,220,000	854,955	23,074,955
2046				7,350,000	294,000	7,350,000	294,000	7,644,000
Total	\$2,064,720,000	\$1,118,921,320	\$3,183,641,320	\$160,815,000	\$107,982,200	\$2,225,535,000	\$1,226,903,520	\$3,452,438,520

<sup>(1)</sup> Excludes debt service on the Refunded Bonds.

<sup>(2)</sup> Reflects taxable rates on bonds issued as taxable bonds with a federal subsidy, but does not reflect the interest credit associated with those bonds. For a description of the effect of federal sequestration on these direct-pay tax credit bonds, see "Department Financial Information—Debt Service Requirements—Federal Sequestration."

<sup>(3)</sup> Assumes interest rates on variable rate bonds ranging from 1.00% to 4.00%, per the Department's financial plan.

#### **CAPITAL REQUIREMENTS**

Every year during its annual budget process, the City adopts a six-year CIP, which outlines anticipated investments over that timeframe. The Department's CIP is a part of the City's CIP. The current adopted CIP covers calendar years 2016-2021; the City's CIP covering 2017-2022 is expected to be adopted in November or December 2016. The Department owns, maintains, and operates a multi-billion-dollar physical plant that includes power generation hydroelectric plants, transmission lines, distribution system, substations, and other utility assets. The Department's CIP is the vehicle for repairing, upgrading, and expanding this infrastructure. This section describes the adopted 2016-2021 CIP and other capital requirements that the Department intends to implement over the period 2016-2021. Any amounts listed for specific projects are for expenses expected to occur only during the period 2016-2021 and may not represent the total cost of the project.

#### Generation

Generation plant includes facilities used to produce electricity. Typical assets are reservoirs, dams, waterways, waterwheels, turbines, generators, and accessory electrical equipment. Generation expenditures are projected to total \$432.3 million during the six-year planning period, averaging about \$72.1 million per year and representing about 21% of planned capital expenditures for that period. A large percentage of generation investment is dedicated to core Department functions that maintain or add to generation infrastructure and ensure system reliability and power availability to customers, including the Department's generator and turbine runner rebuild programs (\$91.2 million). A large portion of the CIP expenditures for generation provides for environmental mitigation requirements primarily related to the terms and conditions of the FERC license for the Boundary Project (\$107.2 million) and upcoming relicensing of the Skagit Project (\$18.2 million).

#### **Transmission**

Transmission plant includes poles, towers, and conductors used to carry electricity from generation facilities to substations. Transmission expenditures are projected to total \$99.0 million during the six-year planning period, averaging about \$16.5 million per year and representing about 5% of planned capital expenditures for that period. The transmission reliability project (\$15.3 million) is an ongoing project that replaces one percent of the Department's transmission structures and conductors each year. It provides engineering, construction, and related work, improving and maintaining the reliability of the overhead or underground transmission system. The Denny Substation Transmission Lines project (\$57.7 million) designs and constructs transmission lines to support the new Denny Substation.

#### Distribution

Distribution plant includes poles, wires and cables, transformers, manholes, vaults, ducts, and other electrical equipment and infrastructure needed to deliver power from the substation to the customer connection at home or business in both network and non-network areas. The Department plans to spend about \$1,019.1 million from 2016 through 2021 on distribution system improvements and additions, averaging \$169.9 million per year and representing about 50% of planned capital expenditures for that period. Significant expenditures are required for the following purposes:

- (i) constructing new and enlarged overhead and underground service connections within the Department's service territory;
- (ii) relocating infrastructure and providing capacity related to a number of large local transportation and regional transit projects, including the Alaskan Way Viaduct and the seawall replacement (\$82 million). The cost of this project is largely out of the Department's control (see "The City of Seattle—Considerations Related to Alaskan Way Viaduct and Seawall Replacement Program");
- (iii) replacement of older equipment in the Department's distribution system that is nearing the end of its usable life, is overloaded, or is of an outdated design, which requires replacement due to the lack of spare parts;
- (iv) network power distribution system design and construction to connect customers to the new Denny Substation; and
- (v) investing in Smart Grid technology.

#### **General Plant**

General plant includes non-electrical system assets including buildings and facilities, such as the North and South Service Centers, and investments in office-related computer equipment, information and communications systems, furniture, and mobile equipment. Programmed expenditures of \$246.3 million provide for general plant improvements and/or replacement over the period 2016-2021, averaging about \$41.1 million per year and representing about 12% of planned capital expenditures for that period. The Department plans to fund major replacement and improvement of its information technology infrastructure (\$42.9 million) and replace and expand its light and heavy duty mobile equipment fleet (\$38.0 million). Other general plant major investments include a technical training center (\$9.9 million), a new service center (\$82.6 million), and an upgrade to the Energy Management System (\$9.5 million), offering remote terminal units that allow operators to see field data in real time.

#### Substations

Substation expenditures are projected to total \$229.0 million during the six-year planning period, averaging about \$38.2 million per year and representing about 11% of planned capital expenditures for that period. The major project is the continued design and construction of the new Denny Substation (\$99.3 million). Other projects include the replacement of existing substation equipment, including transformers and breakers to maintain reliability and to increase capacity to provide for load growth.

## Conservation

Conservation resource programs offer financial incentives (such as rebates, discounts, and loans) to customers who produce energy savings by installing approved energy-saving equipment or weatherization measures or by designing a building to exceed energy code requirements. Program costs include program administration, audits, and inspections, and the costs of designing and installing energy savings measures. The current expenditure level is expected to achieve 84 aMW of cumulative annual energy savings between 2016 and 2021. The Department is forecasting an annual achievement of 14.0 aMW over this six-year period, and the expenditure forecast reflects this level of effort.

## **High Ross Payment Amortization**

In setting rates for the 2000-2003 period, the City Council directed the Department to amortize the \$21.8 million capital portion of the annual payment to B.C. Hydro under the High Ross Agreement through 2035. The Department pays B.C. Hydro \$21.8 million each year from 2000 through the final capital payment in 2020, \$9.1 million of the annual payment is deferred, and \$12.7 million is recognized as an expense. From 2021 through 2035, the remaining balance of deferred costs will be amortized. The deferred portion of the payments to B.C. Hydro is capitalized and therefore is treated as a component of capital requirements. See "Power Resources and Cost of Power—Department-Owned Resources—Skagit Project" for a discussion of the High Ross Agreement.

## Relicensing, Mitigation, and Other Costs

In addition to including capital expenditures for environmental mitigation in the CIP, the Department pays in the year incurred, but for planning purposes defers and capitalizes, certain operations and maintenance expenditures for environmental mitigation. These deferred operations and maintenance expenditures are for mitigation measures similar to those included in the CIP; however, they differ from those in the CIP because they are for measures on land or structures belonging to entities other than the Department and involve payments to the owners. Recipients of these payments include a variety of nonprofit organizations and governmental agencies with which the Department has entered into contracts for environmental mitigation pursuant to the terms of relicensing settlement agreements. The Department also defers environmental remediation expenditures, most of which are related to the Duwamish Waterway cleanup activities. Other deferred costs include city and State taxes on suburban undergrounding to match the timing of the repayment by customers of the Franchise Cities.

## **Adopted CIP and Conservation and Other Capital Requirements**

The Department does not as a matter of course make public projections as to future sales, earnings, or other results. However, the Department has prepared the prospective financial information as set forth in Table 14 to provide readers of this Official Statement information related to projected capital expenditures of the Department. This information was not prepared with a view toward public disclosure or with a view toward complying with the

guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but, in the view of the Department, was prepared on a reasonable basis, reflects the best currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future capital expenditures of the Department. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and potential purchasers of the Bonds and the readers of this Official Statement are cautioned not to place undue reliance on the prospective information.

TABLE 14
ADOPTED CAPITAL IMPROVEMENT AND CONSERVATION PROGRAMS AND OTHER CAPITAL REQUIREMENTS
2016-2021
(\$000,000)

	2016	2017	2018	2019	2020	2021	Total
Generation	\$ 72.6	\$ 71.0	\$ 68.4	\$ 59.9	\$ 76.7	\$ 83.8	\$ 432.3
Transmission	17.6	6.9	14.3	5.2	14.0	41.0	99.0
Substation	52.8	56.5	51.0	22.4	22.4	23.9	229.0
Distribution <sup>(1)</sup>	214.2	196.8	164.4	136.0	140.7	167.0	1,019.1
General Plant	45.0	32.5	20.6	34.9	60.6	52.8	246.3
Total CIP	\$ 402.2	\$ 363.7	\$ 318.7	\$ 258.4	\$ 314.2	\$ 368.5	\$ 2,025.8
Conservation <sup>(2)</sup>	28.7	35.7	36.4	37.1	37.9	38.6	214.5
High Ross Payment Amortization (2)	9.1	10.0	9.1	9.1	9.1	-	46.5
Relicensing, Mitigation, and Other Costs (2)	14.7	3.7	7.7	7.2	4.2	4.5	41.9
Total Funds Required	\$ 454.7	\$ 413.1	\$ 371.9	\$ 311.8	\$ 365.4	\$ 411.6	\$ 2,328.6
Sources of Funds							
Cash from Operating Account	\$ 128.0	\$ 102.8	\$ 97.4	\$ 59.4	\$ 70.1	\$ 137.7	\$ 595.2
Cash from Contributions	54.7	42.7	31.3	33.5	34.8	37.7	234.7
Cash from Bond Sale	272.0	267.6	243.3	218.9	260.6	236.3	1,498.6
Total Funds Available	\$ 454.7	\$ 413.1	\$ 371.9	\$ 311.8	\$ 365.4	\$ 411.6	\$ 2,328.6

<sup>(1)</sup> Includes Alaskan Way Viaduct and seawall replacement. See "The City of Seattle—Considerations Related to Alaskan Way Viaduct and Seawall Replacement Program."

Source: Seattle City Light Department, Finance Division

## **Financing Plans**

Capital requirements of \$2,328.6 million from 2016 through 2021 (including \$2,025.8 million of the CIP and \$302.9 million of certain capitalized costs) are expected to be financed through a combination of cash from operations, contributions in aid of construction, capital grants, and the proceeds of the Bonds and Future Parity Bonds. The Department forecasts that bond proceeds will fund approximately 64% of the capital requirements over the period 2016-2021.

Approximately concurrently with the issuance of the Bonds, the City expects to issue the 2016D and 2016E Bonds in an aggregate principal amount of approximately \$100 million in a private placement of variable rate (multimodal) debt. The 2016D and 2016E Bonds are expected to be sold by direct purchase in an initial Index Floating Rate

<sup>(2)</sup> The City Council passed resolutions authorizing the debt financing and/or deferral of certain costs in accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. Programmatic conservation costs are amortized to expense over 20 years. The deferred portion of annual payments to B.C. Hydro under the High Ross Agreement, which amounts to \$9.1 million per year in years 2000 through 2020, will be amortized over 15 years beginning in 2021. See "Power Resources and Cost of Power—Department-Owned Resources." Includes relicensing, mitigation, toxic cleanup, and other costs such as City and State taxes on suburban undergrounding. These costs are deferred and amortized to expense over the respective project license period or other relevant period.

mode, with options to convert the bonds to Daily, Weekly, Long-Term, or Index Floating Rate modes in the future. The 2016D and 2016E Bonds are expected to be issued as Parity Bonds, subject to meeting the Future Parity Bond debt service coverage covenant. They are expected to be structured with planned serial or term bond amortization of principal in 2017 through 2046. They are expected to be initially sold subject to a Direct Purchase Agreement that includes a Term-Out Provision providing for extraordinary mandatory redemption of the outstanding principal if there is a failure to purchase all of the then-outstanding 2016D and 2016E Bonds on a mandatory tender date. If triggered, the Term-Out Provision would require mandatory sinking fund redemptions over a five-year period in amounts sufficient to redeem all of the remaining outstanding principal during that period. The City would retain the right to convert the 2016D and 2016E Bonds to another interest rate mode during the Term-Out period.

#### ENVIRONMENTAL MATTERS

## **Impact of Environmental Matters**

The Department manages its legal obligations for environmental protection through programs that are expected to produce compliance with regulations. Although the Department cannot predict the outcome or effect of the matters described in this section, the Department does not expect that any of these matters will affect adversely the ability of the City to pay the principal of and interest on the Bonds.

Routine operations in connection with the generation and delivery of electric power are regulated by federal, State, and local laws that prescribe standards, work practices, and training requirements, requiring extensive documentation to ensure the protection of the environment and human health. Noncompliance creates the potential for violations that can result in civil and criminal penalties and substantial fines. Some of these laws also impose strict liability for environmentally damaging releases, including costs of investigation and cleanup, damages, restoration, and the costs of agency oversight and enforcement.

## Waste Management and Disposal Issues

Department operations generate a variety of wastes, including dangerous wastes. The Department's efforts have reduced waste generation and disposal costs, and the Department maintains those reduced levels. The Department promotes compliance with federal and State dangerous waste regulations through use of operations manuals, staff training, and periodic internal inspections or audits. Besides the dangerous waste regulations, internal inspections are used to monitor compliance with other laws, including the Toxic Substances Control Act, Clean Water Act, and Underground Storage Tank regulations.

## **Contaminated Site Liability**

As of December 31, 2015, the Department had recorded environmental liability amounts net of recoveries of \$45.9 million under the GASB reporting requirements. This amount is evaluated semi-annually and is subject to adjustment based on future developments. It is likely that the Department will be liable for a portion of the costs of future remediation of other areas on the Lower Duwamish site, and on the East Waterway alongside Harbor Island and adjacent to the Lower Duwamish.

No assurances can be given that other contaminated sites do not exist or will not be discovered in the future. The Department's policy has been to undertake voluntary cleanup action when contamination is discovered during regular maintenance and construction.

Lower Duwamish Waterway. In 2001, the U.S. Environmental Protection Agency (the "EPA") listed the Lower Duwamish Waterway as a Superfund site. A remedial investigation ("RI") and feasibility study ("FS") and a study and cleanup of early action sites was completed in 2012 pursuant to an Administrative Settlement Agreement Order on Consent entered into among the City (through the Department and SPU), the County, the Port of Seattle, and the Boeing Company. EPA released its Record of Decision in November 2014 estimating the cost to be \$342 million, with a seven-year construction period beginning in 2019. More than 100 entities have been identified as potentially responsible parties ("PRPs"). Over the next two years, a third party will determine the liability of each of the PRPs in accordance with a voluntary allocation agreement.

Harbor Island—East Waterway. The East Waterway was designated as a Superfund site in 2001 as an operable unit of the overall Harbor Island Superfund Site, which was listed by EPA in 1983. Current PRPs include the City, the Port of Seattle, the County, and Seattle Iron & Metals Corporation ("SIMC"). Potential Department liability derives from Department transformers sold to SIMC, from which contaminants are thought to have drained into the waterway. A Supplemental Remedial Investigation and Feasibility Study ("SRI/FS") has been underway since 2006, with the Port of Seattle taking the lead on the study. The City has agreed to an interim sharing of on-going costs of the SRI/FS with the Port and the County. The Department expects that EPA will act n the SRI/FS before the end of 2017. Clean-up construction timing and cost estimates will not be known until the SRI/FS identifies a preferred remedy.

Georgetown Steam Plant. In addition, the Department signed an order with Ecology to investigate and possibly remove contamination in an area that encompasses North Boeing Field, the Department's property known as the Georgetown Steam Plant, and the King County Airport. The draft RI report was submitted to Ecology in June 2016; the FS is anticipated to be complete in 2018. The Department completed interim actions at the Georgetown Steam Plant property in 2012. The Department is also conducting voluntary remedial actions related to pesticides, PCB, and lead contamination at some of its discontinued electrical facilities.

## **Endangered Species Act**

Columbia and Snake River Anadromous Fish. There are three federal action agencies responsible for the operation of the Federal System: the Corps, the Bureau of Reclamation, and BPA. These agencies have been engaged in Endangered Species Act ("ESA") Section 7 consultation for a number of years and, as a result of litigation, the National Oceanic and Atmospheric Administration ("NOAA Fisheries") has been required to develop a series of Biological Opinions relating to the Columbia and Snake River fisheries. In 1995, NOAA Fisheries developed a broad species recovery plan, including recommendations for upstream and downstream passage requirements. These requirements include minimum flow targets for the entire Columbia River basin designed to maximize the survival of downstream migrating juvenile salmon and steelhead and upstream migrating adult salmon and steelhead. NOAA Fisheries and the USFWS developed supplemental recovery plans in 1998 and 2000 that identified reasonable and prudent alternatives to protect and recover not only listed salmon and steelhead but also Bull Trout and sturgeon, which have been listed under the ESA in the Columbia River Basin. Biological Opinions for the Columbia-Snake River Basin were released by NOAA Fisheries in 2008. Two of these Biological Opinions govern the federal operation of 14 hydropower dams in the Federal System, while the third governs salmon harvest by the states and tribes. The Biological Opinion for the Federal System has been the subject of ongoing litigation in U.S. District Court (Oregon). The U.S. Department of Commerce and NOAA Fisheries, in coordination with the U.S. Department of Justice, completed an extensive review of the Biological Opinion and filed the findings of the review and an Adaptive Management Implementation Plan ("AMIP") for the salmon recovery with the U.S. District Court in 2009. NOAA Fisheries submitted a supplemental Biological Opinion on May 20, 2010, that considered new research and fully integrated the AMIP into the 2008 Biological Opinion. In May 2011, the U.S. District Court ruled that the 2008/2010 Biological Opinion was illegal because it failed to identify specific mitigation plans beyond 2013, and issued a remand order for a new Biological Opinion to be submitted by NOAA Fisheries. In response to this remand order, NOAA Fisheries issued a supplemental Biological Opinion on January 17, 2014. The adequacy of the updated Biological Opinion was challenged by a legal complaint filed by the National Wildlife Federation, Sierra Club, State of Oregon, Nez Perce Tribe, NW Energy Coalition, American Rivers, and several fish and wildlife conservation organizations. In response to this legal complaint, the U.S. District Court rejected the federal government's recovery plan for Columbia River salmon and steelhead in an opinion and order filed on May 4, 2016. The court remanded the Biological Opinion but left it in place so that ongoing recovery actions could continue, while ordering NOAA Fisheries to complete a new recovery plan by March 1, 2018. The court order also required updated environmental impact statements for the recovery plan that will need to be completed by NOAA, the Army Corps of Engineers, and the Bureau of Reclamation. The anadromous fish and ESA issues in the Columbia River system affect the amount of electricity the Department receives from BPA's Slice program. See "Power Resources and Costs of Power—Purchased Power Arrangements."

The Department's power generation at the Boundary Project has been affected by the salmon and steelhead recovery plans and the Biological Opinions on which they were based. Specifically, the Biological Opinions require reservoirs upstream from the Boundary Project to store more water during the winter for release in the spring and summer when it is needed for downstream juvenile fish migration. Generation at the Boundary Project therefore is

reduced in the fall and winter, when the region experiences its highest sustained energy demand. Due to the recommendations of the Biological Opinions, the water not released in the fall and winter on the Pend Oreille River is released in the spring and summer, when it is sometimes spilled because the Boundary Project does not have sufficient hydraulic capacity to use all the available water for generation. This results in a reduction in the Boundary Project's firm capability under the terms of the Coordination Agreement. See "Power Resources and Cost of Power—Overview of Resources." The new Biological Opinion issued by NOAA Fisheries will likely result in changes in flows that could have an impact on the Boundary Project. These Biological Opinions may have similar effects on the amounts the Department receives under contracts with Grant PUD and BPA. For a discussion of additional environmental issues and the Boundary project, see "Power Resources and Cost of Power—Department-Owned Resources—Boundary Project."

Skagit, Tolt, and Cedar Rivers ESA-Listed Fish. Other ESA fish listings that may affect Department operations include Bull Trout, Chinook Salmon, and steelhead in Puget Sound. Bull Trout, which were listed as a threatened species in 1999 by the USFWS, have a wide geographic range in the Pacific Northwest. The Skagit River populations of Bull Trout are recognized as being among the healthiest in the U.S. due to excellent habitat conditions, cold water temperatures, and an abundant food supply. Bull Trout are also found in Chester Morse Lake and the Cedar River in the vicinity of the Cedar Falls Project. This species is also occasionally observed in the mainstream Tolt River at the confluence with the North and South Fork Tolt Rivers, which is downstream of the Tolt Project. The Skagit River downstream of the Skagit Project is listed as Critical Habitat for Bull Trout by the USFWS, as are the major tributaries to the three project reservoirs. The Tolt and Cedar Rivers and reservoirs are excluded from the Critical Habitat designations for this species. The draft recovery plan for Bull Trout throughout the coterminous United States was completed by the USFWS in 2004. The final recovery plan for Bull Trout was released by the USFWS on September 28, 2015.

Bull Trout are also found in the Boundary Reservoir. In March 2013, FERC issued a license that includes requiring additional measures to support the recovery efforts for Bull Trout, including habitat enhancements and the suppression of non-native trout. See "Power Resources and Cost of Power—Department-Owned Resources." The Boundary FERC license includes the participation of State and federal agencies responsible for the protection of Bull Trout. The measures to be implemented as part of the license will not affect power generation, although there will be costs associated with implementing protection measures for native salmonids, which include Bull Trout. See "Power Resources and Costs of Power—Department-Owned Resources—Boundary Project."

Chinook Salmon in Puget Sound were listed as threatened by NOAA Fisheries in 1999, and are present in the Skagit, Cedar, and Tolt Rivers downstream of the Department's hydroelectric facilities. Chinook Salmon populations increased to 30-year-high levels on the Skagit River from 2004 through 2006, declined to average levels in 2007 and 2008, further declined from 2009 to 2011, and improved to average levels from 2012 to 2014. The Skagit River downstream of the Skagit Project continues to sustain the largest native population of Chinook Salmon in the Puget Sound region. The Skagit, Cedar, and Tolt Rivers downstream of the Department's hydroelectric facilities were designated as Critical Habitat for Chinook Salmon by NOAA Fisheries. The Department's dams on the Skagit and Tolt Rivers are located above natural passage barriers to salmon and steelhead.

Steelhead were listed as threatened by NOAA Fisheries in 2007. Winter steelhead populations are located in the Skagit, Cedar, and Tolt Rivers downstream of the Department's hydroelectric facilities. The South Fork Tolt River also has one of the few summer steelhead populations in the Puget Sound region. Steelhead populations declined to 30-year-low levels in most Puget Sound rivers during the early 2000s. Steelhead returns to the Skagit River basin remained below the floor level established by WDFW from 2006 to 2009, and reached an historic low point in 2009. Since then, the returns have shown incremental improvement, and exceeded the floor level in 2013 and 2014. Steelhead returning to the upper Skagit River, the area most affected by the Skagit Project, exceeded average annual counts for this reach from 2010 through 2014. NOAA Fisheries is in the process of developing a recovery plan for steelhead in the Puget Sound region, with the plan expected to be completed in early 2018.

A wide range of actions has been taken by the Department to reduce and mitigate the potential adverse impacts of its operations on these listed fish species. On the Cedar River, the Department's activities are covered by a Habitat Conservation Plan that authorizes operations with regard to all listed species of the Cedar Falls Project and by an incidental take permit. Both the Skagit and Tolt Projects were licensed through a collaborative process involving State and federal regulatory agencies, including NOAA Fisheries, USFWS, WDFW, and tribes. These agreements

include extensive measures to protect fish, including complex flow management measures and non-flow measures such as habitat restoration, conservation land acquisition, and research and monitoring. In addition, the Department is continuing an ESA Early Action program that is supporting the recovery of Bull Trout, Chinook Salmon, and steelhead populations in the Skagit and Tolt River watersheds. This program has funded several major habitat restoration projects for the three listed fish species in the Skagit and Tolt River watersheds. The Department has also acquired more than 3,000 acres of high quality habitat for listed fish species in these watersheds for permanent conservation protection. Monitoring and research studies by the Department are continuing in partnership with WDFW, National Park Service, U.S. Fish and Wildlife Service, Skagit River System Co-op, and the Upper Skagit Tribe to determine the population status of and the factors potentially limiting Bull Trout, Chinook Salmon, and steelhead populations downstream of the Skagit Project, and Bull Trout populations in the three Skagit River reservoirs. In addition, monitoring and research studies are continuing in partnership with Tulalip Tribes and WDFW on the South Fork Tolt River focused on Chinook Salmon and both summer and winter steelhead. These studies will be used to develop management and recovery plans in cooperation with State and federal agencies to improve habitat conditions for listed fish species.

The Skagit Project Biological Opinion for Chinook Salmon and steelhead was completed by NOAA Fisheries in November 2012; it included the adoption of four additional flow protection measures that had already been in effect on a voluntary basis by the Department to provide for the ongoing protection and recovery of steelhead and Chinook Salmon. The Skagit Project Biological Opinion for Bull Trout was completed by the USFWS in February 2013 and adopted the same flow protection measures contained in the NOAA Fisheries Biological Opinion, as well as specific habitat conservation measures and population monitoring requirements, to aid in the protection and recovery of Bull Trout. Continued implementation of these required conservation measures will have no significant effect on the Department's operations at the Skagit Project.

#### **Clean Water Act**

Section 401 of the federal Clean Water Act ("CWA") requires states to provide a "water quality certification" regarding compliance of discharges with state water quality requirements as a precondition for federal actions including licensing of hydroelectric projects. The purpose of the certification is to ensure that the project complies with state water quality standards. These standards address various physical and chemical parameters. Section 401 also has been interpreted to authorize states to condition their certification on maintenance of a minimum stream flow determined to be necessary to protect fish.

An agreement with State and federal agencies was reached on minimum flows for the Newhalem Project, and incorporated into the FERC license issued in 1997. These minimum flows were a condition of the Section 401 certification issued in 1996. Ecology implemented new water quality standards for the State in 2007, intended to protect aquatic uses, including federally-listed fish species such as Bull Trout, Chinook Salmon, and steelhead. In 2011, Ecology issued a Section 401 certification as part of the FERC license for the Boundary Project. See "Power Resources and Cost of Power—Department-Owned Resources—Boundary Project." The Department also participates in other water quality regulatory processes.

On April 21, 2014, the EPA and the Corps proposed a rule defining the waters protected under the CWA. Following a public review period, the final rule became effective on August 29, 2015. The new rule redefines the "waters of the United States," which is used to determine whether individual water bodies are jurisdictional under the CWA and thus subject to federal permitting requirements. The rule provides greater clarity on the type of water bodies that are under protected by the CWA, including tributaries, wetlands, and ditches that are connected to designated Waters of the United States." A nationwide stay of the rule was issued by the U.S. Court of Appeals (Sixth Circuit) on October 9, 2015, due to numerous legal challenges pending throughout the country. On May 31, 2016, the U.S. Supreme Court ruled that landowners can challenge "Waters of the United States" rulings in federal court. The impacts of the rule on the Department are expected to be minimal.

## Renewable Energy and Greenhouse Gas Mitigation

In 2000, the City Council set a long-term goal for the Department to achieve greenhouse gas neutrality while meeting all of the electricity needs of Seattle. In 2005, the Department became the first electric utility in the country to publicly declare achievement of zero net greenhouse gas emissions. It has maintained that carbon neutral status every year since.

The Department currently uses hydroelectric resources for 90% of the power it provides, the primary reason the Department's greenhouse gas emissions are so low. The Department's carbon emissions are further reduced by its aggressive energy efficiency and conservation programs, which help customers to save energy and money. Renewable energy projects have been added to the Department's resource mix. See "Power Resources and Cost of Power—Purchased Power Arrangements." The Department's Green Up program offers its retail customers the opportunity to further support the acquisition of renewable energy credits. See "Department Financial Information—Retail Rates—Voluntary Green Power Program." In addition, the Department's IRP relies on only new renewables and conservation to meet future load growth.

The Department has a very low emission factor as reported to and verified through the Climate Registry. The direct costs of carbon dioxide (CO<sub>2</sub>) regulation are likely to be paid by direct emitters; the Department has no fossil fuel plants and very small operational emissions. The Department purchases greenhouse gas offsets for these emissions.

Federal and state initiatives have been proposed to address global climate change by controlling or monitoring greenhouse gas emissions, encouraging renewable energy development, and implementing other measures. Ecology released the draft of the proposed Clean Air Rule in June 2016. The Department is not expected to be regulated under this newly proposed rule. On August 3, 2015, the EPA finalized a new rule, "The Clean Power Plan," under Section 111(d) of the Clean Air Act designed to regulate greenhouse gas emissions from existing power plants. The new rule includes state-specific goals and guidelines for states to develop plans for meeting these goals. The Department is reviewing this new rule and is working with key stakeholders to monitor it as it moves toward possible final implementation. At this time, it is unknown how the State will choose to implement the rule. The Department reports to EPA a small amount of emissions of a potent greenhouse gas used in electrical equipment, but any cost impacts resulting from future legislation are expected to be low. In addition, IRP analyses suggest that a carbon tax or carbon cap and trade regime could increase the competitiveness of the Department's wholesale power sales, because 90% are from power resources with no CO<sub>2</sub> emissions.

## **Climate Change**

The Department continues to research and monitor potential effects of climate change. In 2016, the Department completed a Climate Change Vulnerability Assessment and Adaptation Plan to identify potential actions to reduce risks associated with climate change. The Department is a member of the U.S. Department of Energy Partnership for Energy Sector Climate Resilience, developing best practices to increase resilience to climate change and extreme weather.

The Department's resource mix is 90% hydro-based generation. The physical effects of climate change are expected to affect the amount, timing, and availability of hydroelectric generation in the future. In cooperation with the University of Washington's Civil and Environmental Engineering Department, the Department is studying how projected changes in temperature, rainfall, and snowpack could affect glaciers and stream flow in the region and thus future output from its hydropower generating plants and other hydropower purchases. The climate change studies described in the 2010 through 2014 IRPs suggest little change in annual generation, but gradually increasing runoff during the winter peak demand period, accompanied by gradually decreasing runoff during the late summer and fall. Warmer temperatures may also cause decreases in winter electricity demand. In the adoption of the Strategic Plan 2017-2022 Update City Council has instructed City Light to study its retail load. See "Strategic Plan." The projected effects of climate change on hydropower generation and demand are much less adverse for the Department as a winter-peaking utility than for summer-peaking utilities. In cooperation with the University of Washington's Climate Impacts Group, the Department conducted research on future changes in lightning potential and windstorms due to climate change in western Washington. The study showed little change in these extreme weather events. The Department will be less affected by changes in extreme weather and sea level rise than other City departments, but coordinates with other City departments to understand potential risks. The Department continues to monitor new information on potential climate change effects through its Climate Change Initiative as part of the Strategic Plan.

#### VARIOUS FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

The electric utility industry in general has been, and in the future may be, affected by a number of factors which could impact the financial condition and competitiveness of many electric utilities, including the Department, and the level of utilization of generating and transmission facilities. Such factors include, among others:

- (i) effects of compliance with changing environmental, safety, licensing, regulatory, and legislative requirements;
- (ii) changes resulting from conservation and demand-side management programs on the timing and use of electric energy;
- (iii) changes resulting from a national energy policy;
- (iv) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and "strategic alliances" of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low-cost electricity;
- (v) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many investor-owned utilities;
- (vi) increased competition from independent power producers and marketers, brokers, and federal power marketing agencies;
- (vii) "self-generation" or "distributed generation" (such as microturbines and fuel cells) by industrial and commercial customers and others;
- (viii) effects of inflation on the operating and maintenance costs of an electric utility and its facilities;
- (ix) changes from projected future load requirements;
- (x) increases in costs and uncertain availability of capital;
- (xi) shifts in the availability and relative costs of different fuels (including the cost of natural gas);
- (xii) increases or decreases in the price of energy purchased or sold on the open market that may occur in times of high peak demand or supply;
- (xiii) issues with transmission capacity and integrating wind power generation;
- (xiv) inadequate risk management procedures and practices with respect to, among other things, the purchase and sale of energy and transmission capacity;
- (xv) other legislative changes, voter initiatives, referenda, statewide propositions, sequestration, and other failures of Congress to act;
- (xvi) effects of changes in the economy;
- (xvii) effects of possible manipulation of the electric markets;
- (xviii) natural disasters or other physical calamities, including, but not limited to, earthquakes, tsunami, floods, mud slides, volcanic eruptions, wildfires, droughts, and wind storms;
- (xix) man-made physical and operational disasters, including but not limited to terrorism, security (including cybersecurity) breaches, cyber-attacks, and collateral damage from untargeted computer viruses;
- (xx) variations in the weather and changes in the climate; and
- (xxi) failures of or other issues with infrastructure.

Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility and likely will affect individual utilities, including the Department, in different ways.

The Department is unable to predict what impact such factors will have on its business operations and financial condition. This Official Statement includes a brief discussion of certain of these factors. This discussion does not

purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the Bonds should obtain and review such information.

#### THE CITY OF SEATTLE

The following provides general information about the City.

## **Municipal Government**

Incorporated in 1869, the City is the largest city in the Pacific Northwest and is the seat of King County.

The City is a general purpose government that provides a broad range of services typical of local municipalities, such as streets, parks, libraries, human services, law enforcement, firefighting and emergency medical services, planning, zoning, animal control, municipal court, and utilities. The City owns and operates water, electric, solid waste, and drainage and wastewater utilities, although the County provides wastewater treatment service. The County also provides certain services throughout the County and within the City, including courts of general jurisdiction, felony prosecution and defense, jail, public health, and transit services.

The City is organized under the mayor-council form of government and operates under its City Charter. The Mayor, the city attorney, and the Municipal Court judges are all elected to four-year terms. In 2013, voters approved a charter amendment shifting from nine at-large City Council positions to seven City Council positions elected by district and two at-large positions. As a result, all nine City Council positions were up for election in 2015. The City Council members elected by district will serve four-year terms and the at-large City Council members elected in 2015 will serve a two-year term. In 2017, the at-large positions will be up for re-election, and thereafter, all City Council positions will be for staggered four-year terms.

*Mayor*. The Mayor serves as the chief executive officer of the City. The Mayor presents to the City Council annual statements of the financial and governmental affairs of the City, budgets, and capital improvement plans. The Mayor signs, or causes to be signed on behalf of the City, all deeds, contracts, and other instruments.

*City Council*. As the policy-making legislative body of the City, the City Council sets tax levies and utility rates, makes appropriations, and adopts and approves the annual operating budget and capital improvement plans for the City. The City Council members serve on a full-time basis.

Municipal Court. The State Constitution provides for the existence of county superior courts as the courts of general jurisdiction and authorizes the State Legislature to create other courts of limited jurisdiction. The Seattle Municipal Court has limited jurisdiction over a variety of cases, including misdemeanor criminal cases, traffic and parking infractions, collection of fines, violation of no-contact or domestic violence protection orders, and civil actions for enforcement of City fire and housing codes. The Municipal Court has seven judges. Municipal Court employees report to the judges.

## **Financial Management**

City financial management functions are provided by the Department of Finance and Administrative Services.

Accounting. The accounting and reporting policies of the City conform to generally accepted accounting principles for municipal governments and are regulated by the State Auditor's Office, which maintains a resident staff at the City to perform a continual current audit as well as an annual, post-fiscal year audit of City financial operations. The Accounting Services Division of the Department of Finance and Administrative Services maintains general supervision over the accounting functions of the City.

Auditing. The State Auditor is required to examine the affairs of all local governments at least once every three years; the City is audited annually. The examination must include, among other things, the financial condition and resources of the City, compliance with the State Constitution and laws of the State, and the methods and accuracy of the accounts and reports of the City. Reports of the State Auditor's examinations are required to be filed in the

office of the State Auditor and in the Department of Finance and Administrative Services. The City's Comprehensive Annual Financial Report for 2015 may be obtained from the Department of Finance and Administrative Services and is available at <a href="http://www.seattle.gov/cafrs/default.htm">http://www.seattle.gov/cafrs/default.htm</a>. The Department's 2015 financial statements are also audited by an independent auditor and are attached as Appendix C.

The State Auditor's Office has authority to conduct independent performance audits of State and local government entities. The Office of the City Auditor also reviews the performance of a wide variety of City activities such as span of control, City-wide collections, special events permitting, and specific departmental activities.

Municipal Budget. City operations are guided by a budget prepared under the direction of the Mayor by the City Budget Office pursuant to State statute (chapter 35.32A RCW) and based in part on General Fund revenue forecasts prepared by the City's Department of Finance and Administrative Services. The proposed budget is submitted to the City Council by the Mayor each year not later than 90 days prior to the beginning of the next fiscal year. Currently the fiscal year of the City is January 1 through December 31. The City Council considers the proposed budget, holds public hearings on its contents, and may alter and revise the budget at its discretion, subject to the State requirement that budgeted revenues must at least equal expenditures. The City Council is required to adopt a balanced budget at least 30 days before the beginning of the next fiscal year, which may be amended or supplemented from time to time by ordinance. The Mayor may choose to approve the City Council's budget, veto it, or permit it to become law without the Mayor's signature. The Mayor does not have line-item veto power. The 2016 budget was adopted on November 23, 2015. The City's adopted General Subfund budget is \$1,048.1 million in 2015 and \$1,071.6 million in 2016.

#### **Investments**

Authorized Investments. Chapter 35.39 RCW permits the investment by cities and towns of their inactive funds or other funds in excess of current needs in the following: United States bonds, United States certificates of indebtedness, State bonds or warrants, general obligation or utility revenue bonds of its own or of any other city or town in the State, its own bonds or warrants of a local improvement district that are within the protection of the local improvement guaranty fund law, and any other investment authorized by law for any other taxing district. Under chapter 39.59 RCW, a city or town also may invest in the following: bonds of any local government in the State that have at the time of investment one of the three highest credit ratings of a nationally recognized rating agency, general obligation bonds of any other state or local government of any other state that have at the time of the investment one of the three highest credit ratings of a nationally recognized rating agency, registered warrants of a local government in the same county as the government making the investment; certificates, notes, or bonds of the United States, or other obligations of the United States or its agencies, or of any corporation wholly owned by the government of the United States; or United States dollar-denominated bonds, notes, or other obligations that are issued or guaranteed by supranational institutions, provided that, at the time of investment, the institution has the United States government as its largest shareholder; Federal Home Loan bank notes and bonds, Federal Land Bank bonds and Federal National Mortgage Association notes, debentures, and guaranteed certificates of participation, or the obligations of any other government-sponsored corporation whose obligations are or may become eligible as collateral for advances to member banks as determined by the Board of Governors of the Federal Reserve system; bankers' acceptances purchased on the secondary market; commercial paper purchased in the secondary market, provided that any local government of the State that invests in such commercial paper must adhere to the investment policies and procedures adopted by the Washington State Investment Board; and corporate notes purchased on the secondary market, provided that any local government of the State that invests in such notes must adhere to the investment policies and procedures adopted by the Washington State Investment Board.

Money available for investment may be invested on an individual fund basis or may, unless otherwise restricted by law, be commingled within one common investment portfolio. All income derived from such investment may be either apportioned to and used by the various participating funds or used for the benefit of the general government in accordance with City ordinances or resolutions.

Authorized Investments for Bond Proceeds. Funds derived from the sale of bonds or other instruments of indebtedness will be invested or used in such manner as the initiating ordinances, resolutions, or bond covenants may lawfully prescribe. In addition to the eligible investments discussed above, bond proceeds may also be invested, subject to certain restrictions, in mutual funds with portfolios consisting of (i) only United States

government bonds or United States government guaranteed bonds issued by federal agencies with average maturities of less than four years; bonds of the State or of any local government in the State that have at the time of the investment one of the four highest credit ratings of a nationally recognized rating agency; general obligation bonds of any other state or local government of any other state that have at the time of the investment one of the four highest credit ratings of a nationally recognized rating agency; (ii) bonds of states and local governments or other issuers authorized by law for investment by local governments that have at the time of investment one of the two highest credit ratings of a nationally recognized rating agency; or (iii) securities otherwise authorized by law for investment by local governments.

*City Investments.* The information in this section does not pertain to pension funds that are administered by the City (see "Pension Plans"), and certain refunding bond proceeds that are administered by trustee service providers.

All cash-related transactions for the City, including its utilities, are administered by the Department of Finance and Administrative Services. City cash is deposited into a single bank account, and cash expenditures are paid from a consolidated disbursement account. Investments of temporarily idle cash may be made, according to existing City Council-approved policies, by the Treasury Division of the Department of Finance and Administrative Services in securities described above under "Authorized Investments."

State statutes, City ordinances, and Department of Finance and Administrative Services policies require the City to minimize market risks by safekeeping all purchased securities according to governmental standards for public institutions and by maintaining safety and liquidity above consideration for returns. Current City investment policies require periodic reporting on the City's investment portfolio to the Mayor and the City Council. The City's investment operations are reviewed by the City Auditor and by the State Auditor.

As of December 31, 2015, the combined investment portfolios of the City, not including pensions, totaled \$1,762 million at par value. The City's investment portfolios consist solely of City funds. The City does not invest funds in any other pools, with the exception of tax collection receipts initially held by the County. As of December 31, 2015, the earnings yield on the City's investment portfolios was 1.11%. As of December 31, 2015, the average maturity of the City's investment portfolios was 897 days. Approximately 19.7%, or \$298.4 million, was invested in securities with maturities of three months or less. The City held no securities with maturities longer than 15 years.

Investments were allocated as follows:

U.S. Government-Sponsored Enterprises	27%
U.S. Treasuries <sup>(1)</sup>	26%
Taxable Municipal Bonds	16%
Mortgage-Backed Securities	13%
Commercial Paper	12%
Repurchase Agreements	3%
Certificates of Deposit	3%

<sup>(1)</sup> Includes FDIC-backed and U.S. Department of Housing and Urban Development securities.

Note: may not add to 100% due to rounding.

*Interfund Loans.* The City is authorized to make interfund loans from the City's common investment portfolio to individual funds, bearing interest payable by the borrowing fund. The Director of Finance may approve interfund loans for a duration of up to 90 days and to establish a rate of interest on such loans. Loans of a longer duration require City Council approval.

## Risk Management

The City purchases excess liability insurance to address general, automobile, professional, public official, and other exposures. The policies provide \$40 million limits above a \$6.5 million self-insured retention per occurrence, but coverage excludes partial or complete failure of any of the City's hydroelectric dams. The City also purchases all risk property insurance, including earthquake and flood perils, that provide up to \$500 million in limits subject to a

schedule of deductibles and sublimits. City hydroelectric generation and transmission equipment and certain other utility systems and equipment are not covered by the property insurance policy.

The City insures a primary level of fiduciary, crime liability, inland marine, and various commercial general liability, medical, accidental death and dismemberment, and miscellaneous exposures. Surety bonds are purchased for certain public officials, notary publics, and workers who are permanently and totally disabled from a workplace injury or occupational disease.

#### **Pension Plans**

The information below describes pension plans available to City employees generally. City employees are eligible for coverage by one of the following defined benefit pension plans: SCERS, Firefighters' Pension Fund, Police Relief and Pension Fund, and Law Enforcement Officers' and Fire Fighters' Retirement System ("LEOFF"). The first three are administered by the City and are reported as pension trust funds as part of the City's reporting entity. The State administers LEOFF through the State Department of Retirement Systems ("DRS"). In January 2016, the City announced plans, resulting from labor negotiations, to create a second plan within SCERS, referred to as "SCERS II." The City is currently in the process of preparing the City legislation necessary to implement the proposed SCERS II plan, which is proposed to become effective for new hires beginning in 2017. See "Update on SCERS Pension Benefit Agreement with Coalition and Non-Coalition City Unions" below.

Additional detail on the existing plans is available from SCERS and DRS on their respective websites (SCERS: http://www.seattle.gov/retirement/; DRS: http://www.drs.wa.gov/).

Permanent non-uniformed City employees and certain grandfathered employees of the County (and a predecessor agency of the County) are eligible for membership in SCERS. Newly-hired uniformed police and fire personnel are generally eligible for membership in LEOFF. The Seattle Firefighters' Pension Fund and Police Relief and Pension Fund have been closed to new members since 1977.

Change in Accounting Standards. In 2012, the Governmental Accounting Standards Board ("GASB") approved Statement No. 67 ("GASB 67") and GASB 68, which modified the accounting and financial reporting of pensions by pension plans (GASB 67) and by state and local government employers (GASB 68). GASB 67 affects the financial reporting requirements for the pension systems and does not change the funding requirements for members, employers, or the State. Under GASB 67, pension plans are required to report Total Pension Liability ("TPL") and Net Pension Liability instead of the previously required Unfunded Actuarial Accrued Liability ("UAAL"). GASB 67 requires multi-employer plans to provide a schedule in the notes to the financial statements that displays the proportionate share of contributions per employer, to be used in determining the proportionate share of the NPL that the employer recognizes on its financial statements under GASB 68. GASB 68 requires employers to report any NPL, including a proportionate share of the multiple-employer plans to which they contribute, as a liability in their Statement of Net Position.

The SCERS Annual Report (for the fiscal year ended December 31, 2015) and the State Department of Retirement Systems' Comprehensive Annual Financial Reports for LEOFF (for the fiscal year ended June 30, 2015) were prepared in accordance with GASB 67.

The City's 2015 Financial Statements have been prepared in accordance with GASB 68. As of December 31, 2015, the Seattle City Light Fund reported a liability of \$271.8 million, representing its proportionate share of NPL for SCERS. The effect of this recognition is reflected in its Balance Sheets and as a cumulative adjustment to net position in its Statement of Revenues, Expenses and Changes in Net Position in the 2015 Financial Statements. The NPL was measured as of December 31, 2014, and the TPL used to calculate the NPL was determined by the actuarial valuation as of December 31, 2013, rolled forward to December 31, 2014. The Seattle City Light Fund's proportion of the NPL was based on contributions to SCERS during the fiscal year ended December 31, 2014. As of December 31, 2014, the Seattle City Light Fund's proportionate share of NPL and of the Seattle City Light Fund's contributions are provided as required supplementary information to the Department's 2015 Audited Financial Statements.

The City's financial statements for the fiscal year ended December 31, 2015 were prepared in accordance with GASB 68. The City's Comprehensive Annual Financial Report for 2015 may be obtained from the Department of Finance and Administrative Services and is available at <a href="http://www.seattle.gov/cafrs/default.htm">http://www.seattle.gov/cafrs/default.htm</a>.

Seattle City Employees' Retirement System. SCERS is a cost-sharing multiple-employer defined benefit public employee retirement plan, administered in accordance with Chapter 4.36 of the Seattle Municipal Code ("SMC"), by the Retirement System Board of Administration (the "Board"). The Board consists of seven members, including the Chair of the Finance Committee of the Seattle City Council, the City's Director of Finance, the City's Human Resources Director, two active members and one retired member of the system, and one outside board member who is appointed by the other six board members. Elected and appointed Board members serve for three-year terms. SCERS is a pension trust fund of the City.

SCERS provides retirement, death, and disability benefits. Retirement benefits vest after five years of credited service, while death and disability benefits vest after ten years of service. Retirement benefits are calculated as 2% multiplied by years of creditable service, multiplied by average salary, based on the highest 24 consecutive months. The benefit is actuarially reduced for early retirement. According to the actuarial valuation prepared as of January 1, 2016, there were 6,223 retirees and beneficiaries receiving benefits, and 8,882 active members of SCERS. There are an additional 1,220 terminated employees who are vested and entitled to future benefits and another 977 who are not vested and not entitled to benefits beyond contributions and accumulated interest. From January 1, 2015, to January 1, 2016, the net number of active members increased by 1.6%, the net number of retirees receiving benefits increased by 3.4%, and the net number of vested terminated members increased by 2.7%.

Certain demographic data from the most recent actuarial valuation (with a valuation date as of January 1, 2016), which was completed on June 17, 2016 (the "2015 Actuarial Valuation"), is shown below:

TABLE 10
PLAN MEMBER DEMOGRAPHIC INFORMATION

#### Retirees and Beneficiaries Receiving Benefits **Active Employees** Number<sup>(1)</sup> Number Age Range Percent Percent <25 0.0% 85 1.0% 25-39 0.0% 2,103 23.7% (2) 9 0.1% 2,210 24.9% 40-49 5.3% 31.0% 50-59 325 2,754 2,390 60-69 39.0% 1,623 18.3% 70 +3,408 55.6% 107 1.2%

Source: 2015 Actuarial Valuation

FINANCIAL CONDITION AND ACTUARIAL VALUATIONS. As a department of the City, SCERS is subject to the City's internal control structure and is required by SMC 4.36.140.D to transmit a report to the City Council annually regarding the financial condition of SCERS. The most recent such audited report, for the years ended December 31, 2014, and December 31, 2015, was transmitted on July 11, 2016, by CliftonLarsonAllen LLP (the "2015 SCERS Annual Report").

On July 17, 2014, the Washington State Auditor's Office issued a finding of a significant deficiency in internal controls over financial reporting relating to SCERS account reconciliations as set forth in the financial statements for the year ending December 31, 2013. As described, the finding stated that general ledger accounts were not analyzed and reconciled with subsidiary information on a monthly basis. The City responded to this finding by stating that SCERS would work with the City's central accounting unit to establish a common understanding of how investments and investment activities should be reflected in the

<sup>(1)</sup> Does not include 91 survivors receiving Option B or Option C benefits for a certain period.

<sup>(2)</sup> Includes everyone under the age of 50

City's general ledger. A copy of that audit report is available on the State Auditor's website (www.sao.wa.gov).

Milliman Consultants and Actuaries, as consulting actuary, has evaluated the funding status of SCERS annually since 2010. The most recent actuarial report is the 2015 Actuarial Valuation (with a valuation date as of January 1, 2016). The next actuarial valuation (with a valuation date as of January 1, 2017) is expected to be completed by mid-2017. Historically, the City prepared actuarial valuations biennially, but has prepared them annually since 2010.

As of January 1, 2016 (as set forth in the 2015 Actuarial Valuation), the actuarial value of net assets available for benefits was \$2.397 billion and the actuarial accrued liability was \$3.605 billion. The 2015 Actuarial Valuation utilized the following assumptions:

Investment return	7.50%
Price inflation	3.25%
Expected annual average membership growth	0.50%
Wage inflation	4.00%
Interest on member contributions made prior to January 1, 2012 <sup>(1)</sup>	5.75%

<sup>(1)</sup> Contributions made on or after January 1, 2012, are assumed to accrue interest at 4.75%.

To the extent that actuarial accrued liability exceeds plan assets, an unfunded actuarial accrued liability ("UAAL") exists. The UAAL increased from \$1,165.9 million as of January 1, 2015, to \$1,208.0 million as of January 1, 2016. The funding ratio increased from 66.0% as of January 1, 2015, to 66.5% as of January 1, 2016, which increase is primarily due to the UAAL amortization payment made by the City during the prior year, partially offset by the recognition of deferred asset losses in the actuarial value of assets ("AVA"). For the year ending December 31, 2015, SCERS assets returned about 0.3% on a market basis (gross of investment expenses), a rate of return less than the assumed rated of 7.50%. The result is an actuarial loss on assets for 2015, but only one-fifth of this loss will be recognized in the current year AVA. Unlike most public pension systems, prior to January 1, 2011, all valuations were reported on a mark-to-market basis. Consequently, the full impact of annual asset gains or losses occurring in recent years was reflected in each actuarial valuation. To improve its ability to manage short-term market volatility, the City adopted a five-year asset smoothing methodology in 2011 that recognizes the asset gain or loss occurring in each year evenly over a five-year period.

The following table provides historical plan funding information:

TABLE 11
HISTORICAL SCERS SCHEDULE OF FUNDING PROGRESS (1)
(\$000,000)

Actuarial Valuation Date (January 1) <sup>(2)</sup>	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL) <sup>(3)</sup>	Unfunded AAL (UAAL)	Funding Ratio	Covered Payroll <sup>(4)</sup>	UAAL as % of Covered Payroll
2006	\$ 1,791.8	\$ 2,017.5	\$ (225.7)	88.8%	\$ 447.0	50.5 %
2008	2,119.4	2,294.6	(175.2)	92.4%	501.9	34.9 %
2010	1,645.3	2,653.8	(1,008.5)	62.0%	580.9	173.6 %
2011 <sup>(5)</sup>	2,013.7	2,709.0	(695.4)	74.3%	563.2	123.5 %
$2012^{(5)}$	1,954.3	2,859.3	(905.0)	68.3%	557.0	162.5 %
2013 <sup>(5)</sup>	1,920.1	3,025.3	(1,105.2)	63.5%	567.8	194.6 %
2014 <sup>(5)</sup>	2,094.3	3,260.1	(1,165.8)	64.2%	597.9	195.0 %
2015 <sup>(5)</sup>	2,266.7	3,432.6	(1,165.9)	66.0%	630.9	184.8 %
2016 <sup>(5)</sup>	2,397.1	3,605.1	(1,208.0)	66.5%	641.7	188.3 %

<sup>(1)</sup> For accounting purposes under GASB 67/68, UAAL is replaced with NPL. However, because the City continues to set its contribution rates based on an actuarially required contribution ("ARC") based on the UAAL and funding ratios calculated under the pre-GASB 67/68 methodology, both methods are currently reported in the SCERS actuarial valuations and annual reports.

Source: 2015 Actuarial Valuation

In accordance with GASB 67, the SCERS 2015 Annual Report calculated TPL and NPL based on the actuarial valuation dated as of January 1, 2016, rolled forward using generally accepted actuarial procedures (assuming a 7.50% investment rate of return and 4.00% salary increases) to December 31, 2015, as follows: TPL was calculated to be \$3,612.2 million; plan fiduciary net position ("Plan Net Position") was calculated to be \$2,313.0 million, and NPL was calculated to be \$1,299.2 million, for a funding ratio (Plan Net Position as a percentage of TPL) of 64.0%. A Schedule of the Department's Proportionate Share of the Net Pension Liability and Schedule of the Department's Contributions are set forth in the required supplementary information in Appendix C—2015 Audited Financial Statements of the Department.

SCERS CONTRIBUTION RATES. Member and employer contribution rates are established by Chapter 4.36 of the SMC, which provides that the City contribution must match the normal contributions of members and does not permit the employer rate to drop below the employee rate. The SMC also requires that the City contribute, in excess of the matching contributions, the amount determined by the most recent actuarial valuation that is required to fully fund the plan. Contribution rates are recommended annually by the Board, based on the system's actuarial valuation. Benefit and contribution rates are set by the City Council.

The actuarially required contribution ("ARC") rate is based on amortizing the required contribution over 30 years, meaning that the total contribution rate must be sufficient to pay for the costs of benefits earned during the current year, as well as the annual cost of amortizing the plan's UAAL over 30 years. The City Council may from time to time set the amortization period by resolution, and in 2013, it passed a resolution to close the 30-year amortization period for calculating UAAL. As a result, for purposes of the 2015 Actuarial Valuation calculation, a 27-year amortization period was used. This policy may be revised by the City Council in future years. The 2015 Actuarial Valuation was prepared using the Entry Age Actuarial

<sup>(2)</sup> Actuarial valuations were performed biennially until 2010, after which the City began performing an actuarial valuation annually.

<sup>(3)</sup> Actuarial present value of benefits less actuarial present value of future normal cost. Based on Entry Age Actuarial Cost Method, defined below under "SCERS Contribution Rates."

<sup>(4)</sup> Covered Payroll shown for the prior calendar year; includes compensation paid to all active employees on which contributions are calculated.

<sup>(5)</sup> Beginning with the January 1, 2011, actuarial valuation, SCERS has used five-year asset smoothing.

Cost Method. Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percent of the individual's projected compensation between entry age into the system and assumed exit age (*e.g.*, termination or retirement).

Current and historical contribution rates, based on a percentage of employee compensation (exclusive of overtime), are shown in the table below:

TABLE 12
EMPLOYER AND EMPLOYEE SCERS CONTRIBUTION RATES

							% of Total ARC
Calendar Years	<b>Employer</b>	<b>Employee</b>	Total	Total	% of Total ARC	Total ARC per	Contributed per
(beginning Jan. 1)	Rate	Rate	Contribution Rate	ARC <sup>(1)</sup>	Contributed	GASB 27 <sup>(2)</sup>	GASB 27
2011	9.03%	9.03%	18.06%	25.03%	72%	22.14%	82%
2012	11.01%	10.03%	21.04%	21.04%	100%	21.87%	96%
2013	12.89%	10.03%	22.92%	22.92%	100%	24.05%	95%
2014	14.31%	10.03%	24.34%	24.34%	100%	25.63%	95%
2015	15.23%	10.03%	25.26%	25.26%	100%	26.38%	98%
2016	15.29%	10.03%	25.32%	25.32%	100%	N/A	N/A

<sup>(1)</sup> Reflects total actuarial required contribution (*i.e.*, employer plus employee contribution rates). Beginning November 21, 2011, this rate is used for City budgeting purposes.

Source: Seattle Municipal Code; 2016 Budget; Annual Actuarial Valuation Reports

In 2011, the City failed to increase contribution rates sufficiently to fund the ARC. The City limited its contribution to matching the employee contribution (which was capped pursuant to certain collective bargaining agreements described in the following paragraph), without regard to any amortization of UAAL. This resulted in an increase in unfunded liability, underfunded the pension obligations, and deferred pension funding. On November 21, 2011, the City Council adopted Resolution 31334, affirming the City's intent to fully fund the annual ARC each year with its budget. See Table 12—Employer and Employee SCERS Contribution Rates and Table 13—Projected Actuarially Required Total Contribution Rates by Employer and Employee."

The City's contracts with all labor unions that represent SCERS members describe how contribution rates would be changed in the event that higher contributions are needed to improve the funding status of the system. Under these contracts, the City and employees will share in any contribution rate increase equally, up to a maximum increase of 2% in the employee contribution. The 2% employee contribution rate increase was implemented via 1% increases in 2011 and 2012. This contractual restriction shifts the risk of future increases to the City's employer contribution.

<sup>(2)</sup> The primary difference between the Total ARC calculation and that calculated under GASB 27 is that the Total ARC calculation uses a 0.50% membership growth assumption, while GASB specifies no membership growth assumption. The GASB rate calculations take into account the lag between the determination of the ARC and the expected contribution date associated with that determination (for example, contribution rates for calendar year 2012 were based on the ARC determined as part of the January 1, 2011, actuarial valuation. Beginning in 2016, GASB 27 was superseded by GASB 68, so this calculation will no longer be performed.

Projected total actuarially required contribution rates reported in the 2015 Actuarial Valuation are shown in the table below:

TABLE 13
PROJECTED ACTUARIALLY REQUIRED TOTAL CONTRIBUTION RATES
BY EMPLOYER AND EMPLOYEE

	Assuming	
Contribution Year <sup>(1)</sup>	7.50% Returns	Confidence Range <sup>(2)</sup>
2017	25.32%	25.32-25.32
2018	25.28%	25.99-24.56
2019	25.40%	26.98-23.87
2020	25.78%	28.47-23.24
2021	26.10%	30.14-22.36
2022	26.10%	31.73-20.95

<sup>(1)</sup> Contribution year lags valuation year by one. For example, contribution year 2017 is based on the 2015 Actuarial Valuation (as of January 1, 2016) results, amortized over 27 years beginning in 2016 if the contribution rate increase takes place in 2016.

Source: 2015 Actuarial Valuation

Employer contributions were \$90 million in 2014, of which approximately \$22 million was from the Seattle City Light Fund. In 2015, employer contributions were approximately \$101 million, of which approximately \$25 million was from the Seattle City Light Fund. The employer share for employees of each of the utility funds is allocated to and paid out of the funds of each respective utility.

INVESTMENT OF SCERS PLAN FUNDS. In accordance with chapter 35.39 RCW, the Board has established an investment policy for the systematic administration of SCERS funds. The investment of SCERS funds is governed primarily by the prudent investor rule, as set forth in RCW 35.39.060. SCERS invests retirement funds for the long term, anticipating both good and poor performing financial markets.

SCERS' net assets decreased by \$9.7 million (-0.4%) during 2015, including member and employer contributions of \$166.9 million and net revenue from investment activity totaling \$7.1 million. Expenses increased by \$13.0 million in 2015, primarily attributed to an \$9.1 million increase in retiree benefit payments.

<sup>(2)</sup> Confidence range if asset return at 95th percentile and if asset return at 5th percentile.

Table 14 below shows the historical market value of SCERS' net assets (as of each December 31). Table 15 shows the revenue or loss from investment activity for the last ten years.

TABLE 14
MARKET VALUE OF ASSETS

Year	Market Value of		
(As of December 31)	Assets (MVA) <sup>(1)</sup>		
2006	\$ 2,011.2		
2007	2,119.4		
2008	1,477.4		
2009	1,645.3		
2010	1,812.8		
2011	1,753.5		
2012	1,951.4		
2013	2,216.9		
2014	2,322.7		
2015	2,313.0		

Source: SCERS Actuarial Valuations

TABLE 15 SCERS INVESTMENT RETURNS

Year	Net Investment Income (Loss)			
(As of December 31)	Amount <sup>(1)</sup>	% <sup>(2)</sup>		
2006	\$ 242.7	13.9%		
2007	138.8	7.3%		
2008	(619.7)	-26.8%		
2009	194.7	10.8%		
2010	208.5	13.2%		
2011	(15.8)	0.0%		
2012	230.7	14.0%		
2013	289.8	15.5%		
2014	122.5	5.7%		
2015	7.1	0.3%		

Source: SCERS Annual Reports

<sup>(1</sup> In millions.

<sup>(1)</sup> In millions.

<sup>(2)</sup> Represents one-year return on asset classes.

The table below shows the historical distribution of SCERS investments over the last five years:

TABLE 16
HISTORICAL SCERS DISTRIBUTION OF INVESTMENTS BY CLASS

<b>Investment Categories (January 1)</b>	2016	2015	2014	2013	2012
Fixed Income	28.4%	24.2%	23.7%	23.1%	22.8%
Domestic and International Stocks	53.3%	33.4%	32.1%	30.4%	30.8%
Real Estate	12.8%	11.0%	10.6%	11.3%	12.7%
Alternative Investments	5.4%	4.8%	4.9%	6.2%	8.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: SCERS Actuarial Valuations

In accordance with SCERS' Investment Policy, the Board retains external investment managers to manage components of the SCERS portfolio. Managers have authority to determine investment strategy, security selection, and timing, subject to the Investment Policy, specific Manager Guidelines, legal restrictions, and other Board direction. Managers do not have authority to depart from their guidelines. These guidelines specify eligible investments, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control.

The investment policy defines eligible investments to include securities lending transactions. Through a custodial agent, SCERS participates in a securities lending program whereby securities are lent from the system's investment portfolio on a collateralized basis to third parties (primarily financial institutions) for the purpose of generating additional income to the system. The market value of the required collateral must meet or exceed 102% of the market value of the securities lent. Lending is limited to a volume of less than \$75 million.

Update on SCERS Pension Benefit Agreement with Coalition and Non-Coalition City Unions. As part of an agreement with the Coalition of City Unions, reached in December 2015, and agreements with individual bargaining units that are not part of the Coalition, the City Council is expected to consider ratifying legislation in 2016 to create a new defined benefit retirement plan ("SCERS II") covering non-uniformed employees. The new plan is expected to be open to employees first hired on or after January 1, 2017. The current SCERS plan is expected to close to new entrants as of that date. The conceptual agreement regarding SCERS II includes, among other adjustments, a slight decrease in benefit levels, raising the minimum retirement age and deferring retirement eligibility by increasing the age-plus-years-of-service required for retirement with full benefits. The City expects SCERS II to provide a more cost-effective method for the City to provide retirement benefits to its employees. It would have no effect on uniformed employees.

See "The City of Seattle—Labor Relations."

*Firefighters' Pension Fund; Police Relief and Pension Fund.* The Firefighters' Pension Fund and the Police Relief and Pension Fund are single-employer pension plans that were established by the City in compliance with chapters 41.18 and 41.20 RCW.

All City law enforcement officers and firefighters serving before March 1, 1970, are participants in these plans and may be eligible for a supplemental retirement benefit plus disability benefits under these plans. Some disability benefits may be available to such persons hired between March 1, 1970, and September 30, 1977. Since the effective date of LEOFF in 1970, no payroll for employees was covered under these City plans, and the primary liability for pension benefits for these City plans shifted from the City to the State LEOFF plan described below. The City remains liable for all benefits of employees in service at that time plus certain future benefits in excess of LEOFF benefits. Generally, benefits under the LEOFF system are greater than or equal to the benefits under the old City plan. However, because LEOFF benefits increase with the consumer price index (CPI-Seattle) while some City benefits increase with wages of current active members, the City's projected liabilities vary according to differences between wage and CPI increase assumptions.

These pension plans provide retirement benefits, death benefits, and certain medical benefits for eligible active and retired employees. Retirement benefits are determined under chapters 41.18 and 41.26 RCW for the Firefighters' Pension Fund and under chapters 41.20 and 41.26 RCW for the Police Relief and Pension Fund. As of December 31, 2015, membership in these plans consisted of 799 fire employees (15 of whom are active employees) and 719 police employees (11 of whom are active employees). See "Other Post-Employment Benefits" below for a discussion of medical benefits paid to retirees.

These pension plans do not issue separate financial reports. The most recent actuarial valuations, dated January 1, 2016, use the Entry Age Normal ("EAN") Actuarial Cost Method and value plan assets at fair value. The actuarial valuation for the firefighters' pension fund uses the following actuarial assumptions: inflation rate (CPI), 2.25%; investment rate of return, 6.00%; and projected salary increases, 2.75%. The actuarial valuation for the Police Relief and Pension Fund uses the following actuarial assumptions: inflation rate (CPI), 2.25%; investment rate of return, 3.50%; and projected salary increases, 2.75%. Postretirement benefit increases are projected based on salary increase assumptions for benefits that increase based on salary and based on CPI assumptions for benefits based on CPI.

Since both pension plans were closed to new members effective October 1, 1977, the City is not required to adopt a plan to fund the actuarial accrued liability of these plans. In 1994, the City established an actuarial fund for the Firefighters' Pension Fund and adopted a policy of fully funding the actuarial accrued liability ("AAL") by the year 2018 (which was subsequently extended to 2023). For 2015, the City funded 100% of the ARC but only a portion of the projected payment necessary to fully fund the AAL by 2023. The City's 2016 budget also anticipates fully funding the ARC and making partial payments toward the full funding of the AAL. As of January 1, 2016, the actuarial value of net assets available for benefits in the Firefighters' Pension Fund was \$14.9 million, and the AAL was \$82.9 million. As a result, the UAAL was \$68.0 million and the funded ratio was 18.0%. The City's employer contribution to the fund in 2015 was \$7.0 million, representing 143% of the ARC; there were no current member contributions. Under State law, partial funding of the Firefighters' Pension Fund may be provided by an annual property tax levy of up to \$0.225 per \$1,000 of assessed value within the City. The City does not currently levy this additional property tax, but makes contributions out of the General Fund levy. The fund also receives a share of the State tax on fire insurance premiums.

The City funds the Police Relief and Pension Fund as benefits become due. As of January 1, 2016, the actuarial value of net assets available for benefits in the Police Relief and Pension Fund was \$4.7 million, and the AAL was \$95.8 million. As a result, the UAAL was \$91.1 million and the funded ratio was 5.1%. The City's employer contribution to the fund in 2015 was \$7.9 million, representing 127% of the ARC; there were no current member contributions. The fund also receives police auction proceeds of unclaimed property.

Law Enforcement Officers' and Fire Fighters' Retirement System. Substantially all of the City's current uniformed firefighters and police officers are enrolled in LEOFF. LEOFF is a State-wide, multiple-employer defined benefit plan administered by the DRS. Contributions by employees, employers, and the State are based on gross wages. LEOFF participants who joined the system by September 30, 1977, are Plan 1 members. LEOFF participants who joined on or after October 1, 1977, are Plan 2 members. For all of the City's employees who are covered under LEOFF, the City contributed \$14.2 million in 2015 and \$13.9 million in 2014. The following table outlines the contribution rates of employees and employers under LEOFF.

TABLE 17
LEOFF CONTRIBUTION RATES EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL (As of December 31, 2015)

	Plan 1	Plan 2
Employer	0.18% (1)	5.23% (1)
Employee	0.00	8.41%
State	N/A	3.36%

<sup>(1)</sup> Includes a 0.18% DRS administrative expense rate.

Source: Washington State Department of Retirement Systems

While the City's current contributions represent its full current liability under the retirement systems, any unfunded pension benefit obligations could be reflected in future years as higher contribution rates. The State Actuary's website includes information regarding the values and funding levels of LEOFF. For additional information, see Note 11 to the City's 2015 Comprehensive Annual Financial Report, which may be obtained from the Department of Finance and Administrative Services and is available at <a href="http://www.seattle.gov/cafrs/default.htm">http://www.seattle.gov/cafrs/default.htm</a>.

According to the Office of the State Actuary's June 1, 2015, valuation, LEOFF had no UAAL. LEOFF Plan 1 had a funded ratio of 125% and LEOFF Plan 2 had a funded ratio of 105%. The assumptions used by the State Actuary in calculating the accrued actuarial assets and liabilities are a 7.7% annual rate of investment return for LEOFF Plan 1 and a 7.5% annual rate of investment return for LEOFF Plan 2, 3.75% general salary increases, and 3.0% consumer price index increase. Liabilities were valued using the EAN Actuarial Cost Method and assets were valued using the AVA, which defers a portion of the annual investment gains or losses over a period of up to eight years.

#### **Other Post-Employment Benefits**

The City has liability for two types of other post-employment benefits ("OPEB"): (i) an implicit rate subsidy for health insurance covering employees retiring under SCERS or LEOFF Plan 2 and dependents of employees retiring under LEOFF Plan 1, and (ii) medical benefits for eligible beneficiaries of the City's Firefighters' Pension Fund and Police Relief and Pension Fund. The implicit rate subsidy is the difference between (i) what retirees pay for their health insurance as a result of being included with active employees for rate-setting purposes, and (ii) the estimated required premiums if their rates were set based on claims experience of the retirees as a group separate from active employees. The City has assessed its OPEB liability in order to satisfy the expanded reporting requirements specified by GASB 45. While GASB 45 requires reporting and disclosure of the unfunded OPEB liability, it does not require that it be funded. The City funds its OPEB on a pay-as-you-go basis.

The City commissions a biennial valuation report on its OPEB liabilities associated with the implicit rate subsidy for health insurance covering employees retiring under the SCERS or LEOFF plans. The last valuation was as of January 1, 2015, and showed the UAAL for the implicit rate subsidy was \$44.4 million; the City's estimated annual cost in 2015 was \$3.7 million and the City's estimated contribution in 2015 was \$1.1 million. The valuation of the OPEB liability associated with the City's Firefighters' Pension Fund and Police Relief and Pension Fund is updated annually. As of January 1, 2016, the UAAL for OPEB in the City's Firefighters' Pension Fund was \$311.4 million; the estimated annual cost for 2016 was \$16.9 million and the estimated annual contribution for 2016 was \$11.2 million. As of January 1, 2016, the UAAL for OPEB in the Police Relief and Pension Fund was \$357.0 million; the estimated annual cost for 2016 was \$24.3 million and the estimated annual contribution for 2016 was \$14.2 million.

For additional information regarding the City's OPEB liability, see Note 11 to the City's 2015 Comprehensive Annual Financial Report.

## **Labor Relations**

As of March 2016, the City had 36 separate departments and offices with approximately 13,200 regular and temporary employees. Twenty-six different unions and 51 bargaining units represent approximately 75% of the City's regular employees.

In early 2016, the City adopted legislation approving an agreement reached in December 2015 with the Coalition of City Unions (comprising bargaining units representing the majority of City employees) and other non-Coalition unions. All of the agreements with the bargaining units comprising the Coalition of City Unions and with the other non-Coalition unions have been ratified and implemented, or are in the process of ratification and implementation. The final agreements become effective, retroactively back to January 1, 2015, with a term through December 31, 2018.

The City is in negotiations with certain non-Coalition bargaining groups who are operating under expired contracts: Seattle Police Management Association (expired December 2013), IBEW Local 77 Construction Maintenance and Equipment Operators (expired December 2013), Seattle Police Officers' Guild (expired December 2014), Seattle Fire Chiefs' Association (expired December 2014), and IBEW Local 77 Material Controllers (expired December 2015).

In July 2016, the Seattle Police Officers' Guild failed to ratify a tentative agreement and negotiations will return to mediation. Under Washington State law, police are prohibited from striking, so if mediation fails, the parties would be subject to arbitration.

The City is also negotiating contracts with IBEW Local 77 City Light and Transportation that expires in January 2017, and with a newly created IT Professional unit, also represented by IBEW Local 77.

There is no expected date by which the agreements that are currently in negotiations will be reached, and unions continue to operate under current or expired contracts.

All of the recent agreements (including those with Coalition and non-Coalition bargaining groups) contain a provision for implementation of a SCERS II Retirement System beginning January 1, 2017. The City is in the process of preparing legislation that will be necessary for implementation. See "Pension Plans—Update on SCERS Pension Benefit Agreement with Coalition and Non-Coalition City Unions."

# **Emergency Management and Preparedness**

The City's Office of Emergency Management ("OEM") is responsible for managing and coordinating the City's resources and responsibilities in dealing with emergencies. The OEM prepares for emergencies, trains City staff in emergency response, provides education to the community about emergency preparedness, plans for emergency recovery, and works to mitigate known hazards. It has identified and assessed many types of hazards that may impact the City, including geophysical hazards (*e.g.*, earthquakes, landslides, tsunamis, seismic seiches, volcanic eruptions, and lahars), infectious disease outbreaks, intentional hazards (*e.g.*, terrorism, breaches in cybersecurity, and civil disorder), transportation incidents, fires, hazardous materials, and unusual weather conditions (*e.g.*, floods, snow, water shortages, and wind storms). However, the City cannot anticipate all potential hazards and their effects, including any potential impact on the economy of the City or the region.

# Considerations Related to Alaskan Way Viaduct and Seawall Replacement Program

The Alaskan Way Viaduct and Seawall Replacement Program ("AWVSR Program") consists of multiple projects to remove and replace the State Route 99 Alaskan Way Viaduct, replace an existing seawall, and carry out the redevelopment of the City's central waterfront area. The various projects comprising the AWVSR Program are separate public projects by separate lead public agencies being implemented in a coordinated manner pursuant to a series of written agreements.

Many elements of the AWVSR Program are presently underway. The State's project to replace the Alaskan Way viaduct with a bored tunnel (the "State's Project") and the City's project to replace the existing aging seawall along the waterfront (the "City's Seawall Project") are by far the largest projects in the AWVSR Program. There is also coordination between the AWVSR Program waterfront redevelopment elements (e.g., the City's "Waterfront Seattle" project) and redevelopment projects undertaken by other public agencies in the central waterfront area, such as the Pike Place Market Preservation and Development Authority's MarketFront Project.

Status of State's Project. The State's Project was delayed by more than two years due to the malfunctioning of a deep bore tunneling machine (the "TBM") and is currently scheduled for completion in 2019. The contractor resumed tunneling in February 2016 following repairs and implementation of new quality and safety plans. Tunneling could be suspended again at any time, resulting in additional delays.

Direct Cost Overruns. The State's Project is being undertaken pursuant to a contract between the Washington State Department of Transportation ("WSDOT") and a joint venture named Seattle Tunnel Partners. The City is not a party to that contract. Responsibility for direct cost overruns resulting from the repair of the TBM will be governed by that contract; the City has no direct contractual liability.

Indirect Cost Overruns. The City has a series of agreements with WSDOT relating to the coordination of projects within the AWVSR Program, covering various issues including the protection, repair, and relocation of the City's utility infrastructure impacted by or constructed as part of the State's Project, including infrastructure owned by the Department. See "Capital Requirements—Distribution." In general, these agreements provide that the City is responsible for relocating certain utility infrastructure that conflicts with the State's Project and the State is responsible for avoiding damage and repairing or replacing damaged utility infrastructure as defined in the agreements. It is the City's position that any increase in these indirect costs resulting from the TBM's malfunction or delays are governed by these agreements, and the City's utilities have budgeted according to the agreed-upon City obligations, plus necessary contingencies. The City and the State are currently in negotiations regarding this indirect cost responsibility as well as direct and indirect costs related to other AWVSR projects affected by the delays.

Status of City's Seawall Project. The majority of the City's Seawall Project is currently scheduled for completion in 2017. In addition to the Seawall Project, a number of other public and private projects comprise the AWVSR Program. The final component of the Seawall Project will be constructed in conjunction with these Waterfront Seattle projects on a timeline that is yet to be determined. As with the State's Project, the Seawall Project and Waterfront Seattle Projects will involve the relocation and construction of various components of the City's utility infrastructure, including infrastructure that is or will be owned by the Department. The budgeted CIP for each City utility, including that of the Department, incorporates the estimated cost and timing of expenditures associated with its respective utility infrastructure projects. See "Capital Requirements—Distribution." Any revision in the scope or timing of the Seawall Project and other Waterfront Seattle projects may lead to an increase in the ultimate cost of these various utility infrastructure projects.

# INITIATIVE AND REFERENDUM

#### **State-Wide Measures**

Under the State Constitution, Washington voters may initiate legislation (either directly to the voters, or to the State Legislature and then, if not enacted, to the voters) and require that legislation passed by the State Legislature be referred to the voters. Any law approved in this manner by a majority of the voters may not be amended or repealed by the State Legislature within a period of two years following enactment, except by a vote of two-thirds of all the members elected to each house of the State Legislature. After two years, the law is subject to amendment or repeal by the State Legislature in the same manner as other laws. The State Constitution may not be amended by initiative.

Initiatives and referenda are submitted to the voters upon receipt of a petition signed by at least 8% (initiative) and 4% (referenda) of the number of voters registered and voting for the office of Governor at the preceding regular gubernatorial election.

In recent years, several State-wide initiative petitions to repeal or reduce the growth of taxes and fees, including City taxes, have garnered sufficient signatures to reach the ballot. Some of those tax and fee initiative measures have been approved by the voters and, of those, some remain in effect while others have been invalidated by the courts. Tax and fee initiative measures continue to be filed, but it cannot be predicted whether any more such initiatives might gain sufficient signatures to qualify for submission to the State Legislature and/or the voters or, if submitted, whether they ultimately would become law.

#### **Local Measures**

Under the City Charter, Seattle voters may initiate City Charter amendments and local legislation, including modifications to existing legislation, and through referendum may prevent legislation passed by the City Council from becoming law.

#### LEGAL AND TAX INFORMATION

# **No Litigation Affecting the Bonds**

There is no litigation pending with process properly served on the City questioning the validity of the Bonds or the power and authority of the City to issue the Bonds. There is no litigation pending or threatened which would materially affect the City's ability to meet debt service requirements on the Bonds.

#### Other Litigation

Because of the nature of its activities, the Department is subject to legal actions that arise in the ordinary course of business of running a municipal electric power utility, including various lawsuits and claims involving claims for money damages. (See Appendix C—2015 Audited Financial Statements of the Department—Notes 9, 10, and 13.) Based on its past experience and the information currently known, the Department has concluded that its ability to pay principal of and interest on the Bonds on a timely basis will not be impaired by the aggregate amount of uninsured liabilities of the Department and the timing of any anticipated payments of judgments that might result from suits and claims.

# **Approval of Counsel**

Legal matters incident to the authorization, issuance, and sale of the Bonds by the City are subject to the approving legal opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation, Seattle, Washington, Bond Counsel. The form of the opinion of Bond Counsel with respect to the Bonds is attached hereto as Appendix B. The opinion of Bond Counsel is given based on factual representations made to Bond Counsel and under existing law as of the date of initial delivery of the Bonds. Bond Counsel assumes no obligation to revise or supplement its opinions to reflect any facts or circumstances that may thereafter come to its attention or any changes in law that may thereafter occur. The opinion of Bond Counsel is an expression of its professional judgment on the matters expressly addressed in its opinion and do not constitute a guarantee of result. Bond Counsel will be compensated only upon the issuance and sale of the Bonds.

# **Limitations on Remedies and Municipal Bankruptcies**

Any remedies available to the owners of the Bonds upon the occurrence of an event of default under the Bond Legislation are in many respects dependent upon judicial actions, which are in turn often subject to discretion and delay and could be both expensive and time-consuming to obtain. If the City fails to comply with its covenants under the Bond Legislation or to pay principal of or interest on the Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the Registered Owners of the Bonds.

The rights and obligations under the Bonds and the Bond Legislation may be limited by and are subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, and other laws relating to or affecting creditors' rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases.

A municipality such as the City must be specifically authorized under State law in order to seek relief under Chapter 9 of the U.S. Bankruptcy Code (the "Bankruptcy Code"). Washington State law permits any "taxing district" (defined to include cities) to voluntarily petition for relief under the 1898 federal bankruptcy statute that was superseded by the current Bankruptcy Code. The State Legislature has not amended the 1935 State statute to update the cross-reference to the current Bankruptcy Code, but several Washington municipal corporations nonetheless been permitted to seek relief under the Bankruptcy Code. A creditor cannot bring an involuntary bankruptcy proceeding under the Bankruptcy Code against a municipality, including the City. The federal bankruptcy courts have certain discretionary powers under the Bankruptcy Code.

In the event of a chapter 9 bankruptcy filing by the City, owners of the Bonds may not be able to exercise any of their remedies under the Bond Legislation during the course of the proceeding. Legal proceedings to resolve issues could be time consuming, and substantial delays or reductions in payments to Bondholders may result. The opinion to be delivered by Stradling Yocca Carlson & Rauth, a Professional Corporation, as Bond Counsel, concurrently with the issuance of the Bonds, will be subject to limitations regarding bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium, and other similar laws relating to or affecting creditors' rights. A copy of the proposed form of opinion of Bond Counsel is set forth in Appendix B.

#### **Tax Matters**

In the opinion of Bond Counsel, under existing statutes, regulations, rulings, and judicial decisions, and assuming the accuracy of certain representations and compliance with certain covenants and requirements described herein, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of calculating the federal alternative minimum tax imposed on individuals and corporations. Bond Counsel notes that, with respect to corporations, interest on the Bonds may be included as an adjustment in the calculation of alternative minimum taxable income, which may affect the alternative minimum tax liability of corporations.

The Bonds that have a yield that is lower than their respective stated interest rates, as shown on page i, are being sold at a premium (the "Premium Bonds"). The amount by which a Premium Bond Owner's original basis for determining gain or loss on the sale or exchange of a Premium Bond (generally, the purchase price) exceeds the amount payable on maturity (or on an earlier call date) constitutes bond premium, which must be amortized under Section 171 of the Code. Amortized bond premium reduces the Premium Bond Owner's basis in the applicable Premium Bond, and reduces the amount of tax-exempt interest received. Amortized bond premium is not deductible for federal income tax purposes. The basis reduction as a result of the amortization of bond premium may result in a Premium Bond Owner realizing a taxable gain when a Premium Bond is sold by the Owner for an amount equal to or less (under certain circumstances) than the original cost of the Premium Bond to the Owner. Purchasers of any of the Premium Bonds should consult their own tax advisors as to the treatment, computation, and collateral consequences of amortizable bond premium.

Bond Counsel's opinion as to the exclusion from gross income of interest on the Bonds is based upon certain representations of fact and certifications made by the City and others and is subject to the condition that the City complies with all requirements of the Code that must be satisfied subsequent to the issuance of the Bonds to assure that interest on the Bonds will be excluded from gross income for federal income tax purposes. Failure to comply with such requirements of the Code might cause interest on the Bonds to be included in gross income for federal income tax purposes retroactive to the date of issuance of the Bonds. The City will covenant to comply with all such requirements.

The IRS has initiated an expanded program for the auditing of tax-exempt bond issues that includes both random and targeted audits. It is possible that the Bonds will be selected for audit by the IRS. It is also possible that the market value of the Bonds might be affected as a result of such an audit of the Bonds (or by an audit of similar bonds). It is possible that any such audit might adversely affect the exclusion from gross income of interest on the Bonds or their market value.

SUBSEQUENT TO THE ISSUANCE OF THE BONDS, THERE MIGHT BE FEDERAL, STATE, OR LOCAL STATUTORY CHANGES (OR JUDICIAL OR REGULATORY INTERPRETATIONS OF FEDERAL, STATE, OR LOCAL LAW) THAT AFFECT THE FEDERAL, STATE, OR LOCAL TAX TREATMENT OF THE INTEREST ON THE BONDS OR THE MARKET VALUE OF THE BONDS. LEGISLATIVE CHANGES HAVE BEEN PROPOSED IN CONGRESS, WHICH, IF ENACTED, WOULD RESULT IN ADDITIONAL FEDERAL INCOME TAX BEING IMPOSED ON CERTAIN OWNERS OF TAX-EXEMPT STATE OR LOCAL OBLIGATIONS, SUCH AS THE BONDS. THE INTRODUCTION OR ENACTMENT OF ANY OF SUCH CHANGES COULD ADVERSELY AFFECT THE MARKET VALUE OR LIQUIDITY OF THE BONDS. NO ASSURANCE CAN BE GIVEN THAT, SUBSEQUENT TO THE ISSUANCE OF THE BONDS, SUCH CHANGES (OR OTHER CHANGES) WILL NOT BE INTRODUCED OR ENACTED OR INTERPRETATIONS WILL NOT OCCUR. BEFORE PURCHASING ANY OF THE BONDS, ALL POTENTIAL PURCHASERS

SHOULD CONSULT THEIR TAX ADVISORS REGARDING POSSIBLE STATUTORY CHANGES OR JUDICIAL OR REGULATORY CHANGES OR INTERPRETATIONS, AND THEIR COLLATERAL TAX CONSEQUENCES RELATING TO THE BONDS.

Bond Counsel's opinion may be affected by actions taken (or not taken) or events occurring (or not occurring) after the date hereof. Bond Counsel has not undertaken to determine, or to inform any person, whether any such actions or events are taken or do occur. The Bond Legislation and the Tax Certificate relating to the Bonds permit certain actions to be taken or to be omitted if a favorable opinion of Bond Counsel is provided with respect thereto. Bond Counsel expresses no opinion as to the effect on the exclusion from gross income of interest on the Bonds for federal income tax purposes with respect to any Bond if any such action is taken or omitted based upon the advice of counsel other than Stradling Yocca Carlson & Rauth, P.C.

Although Bond Counsel has rendered an opinion that interest on the Bonds is excluded from gross income for federal income tax purposes provided that the City continues to comply with certain requirements of the Code, the ownership of the Bonds and the accrual or receipt of interest with respect to the Bonds may otherwise affect the tax liability of certain persons. Bond Counsel expresses no opinion regarding any such tax consequences. Accordingly, before purchasing any of the Bonds, all potential purchasers should consult their tax advisors with respect to collateral tax consequences relating to the Bonds.

# **Continuing Disclosure Undertaking**

Basic Undertaking to Provide Annual Financial Information and Notice of Listed Events. To meet the requirements of SEC Rule 15c2-12(b)(5) ("Rule 15c2-12"), as applicable to a participating underwriter for the Bonds, the City will undertake in the Bond Legislation (the "Undertaking") for the benefit of holders of the Bonds, as follows.

Annual Financial Information. The City will provide or cause to be provided, either directly or through a designated agent, to the Municipal Securities Rulemaking Board (the "MSRB"), in an electronic format as prescribed by the MSRB:

- (i) annual financial information and operating data of the type included in this Official Statement as generally described below ("annual financial information"); and
- (ii) timely notice (not in excess of ten business days after the occurrence of the event) of the occurrence of any of the following events with respect to the Bonds:
  - (a) principal and interest payment delinquencies;
  - (b) non-payment related defaults, if material;
  - (c) unscheduled draws on debt service reserves reflecting financial difficulties;
  - (d) unscheduled draws on credit enhancements reflecting financial difficulties;
  - (e) substitution of credit or liquidity providers, or their failure to perform;
  - (f) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notice of Proposed Issue (IRS Form 5701-TEB), or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
  - (g) modifications to rights of holders of the Bonds, if material;
  - (h) Bond calls (other than scheduled mandatory redemptions of Term Bonds), if material, and tender offers;
  - (i) defeasances;
  - (j) release, substitution, or sale of property securing repayment of the Bonds, if material;
  - (k) rating changes;
  - (l) bankruptcy, insolvency, receivership, or similar event of the City, as such "Bankruptcy Events" are defined in Rule 15c2-12;

- (m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
- (n) appointment of a successor or additional trustee or the change of name of a trustee, if material.

The City also will provide or cause to be provided to the MSRB timely notice of a failure by the City to provide required annual financial information on or before the date specified below.

*Type of Annual Financial Information Undertaken to be Provided.* The annual financial information that the City undertakes to provide will consist of:

- (i) annual financial statements of the Light System prepared in accordance with generally accepted accounting principles applicable to governmental units (except as otherwise noted therein), as such principles may be changed from time to time and as permitted by State law, which financial statements will not be audited, except that if and when audited financial statements are otherwise prepared and available to the City, they will be provided;
- (ii) a statement of outstanding bonded debt secured by Gross Revenues of the Light System;
- (iii) debt service coverage ratios for the bond debt secured by Gross Revenues of the Light System;
- (iv) sources of Light System power and the MWh produced by those sources; and
- (v) the average number of customers, revenues, and energy sales by customer class.

Annual financial information, as described above, will be provided to the MSRB not later than the last day of the ninth month after the end of each fiscal year of the City (currently, a fiscal year ending December 31), as such fiscal year may be changed as required or permitted by State law, commencing with the City's fiscal year ended December 31, 2016. The annual financial information may be provided in a single document or in multiple documents, and may be incorporated by specific reference to documents available to the public on the Internet website of the MSRB or filed with the SEC.

Amendment of Undertaking. The Undertaking is subject to amendment after the primary offering of the Bonds without the consent of any holder of any Bond, or any broker, dealer, municipal securities dealer, participating underwriter, rating agency, or the MSRB, under the circumstances and in the manner permitted by Rule 15c2-12.

The City will give notice to the MSRB of the substance (or provide a copy) of any amendment to the Undertaking and a brief statement of the reasons for the amendment. If the amendment changes the type of annual financial information to be provided, the annual financial information containing the amended information will include a narrative explanation of the effect of that change on the type of information to be provided.

Termination of Undertaking. The City's obligations under the Undertaking will terminate upon the legal defeasance, prior repayment, or payment in full of all of the outstanding Bonds. In addition, the City's obligations under the Undertaking will terminate if those provisions of Rule 15c2-12 that require the City to comply with the Undertaking become legally inapplicable in respect of the Bonds for any reason, as confirmed by an opinion of nationally recognized bond counsel or other counsel familiar with federal securities laws delivered to the City, and the City provides timely notice of such termination to the MSRB.

Remedy for Failure to Comply with Undertaking. The City has agreed to proceed with due diligence to cause any failure to comply with the Undertaking to be corrected as soon as practicable after the City learns of that failure. No failure by the City (or any other obligated person) to comply with the Undertaking will constitute a default in respect of the Bonds. The sole remedy of any holder of a Bond will be to take such actions as that holder deems necessary, including seeking an order of specific performance from an appropriate court, to compel the City or other obligated person to comply with the Undertaking.

Compliance with Continuing Disclosure Undertakings of the City. The City has entered into undertakings to provide annual information and the notice of the occurrence of certain events with respect to all bonds issued by the

City subject to Rule 15c2-12. The City's review of its compliance during the past five years did not reveal any failure to comply, in a material respect, with any undertakings in effect during this time.

#### OTHER BOND INFORMATION

# **Ratings on the Bonds**

The Bonds have been rated "Aa2" and "AA" by Moody's Investors Service, Inc. and Standard & Poor's Ratings Services, respectively. In general, rating agencies base their ratings on rating materials furnished to them (which may include information provided by the City that is not included in this Official Statement) and on the rating agency's own investigations, studies and assumptions. The ratings will reflect only the views of the rating agencies, and an explanation of the significance of the ratings may be obtained from each rating agency. The ratings were applied for by the City and no application was made to any other rating agency for the purpose of obtaining an additional rating on the Bonds. There is no assurance that the ratings will be retained for any given period of time or that the ratings will not be revised downward, suspended, or withdrawn entirely by the rating agencies if, in their judgment, circumstances so warrant. Any such downward revision, suspension, or withdrawal of the ratings will be likely to have an adverse effect on the market price of the Bonds.

# **Underwriting**

The Bonds are being purchased by Citigroup Global Markets Inc. (the "Underwriter") at a price of \$184,928,261.65, and will be reoffered at a price of \$185,298,136.15. The Underwriter may offer and sell the Bonds to certain dealers (including dealers depositing Bonds into investment trusts) and others at prices lower than the initial offering prices set forth on page i hereof, and such initial offering prices may be changed from time to time by the Underwriter. After the initial public offering, the public offering prices may be varied from time to time

#### **Conflicts of Interest**

Some of the Financial Advisor and Bond Counsel are contingent upon the sale of the Bonds. From time to time Bond Counsel serves as counsel to the Financial Advisor in matters unrelated to the Bonds. None of the members of the City Council or other officers of the City have any conflict of interest in the issuance of the Bonds that is prohibited by applicable law.

# **Official Statement**

This Official Statement is not to be construed as a contract with the owners of any of the Bonds.

The City of Seattle

By: /s/ Glen M. Lee

Glen M. Lee Director of Finance (This page intentionally left blank.)

# APPENDIX A

# BOND ORDINANCE

Ordinance 124916, passed by the City Council on November 23, 2015, which is set forth in this appendix, authorized the issuance of the new money portion of the Bonds. Ordinance 124335 (as amended by Ordinance 124916) authorized the issuance of the refunding portion of the Bonds and is substantially similar to Ordinance 124916.

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# ORDINANCE

CITY OF SEATTLE

COUNCIL BILL

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AN ORDINANCE relating to the electric system of The City of Seattle; authorizing the issuance and sale of municipal light and power revenue bonds for the purposes of providing funds for certain additions and betterments to and extensions of the existing municipal light and power plant and system of the City, paying the costs of issuance of those bonds and providing for the reserve fund requirement; providing for the terms, conditions, covenants and manner of sale of those bonds; describing the lien of those bonds; ratifying and confirming certain prior acts; and amending certain definitions set forth in the Omnibus Refunding Bond Ordinance relating to municipal light and power revenue bonds.

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WHEREAS, The City of Seattle, Washington (the "City"), owns, operates and maintains an electric system (the "Light System"); and

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WHEREAS, the City has need to acquire and construct certain additions and betterments to and extensions of the Light System described in the system or plan adopted by this ordinance

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(the "Plan of Additions"); and

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WHEREAS, the City has outstanding certain revenue bonds (the "Outstanding Parity Bonds") having a charge and lien upon Gross Revenues of the Light System prior and superior to all other charges whatsoever, except reasonable charges for maintenance and operation of

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the Light System; and

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WHEREAS, pursuant to the respective ordinances and resolutions listed in Exhibit A, the City issued its municipal light and power revenue bonds described in Exhibit A, and provided for the issuance of additional bonds having a lien and charge on Gross Revenues of the Light System on a parity of lien with those bonds ("Parity Bonds") upon compliance with certain conditions; and

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WHEREAS, after due consideration, the City finds that it is necessary and in the best interest of the City and its ratepayers to issue municipal light and power revenue bonds as Parity Bonds to pay part of the cost of the Plan of Additions, pay costs of issuance of those bonds and provide for the reserve fund requirement; NOW, THEREFORE,

# BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

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**Definitions.** As used in this ordinance, the following words and phrases Section 1. shall have the meanings set forth below.

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"Accreted Value" means with respect to any Capital Appreciation Bonds (a) as of any Valuation Date, the amount set forth for such date in any Parity Bond Legislation authorizing such Capital Appreciation Bonds and (b) as of any date other than a Valuation Date, the sum of (i) the Accreted Value on the preceding Valuation Date and (ii) the product of (A) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date, calculated based on the assumption that Accreted Value accrues during any semiannual period in equal daily amounts on the basis of a year of twelve 30-day

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months, times (B) the difference between the Accreted Values for such Valuation Dates.

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"Adjusted Net Revenue" has the meaning assigned to that term in Section 13(g)(iii). "Alternate Reserve Security" means Qualified Insurance or a Qualified Letter of Credit,

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that is used to satisfy all or a portion of the Reserve Fund Requirement for the Parity Bonds.

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"Annual Debt Service" for any calendar year means the sum of the amounts required in such calendar year to pay (a) the interest due in such calendar year on all Parity Bonds

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outstanding, excluding interest to be paid from the proceeds of the sale of Parity Bonds or other

bonds; (b) the principal of all outstanding Serial Bonds due in such calendar year; and (c) the Sinking Fund Requirement, if any, for such calendar year.

For purposes of this definition, the principal and interest portions of the Accreted Value of Capital Appreciation Bonds becoming due at maturity or by virtue of a Sinking Fund Requirement shall be included in the calculations of accrued and unpaid and accruing interest or principal in such manner and during such period of time as is specified in any Parity Bond Legislation authorizing such Capital Appreciation Bonds.

For purposes of making coverage ratio calculations in connection with a certificate delivered under Section 13(g) regarding the issuance of Future Parity Bonds, Annual Debt Service shall exclude debt service on Parity Bonds that are included in a refunding or defeasance plan approved by the City Council, which provides for the refunding or defeasance of certain Parity Bonds by irrevocably pledging money and/or Government Obligations pending their early redemption.

For purposes of calculating and determining compliance with the Reserve Fund Requirement and conditions for the issuance of Future Parity Bonds and/or entering into Parity Payment Agreements:

(i) Generally. Except as otherwise provided by subparagraph (ii) below with respect to Variable Interest Rate Bonds and by subparagraph (iii) below with respect to Parity Bonds with respect to which a Payment Agreement is in force, interest on any series of Parity Bonds shall be calculated based on the actual amount of accrued, accreted or otherwise accumulated interest that is payable in respect of that issue taken as a whole, at the rate or rates set forth in the applicable Parity Bond Legislation.

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- 51464961.4 Last Revised April 30, 2015

(ii) Interest on Variable Interest Rate Bonds. The amount of interest deemed to be payable on any Series of Variable Interest Rate Bonds shall be calculated on the assumption that the interest rate on those bonds would be equal to the rate that is 90% of the average RBI during the four calendar quarters preceding the quarter in which the calculation is made.

Interest on Parity Bonds With Respect to Which a Payment (iii) Agreement is in Force. Debt service on Parity Bonds with respect to which a Payment Agreement is in force shall be based on the net economic effect on the City expected to be produced by the terms of the Parity Bonds and the terms of the Payment Agreement, including but not limited to the effects produced by the following: (A) Parity Bonds that would, but for a Payment Agreement, be treated as obligations bearing interest at a Variable Interest Rate instead shall be treated as obligations bearing interest at a fixed interest rate, and (B) Parity Bonds that would, but for a Payment Agreement, be treated as obligations bearing interest at a fixed interest rate instead shall be treated as obligations bearing interest at a Variable Interest Rate. Accordingly, the amount of interest deemed to be payable on any Parity Bonds with respect to which a Payment Agreement is in force shall be an amount equal to the amount of interest that would be payable at the rate or rates stated in those Parity Bonds plus Payment Agreement Payments minus Payment Agreement Receipts. For the purposes of calculating as nearly as practicable Payment Agreement Receipts and Payment Agreement Payments under a Payment Agreement that includes a variable rate component determined by reference to a pricing mechanism or index that is not the same as the pricing mechanism or index used to determine the variable rate interest component on the Parity Bonds to which the Payment Agreement is related, it shall be assumed that the fixed rate used in calculating Payment Agreement Payments will be

- (iv) Parity Payment Agreements. No additional debt service shall be taken into account with respect to a Parity Payment Agreement for any period during which Payment Agreement Payments on that Parity Payment Agreement are taken into account in determining Annual Debt Service on related Parity Bonds under subparagraph (iii) of this definition. However, for any period during which Payment Agreement Payments are not taken into account in calculating Annual Debt Service on any outstanding Parity Bonds because the Parity Payment Agreement is not then related to any outstanding Parity Bonds, payments on that Parity Payment Agreement shall be taken into account by assuming:
- (A) City Obligated to Make Payments Based on Fixed Rate. If the City is obligated to make Payment Agreement Payments based on a fixed rate and the Qualified Counterparty is obligated to make payments based on a variable rate index, that payments by the City will be based on the assumed fixed payor rate, and that payments by the Qualified Counterparty will be based on a rate equal to the average rate determined by the variable rate index specified by the Parity Payment Agreement during the four calendar quarters preceding the quarter in which the calculation is made, and
- (B) City Obligated to Make Payments Based on Variable Rate

  Index. If the City is obligated to make Payment Agreement Payments based on a variable rate

index and the Qualified Counterparty is obligated to make payments based on a fixed rate, that payments by the City will be based on a rate equal to the average rate determined by the variable rate index specified by the Parity Payment Agreement during the four calendar quarters preceding the quarter in which the calculation is made, and that the Qualified Counterparty will make payments based on the fixed rate specified by the Parity Payment Agreement.

(v) Tax Credit Subsidy Payments. For the purpose of calculating the Reserve Fund Requirement, the City shall deduct from Annual Debt Service the Tax Credit Subsidy Payments the City is scheduled to claim from the federal government in respect of the interest on a series of Parity Bonds that are Tax Credit Subsidy Bonds or other bonds with respect to which the federal government is scheduled to provide direct payments.

"Authorized Denomination" means \$5,000 or any integral multiple thereof within a maturity of a Series or such other amount to be established in the Bond Resolution.

"Beneficial Owner" means, with regard to a Bond, the owner of any beneficial interest in that Bond.

"Bond Counsel" means a lawyer or a firm of lawyers, selected by the City, of nationally recognized standing in matters pertaining to bonds issued by states and their political subdivisions.

"Bond Purchase Contract" means a written offer to purchase a Series, which offer has been accepted by the City in in accordance with this ordinance. In the case of a competitive sale, the official notice of sale, the Purchaser's bid and the award by the City shall comprise the offer and the award by the City in accordance with this ordinance shall be deemed the acceptance of that offer for purposes of this ordinance.

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"Bond Register" means the books or records maintained by the Bond Registrar for the purpose of registration of each Bond.

"Bond Registrar" or "Registrar" means the Fiscal Agent (unless the Bond Resolution provides for a different Bond Registrar with respect to a particular Series of the Bonds), or any successor bond registrar selected in accordance with the Registration Ordinance.

"Bond Resolution" means a resolution of the City Council adopted pursuant to this ordinance approving the Bond Sale Terms and taking other actions consistent with this ordinance.

"Bond Sale Terms" means the terms and conditions for the sale of a Series of the Bonds, including the amount, date or dates, denominations, interest rate or rates (or mechanism for determining interest rate or rates), payment dates, final maturity, redemption and tender rights, price, and other terms or covenants set forth in Section 5.

"Bonds" means the revenue bonds issued pursuant to this ordinance.

"Capital Appreciation Bonds" means any Parity Bonds as to which interest is payable only at the maturity or prior redemption of such Parity Bonds. For the purpose of (a) receiving payment of the redemption premium, if any, on a Capital Appreciation Bond that is redeemed prior to maturity, or (b) computing the principal amount of Parity Bonds held by the Owner of a Capital Appreciation Bond in giving to the City or the paying agent for those bonds any notice, consent, request, or demand pursuant to this ordinance or for any purpose whatsoever, the principal amount of a Capital Appreciation Bond shall be deemed to be its Accreted Value.

"CIP" means the portion or portions relating to the Light System of the "2015-2020 Capital Improvement Program" of the City as adopted by the City in Ordinance 124648, together with any previously adopted capital improvement program of the City, as the CIP may be amended, updated, supplemented or replaced from time to time by ordinance.

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"City" means The City of Seattle, Washington, a municipal corporation duly organized and existing under the laws of the State.

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"City Council" means the City Council of the City, as duly and regularly constituted from time to time.

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"Code" means the Internal Revenue Code of 1986, or any successor thereto, as it has been and may be amended from time to time, and regulations thereunder.

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"Conservation Plan" means the 1996 Energy Management Services Plan of the City with respect to the Light System endorsed by the City in Resolution 29427, adopted September 16, 1996, as that plan may be amended, updated, supplemented or replaced from time to time, to

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the extent that funds are appropriated by the City therefor.

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"Deferred Hydroelectric Project Relicensing Costs" means certain costs required by the Federal Energy Regulatory Commission to be incurred as a condition of the renewal of licenses for the Light System's hydroelectric projects, which costs are treated in the same manner as capital expenditures.

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"DTC" means The Depository Trust Company, New York, New York.

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"Director of Finance" means the Director of the Finance Division of the Department of Finance and Administrative Services of the City, or any other officer who succeeds to substantially all of the responsibilities of that office.

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"Fiscal Agent" means the fiscal agent of the State, as the same may be designated by the State from time to time.

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"Future Parity Bonds" means, with reference to any Series of the Bonds, any fixed or variable rate revenue bonds of the City (other than that Series and any other Parity Bonds then outstanding) issued or entered into after the Issue Date of such Series, having a charge or lien upon Gross Revenues for payment of the principal thereof and interest thereon equal in priority to the charge or lien upon Gross Revenues for the payment of the principal of and interest on the Outstanding Parity Bonds and the Bonds. Future Parity Bonds may include Parity Payment Agreements and any other obligations issued in compliance with Section 13(g) or Section 13(h).

"Government Obligations" has the meaning given in RCW 39.53.010, as now in effect or as may hereafter be amended.

"Gross Revenues" means (a) all income, revenues, receipts and profits derived by the City through the ownership and operation of the Light System; (b) the proceeds received by the City directly or indirectly from the sale, lease or other disposition of any of the properties, rights or facilities of the Light System; (c) Payment Agreement Receipts, to the extent that such receipts are not offset by Payment Agreement Payments; and (d) the investment income earned on money held in any fund or account of the City, including any bond redemption funds and the accounts therein, in connection with the ownership and operation of the Light System. Gross Revenues do not include: (i) insurance proceeds compensating the City for the loss of a capital asset; (ii) income derived from investments irrevocably pledged to the payment of any defeased bonds payable from Gross Revenues; (iii) investment income earned on money in any fund or account created or maintained solely for the purpose of complying with the arbitrage rebate provisions of the Code; (iv) any gifts, grants, donations or other funds received by the City from any State or federal agency or other person if such gifts, grants, donations or other funds are the subject of any limitation or reservation imposed by the donor or grantor or imposed by law or

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administrative regulation to which the donor or grantor is subject, limiting the application of such funds in a manner inconsistent with the application of Gross Revenues hereunder; (v) the proceeds of any borrowing for capital improvements (or the refinancing thereof); and (vi) the proceeds of any liability or other insurance (excluding business interruption insurance or other insurance of like nature insuring against the loss of revenues).

"High Ross Agreement" means the agreement dated as of March 30, 1984, between the City and Her Majesty the Queen in Right of the Province of British Columbia relating to the City's High Ross Dam.

"High Ross Capital Payments" means the deferred portion of the annual capital payments required to be made by the City under Section 5 of the High Ross Agreement, representing the annual cost that would have been incurred by the City for the construction of the High Ross Dam.

"Issue Date" means, with respect to a Bond, the date, as determined by the Director of Finance, on which that bond is issued and delivered to the Purchaser in exchange for its purchase price.

"Letter of Representations" means the Blanket Issuer Letter of Representations between the City and DTC dated October 4, 2006, as it may be amended from time to time, or an agreement with a substitute or successor Securities Depository.

"Light Fund" means the special fund of the City of that name heretofore created and established by the City Council.

"Light System" means the municipal light and power plant and system now belonging to or which may hereafter belong to the City.

"MSRB" means the Municipal Securities Rulemaking Board.

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"Net Revenue" for any period means that amount determined by deducting from Gross Revenues the expenses of operation, maintenance and repair of the Light System and further deducting any deposits into the Rate Stabilization Account, and by adding to Gross Revenues any withdrawals from the Rate Stabilization Account. In calculating Net Revenue, the City may include the Tax Credit Subsidy Payments the City expects to receive from the federal government in respect to the interest on a series of Parity Bonds that are Tax Credit Subsidy Bonds or other bonds with respect to which the federal government will provide direct payments.

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"Omnibus Refunding Bond Ordinance" means Ordinance 124335 (which amended and restated Ordinance 121941, as previously amended by Ordinance 122838), as amended by Section 19 and as it may be amended from time to time in the future.

"Outstanding Parity Bonds" means, for purposes of this ordinance, the outstanding series of Parity Bonds described in Exhibit A.

"Owner" means, without distinction, the Registered Owner and the Beneficial Owner of a Bond.

"Parity Bond Fund" means the special fund of the City known as the Seattle Municipal Light Revenue Parity Bond Fund established within the Light Fund pursuant to Ordinance 92938 for the purpose set forth in Section 13(a).

"Parity Bond Legislation" means any ordinance or resolution passed or adopted by the City Council providing for the issuance of Parity Bonds, and any other ordinance or resolution amending or supplementing the provisions of any Parity Bond Legislation as originally passed or adopted or as theretofore amended or supplemented.

"Parity Bonds" means the Outstanding Parity Bonds, the Bonds and any Future Parity Bonds.

"Parity Conditions" means the conditions for issuing Future Parity Bonds under the Parity Bond Legislation authorizing the issuance of the Outstanding Parity Bonds.

"Parity Payment Agreement" means a Payment Agreement under which the City's obligations are expressly stated to constitute a charge and lien on Net Revenue of the Light System equal in rank with the charge and lien upon such Net Revenue required to be paid into the Parity Bond Fund to pay and secure the payment of the principal of and interest on Parity Bonds.

"Payment Agreement" means a written contract entered into, for the purpose of managing or reducing the City's exposure to fluctuations or levels of interest rates or for other interest rate, investment, asset or liability management purposes, by the City and a Qualified Counterparty on either a current or forward basis as authorized by any applicable laws of the State in connection with, or incidental to, the issuance, incurring or carrying of particular bonds, notes, bond anticipation notes, commercial paper or other obligations for borrowed money, or lease, installment purchase or other similar financing agreements or certificates of participation therein, that provides for an exchange of payments based on interest rates, ceilings or floors on such payments, options on such payments, or any combination thereof or any similar device.

"Payment Agreement Payments" means the amounts periodically required to be paid by the City to the Qualified Counterparty pursuant to a Payment Agreement.

"Payment Agreement Receipts" means the amounts periodically required to be paid by the Qualified Counterparty to the City pursuant to a Payment Agreement.

"Permitted Investments" means any investments or investment agreements permitted for the investment of City funds under the laws of the State, as amended from time to time.

"Plan of Additions" means the system or plan of additions to and betterments and 1 extensions of the Light System adopted by ordinance, including but not limited to the CIP, the 2 Conservation Plan, the High Ross Capital Payments and the Deferred Hydroelectric Project 3 Relicensing Costs. The Plan of Additions includes all amendments, updates, supplements or 4 replacements to the CIP, the Conservation Plan, the High Ross Capital Payments and the 5 Deferred Hydroelectric Project Relicensing Costs, all of which automatically shall constitute 6 amendments to the Plan of Additions upon approval by ordinance. The Plan of Additions 7 includes the purchase and installation of all materials, supplies, appliances, equipment (including 8 but not limited to data processing hardware and software and conservation equipment) and 9 facilities, the acquisition of all permits, licenses, franchises, property and property rights, other 10 capital assets and all engineering, consulting and other professional services and studies (whether 11 performed by the City or by other public or private entities) necessary or convenient to carry out 12 the Plan of Additions. The Plan of Additions also may be modified to include other 13 improvements without amending the CIP, the Conservation Plan, the High Ross Capital 14 Payments and the Deferred Hydroelectric Project Relicensing Costs, if the City determines by 15 ordinance that those amendments or other improvements constitute a system or plan of additions 16 to or betterments or extensions of the Light System. 17

"Professional Utility Consultant" means the independent person(s) or firm(s) selected by the City having a favorable reputation for skill and experience with electric systems of comparable size and character to the Light System in such areas as are relevant to the purposes for which they were retained.

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"Purchaser" means the entity or entities who have been selected in accordance with this ordinance to serve as underwriter, purchaser or successful bidder in a sale of any Series of the Bonds.

"Qualified Counterparty" means a party (other than the City or a person related to the City) who is the other party to a Payment Agreement and who is qualified to act as the other party to a Payment Agreement under any applicable laws of the State.

"Qualified Insurance" means any municipal bond insurance policy or surety bond, issued by any insurance company licensed to conduct an insurance business in any state of the United States (or by a service corporation acting on behalf of one or more such insurance companies), which insurance company or companies, as of the time of issuance of such policy or surety bond, are rated in one of the two highest rating categories by Moody's Investors Service, Inc. and Standard & Poor's Ratings Services, or their comparably recognized business successors.

"Qualified Letter of Credit" means any letter of credit issued by a financial institution for the account of the City in connection with the issuance of Parity Bonds, which institution maintains an office, agency or branch in the United States, and as of the time of issuance of such letter of credit, the financial institution is rated in one of the two highest rating categories by Moody's Investors Service, Inc. and Standard & Poor's Ratings Services, or their comparably recognized business successors.

"RBI" means The Bond Buyer Revenue Bond Index or comparable index, or, if no comparable index can be obtained, 80% of the interest rate for actively traded 30-year United States Treasury obligations.

"Rate Stabilization Account" means the fund of that name originally established in the Light Fund pursuant to Ordinance 121637.

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"Rating Agency" means any nationally recognized rating agency then maintaining a rating on any then outstanding Parity Bonds at the request of the City.

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"Record Date" means, unless otherwise defined in the Bond Resolution, in the case of each interest or principal payment date, the Bond Registrar's close of business on the 15<sup>th</sup> day of the month preceding the interest or principal payment date. With regard to redemption of a Bond prior to its maturity, the Record Date shall mean the Bond Registrar's close of business on the day prior to the date on which the Bond Registrar sends the notice of redemption.

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"Refundable Bonds" means any Parity Bonds that are eligible for refunding under the Omnibus Refunding Bond Ordinance.

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"Refunding Parity Bonds" means Future Parity Bonds issued pursuant to Section 13(h) and the Omnibus Refunding Bond Ordinance, or other Future Parity Bond Legislation, for the

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purpose of refunding any Refundable Bonds.

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Bond is registered on the Bond Register. For so long as the City utilizes the book-entry only

"Registered Owner" means, with respect to a Bond, the person in whose name that

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system for the Bonds under the Letter of Representations, Registered Owner shall mean the

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Securities Depository.

"Registration Ordinance" means City Ordinance 111724 establishing a system of

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registration for the City's bonds and other obligations pursuant to Seattle Municipal Code

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Chapter 5.10, as that chapter now exists or may hereafter be amended.

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"Reserve Fund" means the special fund of the City known as the Municipal Light and Power Bond Reserve Fund established as a separate account within the Light Fund pursuant to Ordinance 71917, as amended.

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"Reserve Fund Requirement" means, for any issue of the Bonds, the Reserve Fund Requirement established in the Bond Resolution approving that issue, consistent with Section 13(b). For any issue of Future Parity Bonds, the Reserve Fund Requirement means the requirement specified for that issue. The aggregate Reserve Fund Requirement for all Parity Bonds shall be the sum of the Reserve Fund Requirements for each issue of the Parity Bonds. For purposes of this definition, "issue" means all series of Parity Bonds issued pursuant to a single Bond Resolution.

"Rule 15c2-12" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934, as amended.

"SEC" means the United States Securities and Exchange Commission.

"Securities Depository" means DTC, any successor thereto, any substitute securities depository selected by the City, or the nominee of any of the foregoing. Any successor or substitute Securities Depository must be qualified under applicable laws and regulations to provide the services proposed to be provided by it.

"Serial Bonds" means Parity Bonds maturing in specified years, for which no Sinking Fund Requirements are mandated.

"Series of the Bonds" or "Series" means a series of the Bonds issued pursuant to this ordinance.

"Sinking Fund Account" means any account created in the Parity Bond Fund to amortize the principal or make mandatory redemptions of Term Bonds.

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"Sinking Fund Requirement" means, for any calendar year, the principal amount of

Term Bonds required to be purchased, redeemed, paid at maturity or paid into any Sinking Fund

Account for such calendar year (plus any required redemption premium, if any), as established

by the Parity Bond Legislation authorizing the issuance of such Term Bonds.

"State" means the State of Washington.

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"Tax Credit Subsidy Bond" means any Parity Bond that is designated by the City as a

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tax credit bond pursuant to the Code, and which is further designated as a "qualified bond" under

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Section 6431 or similar provision of the Code, and with respect to which the City is eligible to

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receive a Tax Credit Subsidy Payment.

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"Tax Credit Subsidy Payment" means a payment by the federal government with

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"Tax-Exempt Bond" means any Parity Bond, the interest on which is intended on the

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Issue Date to be excluded from gross income for federal income tax purposes.

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"Term Bond" means any Parity Bond that is issued subject to mandatory redemption

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prior to its maturity in Sinking Fund Requirements.

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"Undertaking" means the undertaking to provide continuing disclosure entered into

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pursuant to Section 18, in substantially the form attached as Exhibit B.

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"Valuation Date" means, with respect to any Capital Appreciation Bonds, the date or

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dates set forth in any Parity Bond Legislation authorizing such Parity Bonds on which specific

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Accreted Values are assigned to the Capital Appreciation Bonds.

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"Variable Interest Rate" means any variable interest rate or rates to be borne by the Bonds or any other Parity Bonds. The method of computing such a variable interest rate shall be

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as specified in the Parity Bond Legislation authorizing or specifying the terms of such Parity

Bonds, which Parity Bond Legislation also shall specify either (i) the particular period or periods of time or manner of determining such period or periods of time for which each value of such variable interest rate shall remain in effect or (ii) the time or times upon which any change in such variable interest rate shall become effective.

"Variable Interest Rate Bonds" means, for any period of time, any Bonds or other Parity Bonds that bear a Variable Interest Rate during that period, except that Bonds or Parity Bonds shall not be treated as Variable Interest Rate Bonds if the net economic effect of interest rates on particular Parity Bonds of an issue and interest rates on other Parity Bonds of the same issue, as set forth in the applicable Parity Bond Legislation, or the net economic effect of a Payment Agreement with respect to particular Parity Bonds, in either case is to produce obligations that bear interest at a fixed interest rate; and Parity Bonds with respect to which a Payment Agreement is in force shall be treated as Variable Interest Rate Bonds if the net economic effect of the Payment Agreement is to produce obligations that bear interest at a Variable Interest Rate.

Section 2. <u>Adoption of System or Plan</u>. The City specifies, adopts and orders the Plan of Additions to be carried out as generally provided for in the documents comprising the Plan of Additions. The estimated cost of the Plan of Additions, as nearly as may be determined, is declared to be \$2,171,448,000, of which \$280,000,000 is expected to be financed from proceeds of the Bonds and investment earnings thereon.

Section 3. <u>Authorization of Bonds</u>. The City is authorized to issue revenue bonds payable from the sources described in Section 12, in the maximum principal amount stated in Section 5, to provide funds to (a) pay part of the cost of carrying out the Plan of Additions; (b) provide for the Reserve Fund Requirement; (c) capitalize interest on, if necessary, and pay

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the costs of issuance of the Bonds; and (d) for other Light System purposes approved by ordinance. The Bonds may be issued in one or more Series and may be combined with other Parity Bonds (including Refunding Parity Bonds) authorized separately. The Bonds shall be designated municipal light and power revenue bonds, shall be numbered separately and shall have any name, year and series or other label as deemed necessary or appropriate by the Director of Finance.

Section 4. Manner of Sale of the Bonds. The Director of Finance may provide for the sale of each Series by public sale, negotiated sale, limited offering or private placement with one or more Purchasers, or remarketing agent (if the Bonds are issued with Variable Interest Rates), chosen through a selection process acceptable to the Director of Finance. The Director of Finance is authorized to specify a date and time of sale of and a date and time for delivery of each Series of the Bonds; to give notice of that sale; to determine any bid parameters or other bid requirements and criteria for determining the award of the bid; to provide for the use of an electronic bidding mechanism; to determine matters relating to a forward or delayed delivery of the Bonds; and to specify other matters and take other actions as in his or her determination are necessary, appropriate, or desirable to carry out the sale of each Series of the Bonds. Each Series of the Bonds must be sold on Bond Sale Terms in accordance with Section 5.

Section 5. <u>Bond Sale Terms</u>; <u>Bond Resolution</u>. The Director of Finance is appointed to serve as the City's designated representative in connection with the issuance and sale of the Bonds in accordance with RCW 39.46.040(2) and this ordinance. The Director of Finance is authorized to accept, on behalf of the City, the Bond Purchase Contract, remarketing agreement, if applicable, and other applicable agreements on Bond Sale Terms consistent with the parameters set forth in this section. No such acceptance shall be effective until adoption of a

Bond Resolution approving the Bond Sale Terms. Once adopted, the Bond Resolution shall be deemed a part of this ordinance as if set forth herein.

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- Maximum Principal Amount. The Bonds may be issued in one or more Series and shall not exceed the aggregate principal amount of \$280,000,000 (which in the case of Variable Rate Bonds means the principal amount outstanding at any one time).
- Date or Dates. Each Bond shall be dated its Issue Date, as determined by the (b) Director of Finance. For fixed rate bonds, the Issue Date may not be any later than December 31, 2018.
  - **Denominations.** The Bonds shall be issued in Authorized Denominations. (c)
- Interest Rate(s); Payment Dates. Each Bond shall bear interest from the Issue (d) Date or from the most recent date for which interest has been paid or duly provided for, whichever is later, and shall be payable on dates determined by the Director of Finance. One or more rates of interest shall be established for each maturity of each Series of the Bonds, which rate or rates may be fixed or variable. Fixed interest rates shall be computed on the basis of a 360-day year of twelve 30-day months and the net interest cost shall not exceed a weighted average rate of 10% per annum. Principal payments shall commence on a date and shall be payable at maturity or in accordance with Sinking Fund Requirements on dates determined by the Director of Finance.
- Final Maturity. Each Series of the Bonds shall mature no later than 40 years (e) after its Issue Date.
- Redemption Rights. The Bond Sale Terms may include provisions for the **(f)** optional and mandatory redemption and tenders of Bonds determined by the Director of Finance, subject to the following:

- (A) subject to redemption at the option of the City prior to its maturity date on the dates and at the redemption prices set forth in the Bond Purchase Contract, or (B) not subject to redemption prior to its maturity date. If a Bond is subject to optional redemption prior to its maturity, it must be subject to such redemption on one or more dates occurring not more than 10½ years after the Issue Date.
- (ii) Mandatory Redemption. Any Bond may be designated as a Term Bond, subject to mandatory redemption prior to its maturity consistent with Section 8(b).
- (g) Price. The purchase price for each Series of the Bonds shall be acceptable to the Director of Finance.

## (h) Other Terms and Conditions.

- (i) On the Issue Date of each Series, the average expected life of the capital facilities to be financed with the proceeds of that Series must exceed the weighted average maturity of the Bonds of that Series allocated to financing those capital facilities.
- (ii) As of the Issue Date of each Series, the City Council must find that (A) the Parity Conditions will have been met or satisfied, so that such Series may be issued as Parity Bonds, and (B) the issuance and sale of the Series is in the best interest of the City and in the public interest. In making its findings, the City Council shall give due regard to the cost of operation and maintenance of the Light System and to any portion of Gross Revenues pledged for the payment of any bonds, warrants or other indebtedness, and shall find and determine that Gross Revenues, at the rates established from time to time consistent with Section 13(d), will be sufficient, in the judgment of the City Council, to meet all expenses of operation and maintenance of the Light System and to provide the amounts previously pledged for the payment

of all outstanding obligations payable out of Gross Revenues and pledged for the payment of the Bonds.

(iii) Any Series may provide for Qualified Insurance, a Qualified Letter of Credit or other credit enhancement, or for Payment Agreements. To that end, the Director of Finance may include such additional terms, conditions and covenants as may be necessary or desirable, including but not limited to restrictions on investment of Bond proceeds and pledged funds, and requirements to give notice to or obtain the consent of a credit enhancement provider or Qualified Counterparty.

- (iv) The Bond Resolution must establish the Reserve Fund Requirement, if any, and must set forth the method for satisfying any such requirement, consistent with Section 13(b).
- (v) Any Series of the Bonds may be designated or qualified as Tax-Exempt Bonds, Tax Credit Subsidy Bonds, or other taxable bonds, and may include such additional terms and covenants relating to federal tax matters as the Director of Finance deems necessary or appropriate, consistent with Section 14.

# Section 6. Bond Registrar; Registration and Transfer of Bonds.

- (a) Registration of Bonds. The Bonds shall be issued only in registered form as to both principal and interest and shall be recorded on the Bond Register.
- (b) Bond Registrar; Transfer and Exchange of Bonds. The Bond Registrar shall keep, or cause to be kept, sufficient books for the registration and transfer of the Bonds, which shall be open to inspection by the City at all times. The Bond Register shall contain the name and mailing address of the Registered Owner of each Bond and the principal amount and number of each of the Bonds held by each Registered Owner.

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The Bond Registrar is authorized, on behalf of the City, to authenticate and deliver Bonds transferred or exchanged in accordance with the provisions of the Bonds and this ordinance, to serve as the City's paying agent for the Bonds and to carry out all of the Bond Registrar's powers and duties under this ordinance and the Registration Ordinance.

The Bond Registrar shall be responsible for its representations contained in the Bond Registrar's Certificate of Authentication on the Bonds. The Bond Registrar may become an Owner of Bonds with the same rights it would have if it were not the Bond Registrar and, to the extent permitted by law, may act as depository for and permit any of its officers or directors to act as members of, or in any other capacity with respect to, any committee formed to protect the rights of Owners.

Bonds surrendered to the Bond Registrar may be exchanged for Bonds in any Authorized Denomination of an equal aggregate principal amount and of the same Series, interest rate and maturity. Bonds may be transferred only if endorsed in the manner provided thereon and surrendered to the Bond Registrar. Any exchange or transfer shall be without cost to an Owner or transferee. The Bond Registrar shall not be obligated to exchange or transfer any Bond during the period between the Record Date and the corresponding interest or principal payment date or redemption date.

(c) Securities Depository; Book-Entry Form. The Bonds initially shall be registered in the name of the Securities Depository. The Bonds so registered shall be held fully immobilized in book-entry form by the Securities Depository in accordance with the provisions of the Letter of Representations. Neither the City nor the Bond Registrar shall have any responsibility or obligation to participants of the Securities Depository or the persons for whom they act as nominees with respect to the Bonds regarding accuracy of any records maintained by

the Securities Depository or its participants of any amount in respect of principal of or interest on the Bonds, or any notice which is permitted or required to be given to Registered Owners hereunder (except such notice as is required to be given by the Bond Registrar to the Securities Depository). Registered ownership of a Bond initially held in book-entry form, or any portion thereof, may not be transferred except: (i) to any successor Securities Depository; (ii) to any substitute Securities Depository appointed by the City or such substitute Securities Depository's successor; or (iii) to any person if the Bond is no longer held in book-entry form.

Upon the resignation of the Securities Depository from its functions as depository, or upon a determination by the City to discontinue services of the Securities Depository, the City may appoint a substitute Securities Depository. If (i) the Securities Depository resigns from its functions as depository and no substitute Securities Depository can be obtained, or (ii) the City determines that the Bonds are to be in certificated form, the ownership of Bonds may be transferred to any person as provided herein and the Bonds no longer shall be held in book-entry form.

Section 7. Payment of Bonds. The Bonds shall be payable solely out of the Parity Bond Fund, in lawful money of the United States, and shall not be general obligations of the City. Principal of and interest on each Bond registered in the name of the Securities Depository is payable in the manner set forth in the Letter of Representations. Interest on each Bond not registered in the name of the Securities Depository is payable by electronic transfer on the interest payment date, or by check or draft of the Bond Registrar mailed on the interest payment date to the Registered Owner at the address appearing on the Bond Register on the Record Date. The City, however, is not required to make electronic transfers except pursuant to a request by a Registered Owner in writing received at least ten days prior to the Record Date and at the sole

expense of the Registered Owner. Principal of each Bond not registered in the name of the Securities Depository is payable upon presentation and surrender of the Bond by the Registered Owner to the Bond Registrar. The Bonds are not subject to acceleration under any circumstances.

## Section 8. Redemption and Purchase of Bonds.

- (a) Optional Redemption. All or some of the Bonds may be subject to redemption prior to their stated maturity dates at the option of the City at the times and on the terms approved in accordance with Section 5.
- (b) Mandatory Redemption. If not redeemed or purchased at the City's option prior to maturity, Term Bonds (if any) shall be redeemed, at a price equal to the principal amount thereof to be redeemed plus accrued interest, on the dates and in the years and Sinking Fund Requirements as set forth in the Bond Resolution. If the City redeems or purchases Term Bonds at the City's option prior to maturity, the Term Bonds so redeemed or purchased (irrespective of their redemption or purchase prices) shall be credited at the par amount thereof against the remaining Sinking Fund Requirements, as determined by the Director of Finance. In the absence of a determination by the Director of Finance or other direction in the Bond Resolution, credit shall be allocated on a pro rata basis.
- (c) Selection of Bonds for Redemption; Partial Redemption. If fewer than all of the outstanding Bonds of a Series are to be redeemed at the option of the City, the Director of Finance shall select the Series and maturity or maturities to be redeemed. If fewer than all of the outstanding Bonds of a maturity of a Series are to be redeemed, the Securities Depository shall select Bonds registered in the name of the Securities Depository to be redeemed in accordance with the Letter of Representations and the Bond Registrar shall select all other Bonds of the Series to be redeemed randomly in such manner as the Bond Registrar shall determine. All or a

portion of the principal amount of any Bond that is to be redeemed may be redeemed in any Authorized Denomination. If less than all of the outstanding principal amount of any Bond is redeemed, upon surrender of that Bond to the Bond Registrar there shall be issued to the Registered Owner, without charge, a new Bond (or Bonds, at the option of the Registered Owner) of the same Series, maturity and interest rate in any Authorized Denomination in the aggregate principal amount to remain outstanding.

(d) Purchase. The City reserves the right and option to purchase any or all of the Bonds at any time at any price acceptable to the City plus accrued interest to the date of purchase.

Section 9. Notice of Redemption. Unless otherwise set forth in the Bond Resolution, the City shall cause notice of any intended redemption of Bonds to be given not less than 20 nor more than 60 days prior to the date fixed for redemption by first-class mail, postage prepaid, to the Registered Owner of any Bond to be redeemed at the address appearing on the Bond Register on the Record Date, and the requirements of this sentence shall be deemed to have been fulfilled when notice has been mailed as so provided, whether or not it is actually received by the Registered Owner of any Bond. Interest on Bonds called for redemption shall cease to accrue on the date fixed for redemption unless the Bond or Bonds called are not redeemed when presented pursuant to the call.

In the case of an optional redemption, the notice may state that the City retains the right to rescind the redemption notice and the related optional redemption of Bonds by giving a notice of rescission to the affected Registered Owners at any time prior to the scheduled optional redemption date. Any notice of optional redemption that is rescinded by the Director of Finance

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shall be of no effect, and the Bonds for which the notice of optional redemption has been rescinded shall remain outstanding.

Failure to Pay Bonds. Except as otherwise provided in the Bond Section 10. Resolution, if any Bond is not paid when properly presented at its maturity or redemption date, the City shall be obligated to pay, solely from the Parity Bond Fund and the other sources pledged in this ordinance, interest on that Bond at the same rate provided in that Bond from and after its maturity or redemption date until that Bond, principal, premium, if any, and interest, is paid in full or until sufficient money for its payment in full is on deposit in the Parity Bond Fund and that Bond has been called for payment by giving notice of that call to the Registered Owner of that Bond.

Form and Execution of Bonds. The Bonds shall be typed, printed or Section 11. reproduced in a form consistent with the provisions of this ordinance, the Bond Resolution and State law, shall be signed by the Mayor and Director of Finance, either or both of whose signatures may be manual or in facsimile; and the seal of the City or a facsimile reproduction thereof shall be impressed or printed thereon.

Only Bonds bearing a certificate of authentication in substantially the following form (with the designation, year and Series of the Bonds adjusted consistent with this ordinance), manually signed by the Bond Registrar, shall be valid or obligatory for any purpose or entitled to the benefits of this ordinance: "This Bond is one of the fully registered The City of Seattle, Washington, [Municipal Light and Power Improvement Revenue Bonds], [Year], [Series], described in [this ordinance]." The authorized signing of a certificate of authentication shall be conclusive evidence that the Bond so authenticated has been duly executed, authenticated and delivered and is entitled to the benefits of this ordinance.

If any officer whose manual or facsimile signature appears on a Bond ceases to be an officer of the City authorized to sign bonds before the Bond bearing his or her manual or facsimile signature is authenticated or delivered by the Bond Registrar or issued by the City, that Bond nevertheless may be authenticated, delivered and issued and, when authenticated, issued and delivered, shall be as binding on the City as though that person had continued to be an officer of the City authorized to sign bonds. Any Bond also may be signed on behalf of the City by any person who, on the actual date of signing of the Bond, is an officer of the City authorized to sign bonds, although he or she did not hold the required office on the date of issuance of the Bonds.

Section 12. Security for the Bonds; Parity with other Bonds. The Bonds shall be special limited obligations of the City payable from and secured solely by Gross Revenues and by money in the Parity Bond Fund and the Reserve Fund. Gross Revenues are pledged to make the payments into the Parity Bond Fund and the Reserve Fund required by Section 13(a) and Section 13(b), which pledge shall constitute a charge upon such Gross Revenues prior and superior to all other charges whatsoever, save and except reasonable charges for maintenance and operation of the Light System.

The Bonds shall be on a parity with the Outstanding Parity Bonds and all Future Parity Bonds, without regard to date of issuance or authorization and without preference or priority of right or lien with respect to participation of special funds in amounts from Gross Revenues for payment thereof. Nothing contained herein shall prevent the City from issuing revenue bonds or other obligations which are a charge or lien upon Gross Revenues subordinate to the payments required to be made from Gross Revenues into the Parity Bond Fund and the accounts therein.

subdivision of the State or a charge upon any general fund or upon any money or other property of the City, the State or any political subdivision of the State not specifically pledged by this

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nvestments. Earnings on money and investments in the Reserve Fund shall be deposited

### Section 13. Bond Covenants.

(a) Parity Bond Fund. The Parity Bond Fund has been previously created for the sole purpose of paying the principal of and interest on the Parity Bonds as the same shall become due. The Bonds shall be payable (including principal, Sinking Fund Requirements, redemption premium (if any) and interest) out of the Parity Bond Fund. So long as any Parity Bonds or Parity Payment Agreements are outstanding, the Director of Finance shall set aside and pay into the Parity Bond Fund on or prior to the respective dates on which such payments shall become due and payable certain fixed amounts out of Gross Revenues sufficient to make such payments as the same shall become due. Money in the Parity Bond Fund shall, to the fullest extent practicable and reasonable, be invested and reinvested at the direction of the Director of Finance solely in, and obligations deposited in such accounts shall consist of, Permitted Investments. Earnings on money and investments in the Parity Bond Fund shall be deposited in and used for the purposes of that fund.

The Bonds shall not constitute general obligations of the City, the State or any political

(b) Reserve Fund. The Reserve Fund has been previously created for the purpose of securing the payment of the principal of and interest on all Parity Bonds and all amounts due under any Parity Payment Agreements. Money held in the Reserve Fund shall, to the fullest extent practicable and reasonable, be invested and reinvested at the direction of the Director of Finance solely in, and obligations deposited in such accounts shall consist of, Permitted Investments. Earnings on money and investments in the Reserve Fund shall be deposited in that

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- fund and credited against amounts required to be deposited therein until the Reserve Fund is fully funded, and thereafter such earnings shall be deposited in the Parity Bond Fund.
- (i) Reserve Fund Requirement. Each Bond Resolution shall establish the Reserve Fund Requirement, if any, for all Bonds issued thereunder and the method for providing for such Reserve Requirement.
- (A) In the Parity Bond Legislation authorizing the issuance of any Future Parity Bonds, the City shall provide for deposit into the Reserve Fund out of Gross Revenues (or out of any other legally available funds, including proceeds of Parity Bonds) at one time on the Issue Date or in periodic payments so that by five years from the date of such Future Parity Bonds there will have been paid into the Reserve Fund an amount which, together with the money already on deposit therein, will be at least equal to the Reserve Fund Requirement for all Parity Bonds outstanding at the end of that five-year period.
- (B) Notwithstanding the foregoing, any Parity Bond Legislation may provide for the City to obtain one or more Alternate Reserve Securities for specific amounts required to be paid into the Reserve Fund. The amount available to be drawn upon under each such Alternate Reserve Security shall be credited against the amounts required to be maintained in the Reserve Fund by paragraph (A) of this subsection.
- (C) An Alternate Reserve Security may not be cancelable on less than five years' notice. In the event of receipt of any notice of cancellation, the City shall substitute an Alternate Reserve Security in the amount required pursuant to paragraph (A) of this subsection, or in the alternative shall create a special account in the Light Fund and deposit therein, on or before the 25<sup>th</sup> day of each of the 60 succeeding calendar months, 1/60<sup>th</sup> of the amount sufficient, together with other money and investments on deposit in the Reserve Fund, to equal the Reserve

Fund Requirement on the date any such cancellation shall become effective. Such amounts shall be transferred from money in the Light Fund (after making provision for payment of operating and maintenance expenses and for the required payments into the Parity Bond Fund). Amounts on deposit in such special account shall not be available to pay debt service on Parity Bonds or for any other purpose of the City, and shall be transferred to the Reserve Fund on the effective date of any cancellation of the Alternate Reserve Security to make up the deficiency caused thereby. Amounts in that special account or in the Reserve Fund may be transferred back to the Light Fund and used for any purpose if and when a substitute Alternate Reserve Security is obtained.

(D) If the amount in the Reserve Fund is less than the Reserve Fund Requirement (taking into account the five-year period referred to in paragraph (A) of this subsection), the City shall transfer to the Reserve Fund money in an amount sufficient to restore the Reserve Fund to the Reserve Fund Requirement within 12 months after the date of such deficiency. The City shall transfer such amounts first from money in the Light Fund (after making provision for payment of operating and maintenance expenses and for the required payments into the Parity Bond Fund) and only thereafter from money in any construction fund or account established with respect to any issue of Parity Bonds, first taking money from the unrestricted portion thereof, then taking money from the restricted portion thereof. If the amount in the Reserve Fund is greater than the Reserve Fund Requirement, then and only then may the City withdraw such excess from the Reserve Fund and deposit such excess in the Light Fund.

(ii) Use of Reserve Fund for Refunding Bonds. If any Parity Bonds are refunded, the money set aside in the Reserve Fund to secure the payment of such Parity Bonds may be used to retire such Parity Bonds or may be transferred to any reserve fund or account

Reserve Securities, to the Reserve Fund Requirement.

- which may be created to secure the payment of any bonds issued to refund such Parity Bonds, as long as the money left remaining in the Reserve Fund is at least equal, together with all Alternate
  - (iii) Use of Reserve Fund for Payment of Debt Service. If the money in the Parity Bond Fund is insufficient to meet maturing installments of either interest on or principal of and interest on the Parity Bonds (including amounts payable under any Parity Payment Agreements), such deficiency shall be made up from the Reserve Fund by the withdrawal of money or proceeds of Alternate Reserve Securities, as the case may be. Any deficiency created in the Reserve Fund by reason of any such withdrawal or claim against an Alternate Reserve Security shall then be made up out of Net Revenue or out of any other legally available funds of the City.
  - (iv) Withdrawals From Reserve Fund. Money in the Reserve Fund may be withdrawn by the City for any lawful purpose as long as the aggregate of any money and Alternate Reserve Securities remaining on deposit in the Reserve Fund is at least equal to the Reserve Fund Requirement for the Parity Bonds then outstanding. The City reserves the right to substitute one or more Alternate Reserve Securities for money previously deposited in the Reserve Fund and to withdraw such excess to the extent described in the preceding sentence. Any withdrawals from subaccounts within the Reserve Fund shall be made on a pro rata basis, except when the terms of an Alternate Reserve Security require all cash and investments in the Reserve Fund to be withdrawn before any draw or claim is made on the Alternate Reserve Security, or unless the City receives an opinion of Bond Counsel to the effect that such pro rata withdrawal is not required to maintain the federal tax benefits (if any) of any then outstanding Parity Bonds issued as Tax-Exempt Bonds or Tax Credit Subsidy Bonds.

## (c) Sale or Disposition of the Light System.

- (i) The City may dispose of all or substantially all of the Light System if the City simultaneously causes all of the Parity Bonds to be, or be deemed to be, no longer outstanding.
- (ii) Except as provided below, the City will not dispose of any part of the Light System in excess of 5% of the value of the net utility plant of the Light System in service unless prior to such disposition:
- (A) there has been filed with the Director of Finance a certificate of the Professional Utility Consultant stating that such disposition will not impair the ability of the City to comply with the rate covenant set forth in Section 13(d); or
- (B) provision is made for the payment, redemption or other retirement of a principal amount of Parity Bonds equal to the greater of the following amounts: (1) an amount which will be in the same proportion to the net principal amount of Parity Bonds then outstanding (defined as the total principal amount of Parity Bonds then outstanding less the amount of cash and investments in the Parity Bond Fund) that Gross Revenues for the 12 preceding months attributable to the part of the Light System sold or disposed of bears to the total Gross Revenues for such period; or (2) an amount which will be in the same proportion to the net principal amount of Parity Bonds then outstanding that the book value of the part of the Light System sold or disposed of bears to the book value of the entire Light System immediately prior to such sale or disposition.
- (iii) The City may dispose of any portion of the Light System that has become unserviceable, inadequate, obsolete, worn out or unfit to be used or no longer necessary, material to or useful in the operation of the Light System.

- (iv) If the ownership of all or part of the Light System is transferred from the City through the operation of law, the City shall reconstruct or replace the transferred portion using any proceeds of the transfer unless the City Council determines that such reconstruction or replacement is not in the best interests of the City and the Owners of the Parity Bonds, in which case any proceeds shall be used to retire Parity Bonds prior to maturity.
- (d) Rates and Charges. The City will establish from time to time and maintain such rates for electric energy as will maintain the Light System in sound financial condition and provide sufficient revenues to pay into the Parity Bond Fund the amounts that are required by this ordinance to be applied to the payment of the principal of and interest on the Parity Bonds until the Parity Bonds shall have been paid in full, to pay all costs of operation and maintenance and to pay all bonds, warrants and indebtedness for which any revenues of the Light System shall have been pledged.
- (e) Maintenance and Operation of the Light System. The City will operate the properties of the Light System in an efficient manner and at a reasonable cost; and will maintain, preserve and keep, or cause to be maintained, preserved and kept, the properties of the Light System and every part and parcel thereof in good repair, working order and condition; and from time to time will make or cause to be made all necessary and proper repairs, renewals and replacements thereto so that at all times the business carried on in connection therewith will be properly and advantageously conducted.
- (f) Books and Financial Statements. The City will keep and maintain proper books of account for the Light System in accordance with generally accepted accounting principles applicable to governmental utilities; will generally adhere to the uniform system of accounts prescribed by the State Auditor's Office and the Federal Energy Regulatory Commission (if

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- (g) Issuance of Future Parity Bonds. Except as provided in Section 13(h) for the issuance of Refunding Parity Bonds, Future Parity Bonds may be issued (and Parity Payment Agreements may be entered into), from time to time in one or more series for any lawful purpose of the City's Light Department, only if at the time of delivery of each series of Future Parity Bonds to the initial purchasers thereof (or on the effective date of the Parity Payment Agreement):
- (i) There is no deficiency in the Parity Bond Fund or in any of the accounts therein and provision has been made to meet the Reserve Fund Requirement for all Parity Bonds then outstanding plus such proposed series of Parity Bonds; and
  - (ii) There shall have been filed with the City either:
- (A) a certificate of the Director of Finance stating that Net Revenue in any 12 consecutive months out of the most recent 24 months preceding the delivery of the proposed series of Parity Bonds (the "Base Period") was not less than 125% of maximum Annual Debt Service in any future calendar year on all Parity Bonds then outstanding and the proposed series of Parity Bonds (except that if any adjustment in the rates, fees and charges for the services of the Light System will be effective at any time prior to or within six months after

the delivery of the proposed Parity Bonds, the Director of Finance shall reflect in his or her certificate the Net Revenue he or she calculates would have been collected in the Base Period if such new rates, fees and charges had been in effect for the entire Base Period), or

- (B) a certificate of the Professional Utility Consultant setting forth:

  (1) the amount of the Adjusted Net Revenue computed as provided in paragraph (iii) below;

  (2) the amount of maximum Annual Debt Service in any calendar year thereafter on account of all Parity Bonds to be outstanding in such calendar year, including the Parity Bonds proposed to be issued, and stating that the amount shown in subparagraph (B)(1) above is not less than 125% of the amount shown in this subparagraph (B)(2).
- (iii) For the purposes of the certificate required by paragraph (ii) above, Adjusted Net Revenue shall be computed by the Professional Utility Consultant by adjusting the Net Revenue for the Base Period by any or all of the following conditions and requirements as may be appropriate to the circumstances:
- (A) If the Parity Bonds are being issued for the purpose of acquiring operating electric utility properties having an earnings record, the Professional Utility Consultant shall estimate the effect on the Net Revenue for the Base Period of the acquisition of such electric utility properties and the integration thereof into the Light System, and shall adjust the Net Revenue for the Base Period to give effect to such estimate. Any such estimate shall be based upon the operating experience and records of the City and upon any available financial statements and records relating to the earnings of such electric utility properties to be acquired.
- (B) If any changes have been adopted by the City Council and are in effect on the date of sale of the Parity Bonds or are to go into effect not later than 12 months after such date, in any rates and charges imposed by the City on sales of power and energy and

other services furnished by the Light System, which were not in effect during the entire Base Period, the Professional Utility Consultant may, if such changes resulted in increases in such rates and charges, and shall, if such changes resulted in reductions in such rates and charges, adjust Net Revenue for the Base Period to reflect any change in such Net Revenue that would have occurred if the changed rates and charges had been in effect during the entire Base Period.

(C) If the purpose for which the Parity Bonds are being issued is to acquire or construct generation or transmission facilities required to furnish or make available to the Light System additional power and energy, or transmission facilities required to enable the City to sell additional power and energy, the Professional Utility Consultant may adjust Net Revenue for the Base Period by (1) deducting the amount of the estimated increase in operating and maintenance expenses resulting from the acquisition or construction of such facilities in their first year of full operation, (2) adding any additional revenues to be derived from the sale or transmission of such additional power and energy pursuant to executed power sales contracts, and (3) adding an amount equal to the estimated cost of the power and energy which would have been replaced or displaced by such facilities had such additional power and energy in excess of the power and energy to be sold pursuant to clause (2) above been used in the Light System during the Base Period.

(D) If there were any customers added to the Light System during the Base Period or thereafter and prior to the date of the Professional Utility Consultant's certificate, Net Revenue may be adjusted on the basis that such added customers were customers of the Light System during the entire Base Period.

(E) If extensions of or additions to the Light System (not described in subparagraph (C) above) are in the process of construction on the date of the Professional Utility

Consultant's certificate, or if the proceeds of the Parity Bonds being issued are to be used to acquire or construct extensions of or additions to the Light System (not described in subparagraph (C) above), the Net Revenue for the Base Period may be adjusted by adding any additional revenues not included in the preceding paragraphs that will be derived from such additions and extensions and deducting the estimated increase in operating and maintenance expenses resulting from such additions and extensions.

- (F) The Net Revenue for the Base Period may be adjusted by excluding from the determination of expenses of operation, maintenance and repair of the Light System any extraordinary, nonrecurring expenses of the Light System or any judgments or amounts to be paid in settlement of claims against the Light System.
- (iv) In rendering any certificate under this Section 13(g), the Professional Utility Consultant may rely upon, and such certificate shall have attached thereto, (A) financial statements of the Light System, certified by the Director of Finance, showing income and expenses for the period upon which the same are based and a balance sheet as of the end of such period, (B) similar certified statements by the Division of Municipal Corporations of the Office of the State Auditor of the State (or any successor thereto), or (C) similar certified statements by a Certified Public Accountant for as much of such period as any examination by them has been made and completed. If two or more of such statements are inconsistent with each other, the Professional Utility Consultant shall rely on the statement described under clause (A) in this Section 13(g)(iv).

# (h) Issuance of Refunding Parity Bonds.

(i) Without complying with the provisions of Section 13(g), the City may at any time and from time to time issue one or more series of Refunding Parity Bonds, but only if

there shall have been filed with the City a certificate of the Director of Finance stating that Annual Debt Service immediately after the issuance of such Refunding Parity Bonds (calculated by including debt service on the Refunding Parity Bonds but excluding debt service on the bonds to be refunded with the proceeds thereof) does not exceed the Annual Debt Service immediately prior to the issuance of the Refunding Parity Bonds (calculated by including debt service on the bonds to be refunded but excluding debt service on the Refunding Parity Bonds) by more than \$5,000 in any calendar year that any then-outstanding Parity Bonds are anticipated to be outstanding.

- (ii) Parity Bonds of any one or more series or one or more maturities within a series may be refunded by a single series of Refunding Parity Bonds, which Refundable Bonds shall be specified in the Parity Bond Legislation providing for the issuance of the Refunding Parity Bonds, and the principal amount of such Refunding Parity Bonds may include amounts necessary to pay the principal of the Parity Bonds to be refunded, interest thereon to the date of payment or redemption thereof, any premium payable thereon upon such payment or redemption and the costs of issuance of such Refunding Parity Bonds. The proceeds of the Refunding Parity Bonds shall be held and applied in such manner as is provided in the Parity Bond Legislation providing for the issuance of such Refunding Parity Bonds, so that upon the delivery of such Refunding Parity Bonds the Parity Bonds to be refunded thereby shall be deemed to be no longer outstanding in accordance with the provisions of the Parity Bond Legislation providing for the issuance of those Parity Bonds.
- (iii) Refunding Parity Bonds may also be issued upon compliance with the provisions of Section 13(g).

otherwise available.

1 (iv) Nothing contained in this ordinance shall prohibit or prevent, or be
2 deemed or construed to prohibit or prevent, the City from issuing Refunding Parity Bonds to
3 fund or refund maturing Parity Bonds of the City for the payment of which money is not

# Section 14. <u>Provisions Relating to Certain Federal Tax Consequences of the Bonds.</u>

- (a) Tax-Exempt Bonds. The City covenants that it will take all actions consistent with the terms of any Series issued as Tax-Exempt Bonds, this ordinance and the Bond Resolution, reasonably within its power and necessary to prevent interest on that Series from being included in gross income for federal income tax purposes, and the City will neither take any action nor make or permit any use of proceeds of such Series or other funds of the City treated as proceeds of the Series at any time during the term of the Series that will cause interest on the Series to be included in gross income for federal income tax purposes. The City also covenants that it will, to the extent the arbitrage rebate requirement of Section 148 of the Code is applicable to any Series issued as Tax-Exempt Bonds, take all actions necessary to comply (or to be treated as having complied) with that requirement in connection with that Series, including the calculation and payment of any penalties that the City has elected to pay as an alternative to calculating rebatable arbitrage, and the payment of any other penalties if required under Section 148 of the Code to prevent interest on such Series from being included in gross income for federal income tax purposes.
- (b) Tax Credit Subsidy Bonds or other Taxable Bonds. The Director of Finance may, without further action by the City Council, make provision in the Bonds or other written document for such additional covenants of the City as may be necessary or appropriate in order

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for the City to receive from the United States Treasury the applicable Tax Credit Subsidy Payments in respect of any Series of the Bonds issued as Tax Credit Subsidy Bonds or otherwise become and remain eligible for tax benefits under the Code.

Refunding or Defeasance of Bonds. The Bonds are hereby designated Section 15. "Refundable Bonds" for purposes of the Omnibus Refunding Bond Ordinance. The City may issue refunding bonds pursuant to the laws of the State or use money available from any other lawful source to pay when due the principal of and premium, if any, and interest on any Bond, or any portion thereof, included in a refunding or defeasance plan, and to redeem and retire, release, refund or defease those Bonds (the "Defeased Bonds") and to pay the costs of such refunding or defeasance. If money and/or Government Obligations maturing at a time or times and in an amount sufficient, together with known earned income from the investments thereof, to redeem and retire, release, refund or defease the Defeased Bonds in accordance with their terms, are set aside in a special trust fund or escrow account irrevocably pledged to such redemption, retirement or defeasance (the "Trust Account"), then all right and interest of the Owners of the Defeased Bonds in the covenants of this ordinance and in Gross Revenues and the funds and accounts pledged to the payment of such Defeased Bonds, other than the right to receive the funds so set aside and pledged, thereafter shall cease and become void. Such Owners thereafter shall have the right to receive payment of the principal of and interest or redemption price on the Defeased Bonds from the Trust Account. Unless otherwise specified in the Bond Resolution, notice of refunding or defeasance shall be given, and selection of Bonds for any partial refunding or defeasance shall be conducted, in the manner set forth in this ordinance for the redemption of Bonds. After establishing and fully funding such a Trust Account, the Defeased Bonds shall be deemed no longer outstanding and the City may apply any money in any other fund or account

established for the payment or redemption of the Defeased Bonds to any lawful purposes, subject only to the rights of the Owners of any other Parity Bonds.

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#### Amendments. Section 16.

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Amendments Without Bond Owners' Consent. The City Council from time to (a)

time and at any time may pass supplemental resolutions or ordinances, which shall become a part

of this ordinance, for any one or more of the following purposes:

To add other covenants and agreements that do not adversely affect the (i)

interests of the owners of any Parity Bonds then outstanding, or to surrender any right or power

reserved to or conferred upon the City.

To cure any ambiguities or to cure, correct or supplement any defective (ii)

provision contained in this ordinance in regard to matters or questions arising under this

ordinance as the City Council may deem necessary or desirable and not inconsistent with this

ordinance and which do not materially adversely affect the interests of owners of any Parity

Bonds then outstanding.

To make such changes as are necessary to permit the Bonds to be held in (iii)

registered certificate form or in fully immobilized form by a Securities Depository.

Any such supplemental resolution or ordinance may be passed without the consent of the

registered owners of the Parity Bonds at the time outstanding, notwithstanding any of the

provisions of subsection (b) of this section, but only upon receipt by the City of an opinion of

Bond Counsel to the effect that the amendment is permitted by the terms of this ordinance. The

City shall deliver a copy of any such supplemental resolution or ordinance to each Rating

Agency prior to its passage by the City.

- (b) Amendments With Bond Owners' Consent. The City Council may, with the consent of the registered owners representing not less than 60% in aggregate principal amount of the Parity Bonds then outstanding, pass supplemental resolutions or ordinances to add to, change, or eliminate any provision of this ordinance or of any supplemental resolution or ordinance, except no such supplemental resolution or ordinance may:
- (i) Extend the fixed maturity of any Parity Bond, reduce the rate of interest on any Parity Bond, extend the times of payment of interest from their respective due dates, reduce the principal amount of any Parity Bond, or reduce any redemption premium, without consent from the registered owners of or on behalf of all Parity Bonds so affected; or
- (ii) Reduce the percentage of ownership required to approve any such supplemental resolution or ordinance without the consent from the registered owners of or on behalf of all of the Parity Bonds then outstanding.

For purposes of determining whether consents representing the requisite percentage of principal amount of Parity Bonds have been obtained, the Accreted Value of Capital Appreciation Bonds shall be deemed to be the principal amount. It shall not be necessary to obtain approval of the particular form of any proposed supplemental resolution or ordinance, but it shall be sufficient if the consent shall approve the substance thereof.

- (c) Special Amendments. The Registered Owners from time to time of the Bonds, by taking and holding the same, shall be deemed to have consented to the passage by the City Council of any supplemental resolution or ordinance, which shall become a part of this ordinance, for any one or more of the following purposes:
- (i) Permit the reimbursement obligations of the City under any Qualified Insurance or Qualified Letter of Credit (other than Qualified Insurance or a Qualified Letter of

- Credit obtained to satisfy all or a part of the Reserve Fund Requirement) to be secured by a charge and lien on Net Revenue of the Light System equal in rank with the charge and lien upon such Net Revenue required to be paid into the Parity Bond Fund to pay and secure the payment of the principal of and interest on Parity Bonds;
- (ii) Permit the reimbursement obligations of the City under any Alternate Reserve Security to be made by transfers from money in the Light Fund on a parity with the transfers to be made to upon receipt of any notice of cancellation of an Alternate Reserve Security;
- (iii) Provide, in calculating Annual Debt Service with respect to any series of Parity Bonds, the aggregate principal amount of which becomes due and payable, either at maturity for Serial Bonds or as a Sinking Fund Requirement for Term Bonds, in any calendar year in an amount that constitutes 25% or more of the initial aggregate principal amount of such series of Parity Bonds, that the principal of such series of Parity Bonds, together with interest thereon at the rate or rates applicable to such series of Parity Bonds, may be amortized in equal annual installments over a period equal to the longer of 30 years or the remaining term of such series of Parity Bonds;
- (iv) Provide that the amount of interest deemed to be payable on any series of Variable Interest Rate Bonds shall be calculated on the assumption that the interest rate on those Parity Bonds is equal to the highest 12-month rolling average of the SIFMA Municipal Swap Index over the preceding 10 years.
- (v) Clarify that the prohibition against acceleration of Parity Bonds does not prohibit any indirect acceleration of the maturity thereof (A) through reimbursement obligations to the provider of any Qualified Letter of Credit occurring as a result of the mandatory tender for

- purchase thereof or (B) as a result of amounts coming due, including by revised amortization requirements and/or increased interest rates, following an optional or mandatory tender for purchase thereof;
- (vi) Clarify that the definition of "Annual Debt Service" does not include (A) reimbursement obligations to the provider of any Qualified Letter of Credit occurring as a result of the mandatory tender for purchase of Parity Bonds or (B) amounts coming due, including by revised amortization requirements and/or increased interest rates, following an optional or mandatory tender for purchase of Parity Bonds; or
- (vii) Clarify that the definition of "Qualified Letter of Credit" includes a standby bond purchase agreement or similar liquidity facility.
- (d) Effect of Amendment. Upon the passage of any supplemental resolution or ordinance pursuant to the provisions of this section, this ordinance shall be deemed to be modified and amended in accordance therewith, and the respective rights, duties and obligations of the City under this ordinance shall thereafter be determined, exercised and enforced, subject in all respects to such modification and amendments, and all the terms and conditions of any such supplemental resolution or ordinance shall be deemed to be a part of the terms and conditions of this ordinance for any and all purposes.
- (e) Notation on Bonds. Parity Bonds executed and delivered after the execution of any supplemental resolution or ordinance passed pursuant to the provisions of this section may have a notation as to any matter provided for in such supplemental resolution or ordinance, and if such supplemental resolution or ordinance shall so provide, new bonds modified to conform, in the opinion of the City Council, to any modification of this ordinance contained in any such supplemental resolution or ordinance may be prepared by the City and delivered without cost to

the owners of any affected Parity Bonds then outstanding, upon surrender for cancellation of such bonds in equal aggregate principal amounts.

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and available to be used therefor. Thereafter, the City may withdraw any or all of the money

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Section 17. Rate Stabilization Account. The City may at any time deposit in the Rate Stabilization Account, Gross Revenues and any other money received by the Light System

from the Rate Stabilization Account for inclusion in Net Revenue for any applicable year of the

City. Such deposits or withdrawals may be made up to and including the date 90 days after the

end of the applicable year for which the deposit or withdrawal will be included as Net Revenue.

## Section 18. Official Statement; Continuing Disclosure.

- (a) Preliminary Official Statement. The Director of Finance and other appropriate City officials are directed to cause the preparation of and review the form of a preliminary official statement in connection with each sale of one or more Series of the Bonds to the public. For the sole purpose of the Purchaser's compliance with paragraph (b)(1) of Rule 15c2-12, the Director of Finance is authorized to deem that preliminary official statement final as of its date, except for the omission of information permitted to be omitted by Rule 15c2-12. The City approves the distribution to potential purchasers of the Bonds of a preliminary official statement that has been deemed final in accordance with this substitution.
- (b) Final Official Statement. The City approves the preparation of a final official statement for each sale of one or more Series of the Bonds to be sold to the public in the form of the preliminary official statement with such modifications and amendments as the Director of Finance deems necessary or desirable, and further authorizes the Director of Finance to execute and deliver such final official statement to the Purchaser. The City authorizes and approves the

form attached as Exhibit B.

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distribution by the Purchaser of that final official statement to purchasers and potential purchasers of the Bonds.

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(c) Undertaking to Provide Continuing Disclosure. To meet the requirements of paragraph (b)(5) of Rule 15c2-12, as applicable to a participating underwriter for a Series of the Bonds, the Director of Finance is authorized to execute a written Undertaking in substantially the

Section 19. Amendment of Omnibus Refunding Bond Ordinance. The following

in this section. Revisions are shown to the clean amended and restated version of the Omnibus

definitions set forth in the Omnibus Refunding Bond Ordinance are amended to read as set forth

Refunding Bond Ordinance, which was attached to Ordinance 124335 as Exhibit C, with additions shown in double underlining and deletions enclosed in double parentheses and struck

through. References to section numbers and defined terms used in the amended text set forth

below refer to the sections and definitions contained within the amended Omnibus Refunding

Bond Ordinance. With respect to any bonds authorized by the Omnibus Refunding Bond

Ordinance, which are outstanding as of the effective date of this amendatory ordinance, the intent

of these amendments is to effect clarifications of ambiguities. Any amendment contained herein

that is found by a court of competent jurisdiction to adversely affect owners of such outstanding

bonds shall be of no force or effect, except to the extent that such amendments clarify

ambiguities, and the provisions of the Omnibus Refunding Bond Ordinance prior to the effective

date of this amendatory ordinance shall continue in effect as to such outstanding bonds.

(a) Amendment to Section 9. Section 9 of the Omnibus Refunding Ordinance is amended to read as follows:

Section 9. Failure to Pay Bonds. ((If)) Except as otherwise provided in the Bond Resolution, if any Bond is not paid when properly presented at its maturity or redemption date, the City shall be obligated to pay, solely from the Parity Bond Fund and the other sources pledged in this ordinance, interest on that Bond at the same rate provided in that Bond from and after its maturity or redemption date until that Bond, principal, premium, if any, and interest, is paid in full or until sufficient money for its payment in full is on deposit in the Parity Bond Fund and that Bond has been called for payment by giving notice of that call to the Registered Owner of that Bond.

- (b) Amendment to Section 18. The following new subsection (c) is added to Section 18 of the Omnibus Refunding Ordinance, and subsections (c) and (d) are renumbered as subsections (d) and (e), respectively.
  - (c) Special Amendments. The Registered Owners from time to time of any Bonds issued under this ordinance after the effective date of this amendment, by taking and holding the same, shall be deemed to have consented to the passage by the City Council of any supplemental resolution or ordinance, which shall become a part of this ordinance, for any one or more of the following purposes:
  - (i) Permit the reimbursement obligations of the City under any

    Qualified Insurance or Qualified Letter of Credit (other than Qualified Insurance
    or a Qualified Letter of Credit obtained to satisfy all or a part of the Reserve Fund

    Requirement) to be secured by a charge and lien on Net Revenue of the Light

    System equal in rank with the charge and lien upon such Net Revenue required to

be paid into the Parity Bond Fund to pay and secure the payment of the principal of and interest on Parity Bonds;

- (ii) Permit the reimbursement obligations of the City under any

  Alternate Reserve Security to be made by transfers from money in the Light Fund

  on a parity with the transfers to be made to upon receipt of any notice of

  cancellation of an Alternate Reserve Security;
- (iii) Provide, in calculating Annual Debt Service with respect to any series of Parity Bonds, the aggregate principal amount of which becomes due and payable, either at maturity for Serial Bonds or as a Sinking Fund Requirement for Term Bonds, in any calendar year in an amount that constitutes 25% or more of the initial aggregate principal amount of such series of Parity Bonds, that the principal of such series of Parity Bonds, together with interest thereon at the rate or rates applicable to such series of Parity Bonds, may be amortized in equal annual installments over a period equal to the longer of 30 years or the remaining term of such series of Parity Bonds;
- (iv) Provide that the amount of interest deemed to be payable on any series of Variable Interest Rate Bonds shall be calculated on the assumption that the interest rate on those Parity Bonds is equal to highest 12-month rolling average of the SIFMA Municipal Swap Index over the preceding 10 years.
- (v) Clarify that the prohibition against acceleration of Parity

  Bonds does not prohibit any indirect acceleration of the maturity thereof (A)

  through reimbursement obligations to the provider of any Qualified Letter of

Credit occurring as a result of the mandatory tender for purchase thereof or (B) as a result of amounts coming due, including by revised amortization requirements and/or increased interest rates, following an optional or mandatory tender for purchase thereof;

- (vi) Clarify that the definition of "Annual Debt Service" does not include (A) reimbursement obligations to the provider of any Qualified Letter of Credit occurring as a result of the mandatory tender for purchase of Parity Bonds or (B) amounts coming due, including by revised amortization requirements and/or increased interest rates, following an optional or mandatory tender for purchase of Parity Bonds; or
- (vii) Clarify that the definition of "Qualified Letter of Credit" includes a standby bond purchase agreement or similar liquidity facility.
- **(b) Other Sections Unaffected.** All other provisions of the Omnibus Refunding Bond Ordinance remain in full force and effect.
- Section 20. General Authorization. In addition to the specific authorizations in this ordinance, the Mayor and the Director of Finance and each of the other appropriate officers of the City are each authorized and directed to do everything as in his or her judgment may be necessary, appropriate, or desirable in order to carry out the terms and provisions of, and complete the transactions contemplated by, this ordinance. In particular and without limiting the foregoing:
- (a) the Director of Finance may, in his or her discretion and without further action by the City Council, (i) issue requests for proposals for underwriting or financing facilities and execute engagement letters with underwriters, bond insurers or other financial institutions based on

responses to such requests; (ii) change the Bond Registrar or Securities Depository for the Bonds; and (iii) take such actions on behalf of the City as are necessary or appropriate for the City to designate, qualify or maintain the tax-exempt treatment with respect to any Series issued as Tax-Exempt Bonds, to receive from the United States Treasury the applicable federal credit payments in respect of any Series issued as Tax Credit Subsidy Bonds and to otherwise receive any other federal tax benefits relating to the Bonds that are available to the City; and

(b) each of the Mayor and the Director of Finance is separately authorized to execute and deliver (i) any and all contracts or other documents as are consistent with this ordinance and for which the City's approval is necessary or to which the City is a party (including but not limited to agreements with escrow agents, refunding trustees, liquidity or credit support providers, bond insurers, remarketing agents, underwriters, lenders, fiscal agents, counterparties to Payment Agreements, custodians, and the Bond Registrar); and (ii) such other contracts or documents incidental to the issuance and sale of a Series of the Bonds; the establishment of the initial interest rate or rates on a Bond; or the tender, purchase, remarketing, or redemption of a Bond, as may in his or her judgment be necessary or appropriate.

Section 21. Severability. The provisions of this ordinance are declared to be separate and severable. If a court of competent jurisdiction, all appeals having been exhausted or all appeal periods having run, finds any provision of this ordinance to be invalid or unenforceable as to any person or circumstance, such offending provision shall, if feasible, be deemed to be modified to be within the limits of enforceability or validity. However, if the offending provision cannot be so modified, it shall be null and void with respect to the particular person or circumstance, and all other provisions of this ordinance in all other respects, and the offending

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- provision with respect to all other persons and all other circumstances, shall remain valid and enforceable.
- Section 22. <u>Ratification of Prior Acts</u>. Any action taken after passage of this ordinance but prior to its effective date that is consistent with the authority of this ordinance, is ratified, approved and confirmed.
- Section 23. <u>Headings</u>. Section headings in this ordinance are used for convenience only and shall not constitute a substantive portion of this ordinance.

1	Section 24. Effective Date. This ordinance shall take effect and be	in force 30 days
2	after its approval by the Mayor, but if not approved and returned by the Mayor	r within ten days
3	after presentation, it shall take effect as provided by Seattle Municipal Code Sec	etion 1.04.020.
4	Passed by the City Council the 23rd day of	_, 2015, and
5	signed by me in open session in authentication of its passage this	
6	$23^{rd}$ day of $NOV$ ., 2015.	
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8	102	
9	Presidentof the City Council	
0	خسيد ۾	
1	Approved by me this, day of	
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13		
4	Edward B. Murray, Mayor	
15		
16	Filed by me this day of	
17		
8	Manh. Simmon	
19	Monica Martinez Simmons, City Clerk	
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21	(Seal)	
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51464961.4 Last Revised April 30, 2015 Michael Van Dyck/Marc Greenough/Alice Ostdiek FAS SCL Bonds 2016 ORD D1a

- 1 Exhibits:
- 2 Exhibit A: Outstanding Parity Bonds
- 3 Exhibit B: Undertaking to Provide Continuing Disclosure

# **EXHIBIT A**

# **OUTSTANDING CITY LIGHT PARITY BONDS**

•				Bond Legislation	
Issue Name	Dated Date	Original Par Amount	New Money Ord.	Refunding Ord.	Bond Sale Res.
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2008	12/30/2008	\$257,375,000	Ord. 122807	Ord. 121941 (as amended by Ord. 122838)	Res. 31105
Municipal Light and Power Revenue Bonds, 2010A (Taxable Build America Bonds – Direct Payment)	5/26/2010	\$181,625,000	Ord. 123169		Res. 31213
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2010B	5/26/2010	\$596,870,000	Ord. 123169	Ord. 121941 (as amended by Ord. 122838)	Res. 31213
Municipal Light and Power Revenue Bonds, 2010C (Taxable Recovery Zone Economic Development Bonds – Direct Payment)	5/26/2010	\$13,275,000	Ord. 123169	<del>-</del> -	Res. 31213
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2011A	2/8/2011	\$296,315,000	Ord. 123483	Ord. 121941 (as amended by Ord. 122838)	Res. 31263
Municipal Light and Power Improvement Revenue Bonds, 2011B (Taxable New Clean Renewable Energy Bonds – Direct Payment)	2/8/2011	\$10,000,000	Ord. 123483	Ord. 121941 (as amended by Ord. 122838)	Res. 31263
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2012A	7/17/2012	\$293,280,000	Ord. 123752	Ord. 121941 (as amended by Ord. 122838)	Res. 31390
Municipal Light and Power Refunding Revenue Bonds, 2012B (Taxable)	7/17/2012	\$9,355,000	Ord. 123752	Ord. 121941 (as amended by Ord. 122838)	Res. 31390

 $\ \, Ex\ A-Outstanding\ Parity\ Bonds\ V1$ 

Municipal Light and Power Improvement Revenue Bonds, 2012C (Taxable New Clean Renewable Energy Bonds — Direct Payment)	7/17/2012	\$43,000,000	Ord. 123752	<b></b>	Res. 31390
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2013	7/9/2013	\$190,755,000	Ord. 124045	Ord. 121941 (as amended by Ord. 122838)	Res. 31456
Municipal Light and Power Improvement and Refunding Revenue Bonds, 2014	11/05/2014	\$265,210,000	Ord. 124336	Ord. 124335 (amending and restating Ord. 121941)	Res. 31552
Municipal Light and Power Revenue Bonds, 2015A	7/9/2015	\$171,850,000	Ord. 124633		Res. 31592
Municipal Light and Power Revenue Bonds, 2015B-1 (SIFMA Index)	7/23/2015	\$50,000,000	Ord. 124633	1	Res. 31593
Municipal Light and Power Revenue Bonds, 2015B-2 (SIFMA Index)	7/23/2015	\$50,000,000	Ord. 124633	<del>.</del> -	Res. 31593

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#### **EXHIBIT B**

#### FORM OF UNDERTAKING TO PROVIDE CONTINUING DISCLOSURE

The City of Seattle, Washington (the "City"), makes the following written undertaking (the "Undertaking") for the benefit of the holders of the City's Municipal Light and Power Revenue Bonds, 2016 (the "Bonds"), for the sole purpose of assisting the Purchaser in meeting the requirements of paragraph (b)(5) of Rule 15c2-12, as applicable to a participating underwriter for the Bonds. Capitalized terms used but not defined below shall have the meanings given in Ordinance \_\_\_\_\_ and Resolution \_\_\_\_ (together, the "Bond Legislation").

- (a) <u>Undertaking to Provide Annual Financial Information and Notice of Listed Events</u>. The City undertakes to provide or cause to be provided, either directly or through a designated agent, to the Municipal Securities Rulemaking Board (the "MSRB"), in an electronic format as prescribed by the MSRB, accompanied by identifying information as prescribed by the MSRB, the following information:
- (i) Annual financial information and operating data regarding the Municipal Light and Power System (the "Light System") of the type included in the final official statement for the Bonds and described in subsection (b) of this section ("annual financial information");
- Timely notice (not in excess of 10 business days after the occurrence of the event) of the occurrence of any of the following events with respect to the Bonds: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notice of Proposed Issue (IRS Form 5701 – TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds; (7) modifications to rights of holders of the Bonds, if material; (8) Bond calls (other than scheduled mandatory redemptions of Term Bonds), if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Bonds, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of the City, as such "Bankruptcy Events" are defined in Rule 15c2-12; (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and (14) appointment of a successor or additional trustee or the change of name of a trustee, if material; and
- (iii) Timely notice of a failure by the City to provide required annual financial information on or before the date specified in subsection (b) of this section.
- (b) Type of Annual Financial Information Undertaken to be Provided. The annual financial information and operating data that the City undertakes to provide in subsection (a) of this section:

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- (i) Shall consist of (1) annual financial statements of the Light System prepared in accordance with generally accepted accounting principles applicable to governmental units (except as otherwise noted therein), as such principles may be changed from time to time and as permitted by State of Washington (the "State") law, which financial statements will not be audited, except, that if and when audited financial statements are otherwise prepared and available to the City they will be provided; (2) a statement of outstanding bonded debt secured by Gross Revenues of the Light System; (3) debt service coverage ratios for the bond debt secured by Gross Revenues of the Light System; (4) sources of Light System power and the MWh produced by those sources; and (5) the average number of customers, revenues, and energy sales by customer class;
- (ii) Shall be provided not later than the last day of the ninth month after the end of each fiscal year of the City (currently, a fiscal year ending December 31), as such fiscal year may be changed as required or permitted by State law, commencing with the City's fiscal year ending December 31, 20\_\_; and
- (iii) May be provided in a single or multiple documents, and may be incorporated by specific reference to documents available to the public on the Internet website of the MSRB or filed with the United States Securities and Exchange Commission.
- (c) Amendment of Undertaking. The Undertaking is subject to amendment after the primary offering of the Bonds without the consent of any holder of any Bond, or of any broker, dealer, municipal securities dealer, participating underwriter, rating agency or the MSRB, under the circumstances and in the manner permitted by Rule 15c2-12. The City will give notice to the MSRB of the substance (or provide a copy) of any amendment to the Undertaking and a brief statement of the reasons for the amendment. If the amendment changes the type of annual financial information to be provided, the annual financial information containing the amended financial information will include a narrative explanation of the effect of that change on the type of information to be provided.
- (d) <u>Beneficiaries</u>. The Undertaking evidenced by this section shall inure to the benefit of the City and any holder of Bonds, and shall not inure to the benefit of or create any rights in any other person.
- (e) <u>Termination of Undertaking</u>. The City's obligations under this Undertaking shall terminate upon the legal defeasance, prior redemption, or payment in full of all of the outstanding Bonds. In addition, the City's obligations under this Undertaking shall terminate if those provisions of Rule 15c2-12 which require the City to comply with this Undertaking become legally inapplicable in respect of the Bonds for any reason, as confirmed by an opinion of nationally recognized bond counsel or other counsel familiar with federal securities laws delivered to the City, and the City provides timely notice of such termination to the MSRB.
- (f) Remedy for Failure to Comply with Undertaking. As soon as practicable after the City learns of any failure to comply with the Undertaking, the City will proceed with due diligence to cause such noncompliance to be corrected. No failure by the City or other obligated person to comply with the Undertaking shall constitute a default in respect of the Bonds. The sole remedy of any Beneficial Owner of a Bond shall be to take such actions as that Beneficial

Owner deems necessary, including seeking an order of specific performance from an appropriate court, to compel the City or other obligated person to comply with the Undertaking.

- (g) <u>Designation of Official Responsible to Administer Undertaking</u>. The Director of Finance of the City (or such other officer of the City who may in the future perform the duties of that office) or his or her designee is the person designated, in accordance with the Bond Legislation, to carry out the Undertaking of the City in respect of the Bonds set forth in this section and in accordance with Rule 15c2-12, including, without limitation, the following actions:

- (i) Preparing and filing the annual financial information undertaken to be provided;

- (ii) Determining whether any event specified in subsection (a) has occurred, assessing its materiality, where necessary, with respect to the Bonds, and preparing and disseminating any required notice of its occurrence;
- (iii) Determining whether any person other than the City is an "obligated person" within the meaning of Rule 15c2-12 with respect to the Bonds, and obtaining from such person an undertaking to provide any annual financial information and notice of listed events for that person in accordance with Rule 15c2-12;

- (iv) Selecting, engaging and compensating designated agents and consultants, including but not limited to financial advisors and legal counsel, to assist and advise the City in carrying out the Undertaking; and

(v) Effecting any necessary amendment of the Undertaking.

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#### APPENDIX B

#### FORM OF BOND COUNSEL OPINION

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RENO

WASHINGTON SEATTLE

#### [FORM OF BOND COUNSEL OPINION]

The City of Seattle, Washington

Re: The City of Seattle, Washington, \$160,815,000 Municipal Light and Power Improvement and Refunding Revenue Bonds, 2016C

We have served as bond counsel to The City of Seattle, Washington (the "City"), in connection with the issuance of the above referenced bonds (the "2016C Bonds"), and in that capacity have examined such law and such certified proceedings and other documents as we have deemed necessary to render this opinion. As to matters of fact material to this opinion and of which attorneys within the firm involved with the issuance of the 2016C Bonds have no independent knowledge, we have relied upon representations contained in the certified proceedings and other certifications of public officials furnished to us.

The 2016C Bonds are issued pursuant to the laws of the State of Washington and Ordinance 124916, Ordinance 124335, as amended by Ordinance 124916, and Resolution 31707 (collectively, the "Bond Legislation") to provide the funds (i) to finance certain capital improvements to the Light System; (ii) to refund certain of the City's outstanding Municipal Light and Power bonds, (iii) to fund a deposit to the Reserve Fund (if necessary), and (iv) to pay the costs of issuing the 2016C Bonds and the administrative costs of the refunding, all as set forth in the Bond Legislation.

Reference is made to the Bond Legislation for the definitions of capitalized terms used and not otherwise defined herein.

The 2016C Bonds are special limited obligations of the City payable from and secured solely by the Gross Revenues of the Light System, by money in the Seattle Municipal Light Revenue Parity Bond Fund (the "Parity Bond Fund") and by the Municipal Light and Power Bond Reserve Fund (the "Reserve Fund"). The Gross Revenues have been pledged to make the required payments into the Parity Bond Fund and the Reserve Fund, which pledge constitutes a charge on the Gross Revenues prior and superior to all other charges whatsoever, except reasonable charges for maintenance and operation of the Light System, and except that the 2016C Bonds shall have a lien and charge upon such Gross Revenues on a parity with the lien and charge of the Outstanding Parity Bonds and any Future Parity Bonds.

Under the Internal Revenue Code of 1986, as amended (the "Code"), the City is required to comply with certain requirements after the date of issuance of the 2016C Bonds in order to maintain the exclusion of the interest on the 2016C Bonds from gross income for federal income tax purposes,

including, without limitation, requirements concerning the qualified use of 2016C Bond proceeds and the facilities financed or refinanced with 2016C Bond proceeds, limitations on investing gross proceeds of the 2016C Bonds in higher yielding investments in certain circumstances and the arbitrage rebate requirement to the extent applicable to the 2016C Bonds. The City has covenanted in the Bond Legislation to comply with those requirements, but if the City fails to comply with those requirements, interest on the 2016C Bonds could become taxable retroactive to the date of issuance of the 2016C Bonds. We have not undertaken and do not undertake to monitor the City's compliance with such requirements.

As of the date of initial delivery of the 2016C Bonds to the purchaser thereof and full payment therefor, it is our opinion that under existing law:

- 1. The City is a duly organized and legally existing first class city under the laws of the State of Washington;
- 2. The City has duly authorized and approved the Bond Legislation and the 2016C Bonds have been duly authorized and executed by the City and are issued in full compliance with the provisions of the Constitution and laws of the State of Washington, the Bond Legislation and other ordinances and resolutions of the City relating thereto;
- 3. The 2016C Bonds constitute valid and binding obligations of the City payable solely out of the Gross Revenues of the Light System (after reasonable charges for maintenance and operation) and money in the Parity Bond Fund and the Reserve Fund, enforceable in accordance with their terms, except only to the extent that enforcement of payment may be limited by bankruptcy, insolvency or other laws affecting creditors' rights and principles of equity if equitable remedies are sought;
  - 4. The 2016C Bonds are not general obligations of the City; and
- 5. Assuming compliance by the City after the date of issuance of the 2016C Bonds with applicable requirements of the Code, the interest on the 2016C Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the alternative minimum tax applicable to individuals; however, while interest on the 2016C Bonds also is not an item of tax preference for purposes of the alternative minimum tax applicable to corporations, interest on the 2016C Bonds received by corporations is to be taken into account in the computation of adjusted current earnings for purposes of the alternative minimum tax applicable to corporations, interest on the 2016C Bonds received by certain S corporations may be subject to tax, and interest on the 2016C Bonds received by foreign corporations with United States branches may be subject to a foreign branch profits tax. We express no opinion regarding any other federal tax consequences of receipt of interest on the 2016C Bonds.

This opinion is given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur.

The City of Seattle [Date of Closing] Page 3

We express no opinion herein concerning the completeness or accuracy of any official statement, offering circular or other sales or disclosure material relating to the issuance of the 2016C Bonds or otherwise used in connection with the 2016C Bonds. We bring to your attention the fact that the foregoing opinions are expressions of our professional judgment on the matters expressly addressed and do not constitute guarantees of result.

Respectfully submitted

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#### APPENDIX C

#### 2015 AUDITED FINANCIAL STATEMENTS OF THE DEPARTMENT

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# The City of Seattle—City Light Department

Enterprise Fund of The City of Seattle

Financial Statements as of and for the Years Ended December 31, 2015 and 2014, Required Supplementary Information, Other Information, and Independent Auditors' Report

### ENTERPRISE FUND OF THE CITY OF SEATTLE TABLE OF CONTENTS

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#### INDEPENDENT AUDITORS' REPORT

To the Energy and Environment Committee The City of Seattle – City Light Department Seattle, Washington

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of The City of Seattle – City Light Department (the "Department"), an enterprise fund of The City of Seattle, Washington, as of and for the years ended December 31, 2015 and 2014, and the related notes to the financial statements, as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Department's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Department's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Department as of December 31, 2015 and 2014, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.



To the Energy and Environment Committee The City of Seattle – City Light Department

#### **Emphasis of Matters**

As discussed in Note 1, the financial statements present only the Department and do not purport to, and do not present fairly the financial position of The City of Seattle, Washington, as of December 31, 2015 and 2014 and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As discussed in Note 1, the Department adopted the provisions of GASB Statement No. 68, Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27, and GASB Statement No 71, Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68, effective January 1, 2015. The cumulative effect of the change is shown in the current year. Our opinion is not modified with respect to this matter.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The other information as listed in the table of contents, which are the responsibility of management, are presented for purposes of additional analysis and are not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion or provide any assurance on it.

Bahn Gilly Vinchow Krause, LLP

Madison, Wisconsin April 30, 2016

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

The following discussion and analysis of the financial performance of The City of Seattle—City Light Department (the Department) provides a summary of the financial activities for the years ended December 31, 2015, and 2014. This discussion and analysis should be read in combination with the Department's financial statements, which immediately follow this section.

#### **ORGANIZATION**

The Department is the public electric utility of The City of Seattle (the City). As an enterprise fund of the City, the Department owns and operates generating, transmission, and distribution facilities and delivers electricity to approximately 423,000 customers in Seattle and certain surrounding communities. The Department also provides electrical energy to other City agencies at rates prescribed by City ordinances.

#### **OVERVIEW OF THE FINANCIAL STATEMENTS**

The Department's accounting records are maintained in accordance with generally accepted accounting principles for proprietary funds as prescribed by the Governmental Accounting Standards Board (GASB). The Department's accounting records also follow the Uniform System of Accounts for Public Licensees prescribed by the Federal Energy Regulatory Commission (FERC).

This discussion and analysis is intended to serve as an introduction to the Department's financial statements, which are comprised of the financial statements and the notes to the financial statements and include the following:

Balance Sheets, Statements of Revenues, Expenses, and Changes in Net Position, and Statements of Cash Flows—The financial statements provide an indication of the Department's financial health. The balance sheets include all of the Department's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position using the accrual basis of accounting, as well as an indication about which assets can be utilized for general purposes, and which assets are restricted as a result of bond covenants and other commitments. The statements of revenues, expenses, and changes in net position report all of the revenues and expenses during the time periods indicated. The statements of cash flows report the cash provided and used by operating activities, as well as other cash sources such as investment income and cash payments for bond principal and capital additions and betterments.

*Notes to the Financial Statements*—The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### **CONDENSED BALANCE SHEETS**

	December 31		
(\$ in millions)	2015	2014	2013
Assets:			
Utility plant—net	\$ 2,961.5	\$ 2,728.3	\$ 2,541.1
Restricted assets	265.1	298.4	227.0
Current assets	339.6	298.8	369.1
Other assets	339.5	319.7	301.0
Total assets	3,905.7	3,645.2	3,438.2
Total deferred outflows of resources	49.8	19.3	26.0
Total assets and deferred outflows of resources	\$ 3,955.5	\$ 3,664.5	\$ 3,464.2
Liabilities:			
Long-term debt	\$ 2,090.8	\$ 1,925.2	\$ 1,870.3
Noncurrent liabilities	341.5	67.3	78.1
Current liabilities	271.4	258.3	241.7
Other liabilities	29.7	26.7	19.2
Total liabilities	2,733.4	2,277.5	2,209.3
Total deferred inflows of resources	89.9	111.5	100.7
Net position:			
Net investment in capital assets	1,169.6	1,100.8	906.1
Restricted:			
Rate stabilization account	25.0	25.0	25.0
Special deposits and other purposes	<u>-</u> _		(0.4)
Total restricted	25.0	25.0	24.6
Unrestricted—net	(62.4)	149.7	223.5
Total net position	1,132.2	1,275.5	1,154.2
Total liabilities, deferred inflows, and net position	\$ 3,955.5	\$ 3,664.5	\$ 3,464.2

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### **ASSETS**

Utility Plant—Net

#### 2015 Compared to 2014

Utility plant assets net of accumulated depreciation and amortization increased \$233.2 million to \$2,961.5 million in 2015. Utility plant assets were comprised of hydroelectric production plant \$821.1 million which increased \$57.5 million, transmission plant \$230.9 million which increased \$23.1 million, distribution plant \$2,295.6 million which increased \$101.4 million, general plant \$338.5 million which increased \$24.6 million, and intangible assets \$482.1 million which increased \$25.6 million. The net increase in utility plant assets were partially offset by a \$58.9 million increase in Accumulated depreciation and amortization to \$1,671.8 million.

The \$101.4 million increase in distribution plant is primarily due to \$45.0 million for underground system, \$17.9 million for transformers, \$15.9 million for stations, \$11.4 million for poles, \$5.5 million for overhead system, and \$5.4 million for streetlights. In hydroelectric production, an increase of \$40.4 million was due to continued improvements for generation units at the Boundary project.

Other components of utility plant include Construction work-in-progress \$319.8 million which increased \$67.4 million, Nonoperating property \$11.8 million which increased \$1.3 million, Assets held for future use \$60.8 million which decreased \$11.0 million, and Land and land rights \$72.7 million, which increased \$2.2 million. The \$67.5 million increase in Construction work-in-progress is primarily due to increases in the following projects: \$16.5 million for the new customer billing system, \$16.0 million for Seattle Seawall, \$15.7 million for Denny Substation, and \$8.1 million for replacement of the energy management system. The decrease in Assets held for future use is primarily due to distribution assets being placed in service.

See Note 2 Utility Plant of the accompanying financial statements.

#### **2014 Compared to 2013**

Utility plant assets net of accumulated depreciation and amortization increased \$187.2 million to \$2,728.3 million in 2014. Utility plant assets were comprised of hydroelectric production plant \$763.6 million which increased \$2.4 million, transmission plant \$207.8 million which increased \$5.9 million, distribution plant \$2,194.2 million which increased \$107.8 million, general plant \$313.9 million which increased \$8.7 million, and intangible assets \$456.5 million which increased \$15.9 million. The net increase in utility plant assets were partially offset by a \$49.0 million increase in Accumulated depreciation and amortization to \$1,612.9 million

The \$107.8 million increase in distribution plant is primarily due to \$58.4 million for underground system, \$14.2 million for overhead system, \$13.3 million for transformers, \$8.5 million for poles, \$8.0 million for streetlights and \$3.4 million for meters. In hydroelectric production, an increase of \$22.8 million was due to continued improvements for generation units at the Boundary project which are expected to be completed in 2015. The additions to hydroelectric production were offset by retirements, primarily related to generation unit improvements.

Other components of utility plant include Construction work-in-progress \$252.4 million which increased \$88.3 million, Nonoperating property \$10.5 million which increased \$1.8 million, Assets held for future use \$71.8 million which increased \$3.1 million, and Land and land rights \$70.5 million, which increased \$2.3

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

million. The \$86.9 million increase in Construction work-in-progress is primarily due to \$13.1 million for the new customer billing system, \$12.7 million for Boundary generation, \$11.8 million for Denny Substation, and \$49.3 million increases in various other projects, predominantly in distribution.

#### Restricted Assets

#### 2015 Compared to 2014

Restricted assets consisting primarily of restricted cash decreased by \$33.3 million to \$265.1 million.

Construction funds decreased by \$35.1 million to \$88.7 million, and represent the balance of unspent proceeds from the variable rate 2015B bonds issued in July. Proceeds from the 2014 bonds and from the 2015A bonds issued in May 2015 were fully spent during the year funding a significant portion of the ongoing capital improvement program.

Bond reserve account deposits increased by \$25.8 million to \$73.7 million from operating cash, bond proceeds, and interest earnings. Funding from operating cash of \$20.0 million continued accumulation of the reserve account ahead of the existing surety bond 2029 expiration.

The Rate Stabilization Account (RSA) decreased by a net \$23.4 million to \$91.0 million as funds were transferred to operating cash during the year because net wholesale revenues were less than budgeted. See Note 3 Rate Stabilization Account of the accompanying financial statements.

Other restricted assets declined by \$0.6M to \$11.7 million.

#### 2014 Compared to 2013

Restricted assets consisting primarily of restricted cash increased by \$71.4 million to \$298.4 million.

Construction funds increased by \$65.3 million to \$123.8 million, due to unspent proceeds from the 2014 bonds issued in early November designated to fund a portion of the ongoing capital improvement program.

The Rate Stabilization Account (RSA) increased by a net \$4.4 million to a balance of \$114.4 million as a result of operating cash transferred to the RSA during the year because net wholesale revenues were greater than budgeted. See Note 3 Rate Stabilization Account in the accompanying financial statements.

Bond reserve account deposits increased \$1.1 million to \$47.9 million from bond proceeds and interest earnings, and other restricted assets increased by \$0.6 million to \$12.3 million.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### Current Assets

#### 2015 Compared to 2014

Current assets increased by \$40.8 million to \$339.6 million at the end of 2015.

Operating cash increased by \$24.2 million to \$152.5 million at the end of the year. Increased inflows to cash derived from a 4.2% system average rate increase effective in January, Bonneville Power Administration (Bonneville) 0.9% pass-through rate adjustment effective in October, transfers from the RSA, and reimbursement from the Construction account for capital expenditures. Cash inflows were offset by payments for higher debt service payments, capital construction projects, and ongoing operations.

Accounts receivable, net, increased by \$7.6 million to \$82.2 million. A total of \$12.6 million net increase in receivables were for retail electric due to rate increases, large service connections in progress, a grant from the Model Toxics Control Act, damage billings, and other. These were offset by a net decrease in short-term wholesale power sales of \$5.0 million because of lower surplus sales compared to December 2014.

Unbilled revenues increased by \$5.9 million to \$70.5 million mainly because of the rate increases and higher customer loads during the 4<sup>th</sup> quarter compared to same comparable period of 2014.

Other current assets increased by \$3.1 million to \$34.4 million. Materials and supplies inventory was higher by \$2.0 million due to the purchase of additional spare parts for generating facilities and an increase in the unallocated material handling costs that will be charged out in the following year.

#### 2014 Compared to 2013

Current assets decreased by \$70.3 million to \$298.8 million at the end of 2014.

Operating cash decreased by \$65.5 million to \$128.3 million at the end of the year. Increased inflows to cash resulted from a 5.6% system average rate increase effective at the beginning of the year, Bonneville Power Administration (Bonneville) 1.2% pass-through rate adjustment, higher net wholesale energy sales, and reimbursement from the Construction account for certain capital expenditures. The higher cash inflows were offset by greater debt service payments, capital construction projects, ongoing operations, and transfers to the RSA.

Accounts receivable, net, increased by \$10.6 million to \$74.6 million. Wholesale power receivables increased by \$5.9 million as a result of higher surplus sales during December. Other net receivables increased by \$4.7 million including the recovery of costs expended on distribution system assets subject to co-ownership. The ongoing trend of improved collection efforts and revised allowance methodology for large service connection billings led to a lower allowance for bad debt for both retail and sundry sales receivables.

Unbilled revenues decreased by \$14.2 million to \$64.6 million due to lower retail customer loads during the 4<sup>th</sup> quarter compared to same comparable period of 2013.

Materials and supplies inventory increased \$1.2 million to \$30.8 million for ongoing operations.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### Other Assets

#### 2015 Compared to 2014

Other assets increased by \$19.8 million to \$339.5 million. Conservation costs, net, increased by \$15.7 million. The regulatory asset for environmental cleanup costs decreased by \$3.3 million and are mostly associated with cleanup of the Lower Duwamish Waterway Superfund Site. These environmental costs are being recovered through rates over a 25 year period.

The balance of Other assets increased by \$7.4 million. Long term receivables increased \$10.1 million as the result of completion of Shoreline underground electrical infrastructure. This was partly offset by a net \$2.1 million decrease in damage repair costs awaiting billing to other parties. Other deferred charges decreased by a net \$0.6 million. See Note 6 Other Assets of the accompanying financial statements.

#### **2014** Compared to **2013**

Other assets increased by \$18.7 million to \$319.7 million. Conservation costs, net, increased by \$13.8 million. The regulatory asset for environmental cleanup costs increased by \$2.8 million, mostly associated with cleanup of the Lower Duwamish Waterway Superfund Site. These environmental costs are being recovered through rates over a 25 year period. Other assets increased net \$2.1 million.

#### Deferred Outflows of Resources

#### 2015 Compared to 2014

Deferred outflows of resources increased by \$30.5 million to \$49.8 million.

In 2015, the Department implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27* concerning accounting for pension plans. The Department deferred 2015 employer pension contributions and losses related to differences between projected and actual investment earnings totaling \$33.4 million. See Note 11 Seattle City Employees' Retirement System of the accompanying financial statements.

Charges on advance refunding decreased a net \$2.9 million to \$16.4 million. Net activity is the result of additions due to new refunding bond issues and decreases for amortization.

#### 2014 Compared to 2013

Deferred outflows of resources are specifically for Charges on advance refunding of prior lien bonds in recent years. In 2014, Charges on advance refunding decreased by \$6.7 million for a total of \$19.3 million.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### LIABILITIES

#### Long-Term Debt

#### 2015 Compared to 2014

Long-term debt increased a net \$165.6 million to \$2,090.8 million in 2015. In June, the Department issued \$171.9 million of fixed rate revenue bonds and in July, the Department issued \$100.0 million of variable rate revenue bonds to fund the ongoing capital improvement program.

Debt to capitalization ratio was 64.7% at the end of 2015, an increase from the 59.9% ratio of 2014 because of the additional bonds and the \$233.8 million reduction of net position recorded at the beginning of the year due to implementation of GASB Statement No. 68. See Note 11 Seattle City Employees' Retirement System of the accompanying financial statements.

Net revenues available to pay debt service were equal to 1.62 times principal and interest on all bonds for 2015.

See Note 7 Long-Term Debt of the accompanying financial statements.

#### **2014** Compared to **2013**

Long-term debt increased a net \$54.9 million to \$1,925.2 million in 2014. In November, the Department issued \$265.2 million of revenue and refunding revenue tax-exempt bonds to fund the ongoing capital improvement program and to advance refund \$125.4 million of higher interest rate 2004 series bonds.

Debt to capitalization ratio was 59.9% at the end of 2014, a decrease from the 61.7% ratio of 2013 and continuing the favorable trend in recent years.

Net revenues available to pay debt service were equal to 1.85 times principal and interest on all bonds for 2014.

#### Noncurrent Liabilities

#### 2015 Compared to 2014

Total non-current liabilities increased by \$274.2 million to \$341.5 million at the end of 2015.

The significant area of increase was the result of recording Net Pension Liability totaling \$271.8 million due to the implementation of GASB Statement No. 68 concerning pensions. See Note 11 Seattle City Employees' Retirement System of the accompanying financial statements.

Compensated absences increased by \$2.7 million to \$19.4 million primarily due to additional days off negotiated by union contracts that restore to affected employees the value of unpaid furlough days taken in 2010.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

The balance net decrease of \$0.3 million to \$50.3 million was for minimal changes within environmental liabilities, risk management liabilities, and other.

Environmental liabilities are primarily attributable to the estimated cost of remediating contaminated sediments in the lower Duwamish Waterway, a designated federal Superfund site. The Department is considered a potentially responsible party for contamination in the Duwamish River due to land ownership or use of property located along the river. Environmental liabilities decreased by \$0.4 million to \$33.6 million at the end of 2015.

More information on environmental liabilities is found in Note 11 Environmental Liabilities and for other Noncurrent liabilities, primarily for risk management liabilities, in Note 8 Provision for Injuries and Damages of the accompanying financial statements.

#### 2014 Compared to 2013

Total non-current liabilities decreased by \$10.8 million to \$67.3 million at the end of 2014.

Non-current environmental liabilities decreased by \$12.2 million to \$34.0 million. During 2015, work focused on clean-up on two sites; Terminal 117 and Cedar Falls Bridge remediation. Accordingly, a large amount of the non-current liability was reclassified to current.

The balance net decrease of \$1.2 million to \$24.4 million was negligible representing risk management liabilities, compensated absences, and other.

#### **Current Liabilities**

#### 2015 Compared to 2014

Current liabilities increased by \$13.1 million for a total of \$271.4 million at the end of 2015.

Current liability increases of \$24.4 million were for vouchers payable for ongoing operations, debt service, furlough days restored, taxes, power, and other. These were offset by decreases of \$11.3 million in part due to payment for Terminal 117 and Cedar Falls Bridge remediation environmental projects during the year. In addition, current environmental liabilities were adjusted downward from the 2014 estimate that was inadvertently recorded.

#### 2014 Compared to 2013

Current liabilities increased by \$16.6 million for a total of \$258.3 million at the end of the year.

Of the net increase, \$9.6 million was the result of higher environmental liabilities for ongoing clean-up of the Duwamish Waterway superfund site, with the net balance increase primarily for higher debt service from recent bond issues, and vouchers payable for ongoing operations.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### Other Liabilities

#### 2015 Compared to 2014

Other liabilities increased by \$3.0 million to \$29.7 million in 2015. The major increase was for unearned revenue for large service connections in progress due in part to the improving local economy.

#### **2014 Compared to 2013**

Other liabilities increased by \$7.5 million to \$26.7 million in 2014. The major increase was for customer prepayments in the amount of \$6.6 million for large service connections.

#### Deferred Inflows of Resources

#### 2015 Compared to 2014

Deferred inflows of resources decreased by \$21.6 million for a total of \$89.9 million at the end of 2015.

The significant activity occurring since 2010 has been principally the result of implementing, funding, and related activity of the RSA. Funding of the RSA from operating cash has the corresponding effect of deferring operating revenues in the rate stabilization unearned revenue account and vice versa. During 2015, \$23.4 million net was transferred to operating revenues as a result of lower actual net wholesale revenues than budget. The ending balance of the rate stabilization unearned revenue account was \$66.0 million. See Note 3 Rate Stabilization Account of the accompanying financial statements.

Other deferred inflows of resources increased by \$1.8 million to \$23.9 million. The increase was mostly due to payments received from Bonneville in accordance with the Department's Energy Conservation Agreement, net of earned revenue.

#### 2014 Compared to 2013

Deferred inflows of resources increased by \$10.8 million for a total of \$111.5 million at the end of 2014.

During 2014, \$4.4 million net was transferred to the rate stabilization unearned revenue account from operating revenues as a result of higher actual net wholesale revenues than budget. The ending balance of the rate stabilization unearned revenue account was \$89.4 million.

Other deferred inflows of resources increased by \$6.4 million to \$22.1 million. The increase was mostly due to payments received from Bonneville in accordance with the Department's Energy Conservation Agreement, net of earned revenue totaling \$6.0 million. The net balance was due to a higher Bonneville Slice true-up credit and exchange energy regulatory gains.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### RESULTS OF OPERATIONS

#### Condensed Statements of Revenues, Expenses, and Changes in Net Position

	Year Ended December 31		
(\$ in millions)	2015	2014	2013
Operating revenues	\$ 882.9	\$ 886.4	\$ 842.2
Nonoperating revenues	16.7	18.5	11.1
Total revenues	899.6	904.9	853.3
Operating expenses	772.0	734.1	711.0
Nonoperating expenses	76.5	77.9	79.3
Total expenses	848.5	812.0	790.3
Income before capital contributions and grants	51.1	92.9	63.0
Capital contributions	39.0	27.7	47.9
Capital grants	0.4	0.7	1.8
Total capital contributions and grants	39.4	28.4	49.7
Change in net position	\$ 90.5	\$ 121.3	<u>\$ 112.7</u>

#### **SUMMARY**

#### 2015 Compared to 2014

Change in net position for 2015 was \$90.5 million, a decrease of \$30.8 million or 25.4% from 2014 change in net position of \$121.3 million due in large part to lower net wholesale energy sales compared to 2014. Higher retail electric sales, transfers from/(to) RSA, and capital contributions were offset by lower power related revenues, net, and higher distribution, administrative and general, taxes, and depreciation, in addition to the lower net surplus power sales.

#### 2014 Compared to 2013

Change in net position for 2014 was \$121.3 million, an increase of \$8.6 million or 7.6% from 2013 change in net position of \$112.7 million. Higher retail electric sales, net wholesale energy sales, and investment earnings were offset in part by higher power related expenses, conservation, administrative and general, taxes, and depreciation. Lower transfers from/(to) RSA and capital contributions also decreased revenues.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### **REVENUES**

#### 2015 Compared to 2014

Total operating revenues were \$882.9 million, a decrease of \$3.5 million or (0.4%) from 2014. Retail power revenues at \$736.6 million increased \$15.8 million, Wholesale power revenues at \$61.2 million decreased \$35.6 million, Other power revenues at \$36.8 million decreased \$14.0 million, Transfers from/(to) RSA at \$23.4 million increased \$27.8 million, and Other operating revenues at \$24.9 million increased \$2.5 million. Retail power revenues were higher due to the 4.2% across-the-board rate increase effective January 1, 2015 and the 0.9% Bonneville pass-through rate adjustment effective in October 2015 despite lower consumption from warmer weather during most of 2015. Actual net wholesale power revenues were lower than budget and as a consequence, \$23.4 million net was transferred to operating revenues. In 2014, \$4.4 million net was transferred to the RSA unearned revenue account as a result of actual net wholesale energy revenues being higher than budget. The net effect of Transfers from/(to) RSA between years was an increase of \$27.8 million.

Net wholesale energy revenues were \$34.4 million, a substantial decrease of \$47.5 million or (58.0%) from net wholesale energy revenues of \$81.9 million in 2014. On an annual basis, the Department expects to be a net seller in the wholesale energy market. During 2015, earlier snow melt in the mountains, lower than normal spring precipitation, and above average temperatures since May contributed to the lower wholesale energy sales. The resulting less power generated along with lower average wholesale prices also influenced the unfavorable surplus energy revenues. Wholesale power prices remained historically low throughout most of 2015, mainly driven by depressed natural gas prices. Additionally, compared to the average of the last five years, 2015 hydro generation was around 88% and prices were around 80%. Other power related revenues were lower by a net \$8.1 million from 2014, also affected by lower average wholesale power prices along with lower volume available, and thereby causing lower valuation of net power exchange revenues.

#### 2014 Compared to 2013

Total operating revenues were \$886.4 million, an increase of \$44.2 million or 5.3% from 2013. Retail power revenues at \$720.8 million increased \$23.1 million, Wholesale power revenues at \$96.8 million increased \$33.8 million, Other power revenues at \$50.8 million increased \$10.4 million, Transfers from/(to) RSA at (\$4.4) million decreased \$22.7 million, and Other operating revenues at \$22.4 million decreased \$0.4 million. Retail power revenues were higher as a result of the 5.6% across-the-board rate increase effective January 1, 2014 and the 1.2% Bonneville pass-through rate adjustment effective in October 2013. Actual net wholesale power revenues were higher than budgeted and therefore, \$4.4 million net was transferred to the RSA unearned revenue account. In 2013, \$18.3 million net was transferred-in from the RSA unearned revenue account to supplement lower net wholesale energy revenues than budget. The net effect of transactions in the Transfers from/(to) RSA between years was a reduction of \$22.7 million in operating revenues.

Net wholesale energy revenues were \$81.9 million, an increase of \$38.7 million or 89.6% from net wholesale energy revenues of \$43.2 million in 2013. During 2014, higher surplus energy that was available for sale due to a strong water year along with higher average wholesale power prices contributed to the improved net wholesale energy revenues. Other power revenues were higher by a net \$6.8 million from 2013 generally on the basis of higher valuation of net power exchange revenues and the higher average wholesale power prices.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

#### **EXPENSES**

#### 2015 Compared to 2014

Operating expenses totaled \$772.0 million, an increase of \$37.9 million or 5.2% from \$734.1 million in 2014.

Power-related operating expenses at \$354.3 million were higher by \$6.4 million or 1.8%. These expenses were comprised of Long-term purchased power - Bonneville and other of \$213.6 million, which decreased \$0.7 million, Short-term wholesale power purchases of \$26.8 million, which increased \$11.9 million, Other power expenses of \$59.6 million, which decreased \$6.3 million, and Transmission of \$54.3 million, which increased \$1.5 million.

Short-term wholesale power purchases were affected by the earlier snow melt in the region and related consequences, and along with higher average purchase power prices led to increased short-term power purchases to manage load. The aftermath of a major wildfire near one of the Department's generating facilities triggered additional short-term power purchases of \$1.0 million. In general, lower average wholesale power prices and lower volume led to lower valuation of power exchange purchases within Other power expenses.

Non-power operating expenses increased by \$24.2 million to \$224.6 million or 12.1% from \$200.4 million in 2014. These expenses included Distribution expenses of \$65.1 million, which increased \$5.4 million, Customer service of \$38.3 million, which increased \$0.7 million, Conservation of \$29.1 million, which increased \$1.8 million, and Administrative and general, net, of \$92.1 million which increased \$16.3 million.

Distribution expenses increased due to higher labor and benefits for system maintenance, tree trimming, outage maintenance, COLA accruals, and an increase in costs to repair damage billable to other parties.

The implementation of GASB Statement No. 68 increased pension expenses by \$7.5 million within Administrative and general, net. Other increases were for salaries and related benefits due to lower vacancies, COLA accruals, city general fund cost allocations, NERC administration, and other. These were offset by higher overhead applied to capital work generally due to higher labor charges and related higher overhead rates, plus a higher allocation of pension costs from GASB Statement No. 68.

Taxes at \$81.1 million increased incrementally \$1.1 million due to higher revenues. Depreciation and amortization at \$112.0 million increased by \$6.2 million as a result of additional plant assets placed in service.

#### **2014 Compared to 2013**

Operating expenses totaled \$734.1 million, an increase of \$23.1 million or 3.3% from \$711.0 million in 2013.

Power-related operating expenses at \$347.9 million were higher by \$10.5 million or 3.1%. These expenses were comprised of Long-term purchased power - Bonneville and other of \$214.3 million, which increased \$11.2 million, Short-term wholesale power purchases of \$14.9 million, which decreased \$4.9 million, Other

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

power expenses of \$65.9 million, which decreased \$0.4 million, and Transmission which increased \$4.6 million.

Bonneville purchased power costs increased \$5.5 million due to increased power rates effective October 2013 plus a higher block load shaping rate. Other long-term purchased power was higher by \$5.7 million for the most part due to higher average wholesale power prices and volume, plus higher fair valuation of exchanged power. Short-term wholesale power purchases where lower mainly the result of lower volume. Furthermore, Transmission increased because of higher Bonneville transmission rates.

Non-power operating expenses increased by \$8.4 million to \$200.4 million or 4.4% from \$192.0 million in 2013. These expenses included Distribution expenses of \$59.7 million, unchanged, Customer service of \$37.6 million, which decreased \$1.6 million, Conservation of \$27.3 million, which increased \$5.8 million, and Administrative and general, net, of \$75.8 million which increased \$4.1 million.

Customer service expenses were higher due to increased temporary labor for low income outreach and meter reading, and customer contract expenses due to increased service connections, offset by lower bad debt expense. Conservation expenses increased because of higher amortization for commercial and residential programs, and higher customer renewable solar energy credits. Administrative and general, net, were higher because of general office salaries due to a lower vacancy rate along with higher professional service fees.

Taxes at \$80.0 million increased \$0.7 million due to higher revenues and included the effect of \$2.8 million of conservation incentive tax credits. Depreciation and amortization at \$105.8 million increased by \$3.5 million as a result of additional plant assets placed in service.

#### NONOPERATING REVENUES AND (EXPENSES), CAPITAL CONTRIBUTIONS AND GRANTS

#### 2015 Compared to 2014

Nonoperating revenues decreased by \$1.8 million to \$16.7 million in 2015. Major causes were lower market performance for the Department's share of investments in the city cash pool and less sales of properties. There was an increase in FEMA grants and specifically related to a fire near one of the Department's generating facilities.

Nonoperating expenses were slightly lower by \$1.4 million to \$76.5 million. Higher interest on outstanding bonds were offset primarily by higher interest charged to construction projects as the focus on capital work continued during the year.

Capital contributions and grants increased by \$11.0 million to \$39.4 million in 2015. Capital contributions were higher mostly due to energization of underground electrical infrastructure for Shoreline, a local suburban jurisdiction within the Department's service territory; and to a lesser extent, for service connections for larger construction projects.

#### 2014 Compared to 2013

Nonoperating revenues increased by \$7.4 million to \$18.5 million in 2014. The major contributor was a substantial gain in investment income of \$7.1 million due to the favorable swing between years in unrealized fair value gains for the Department's share of investments in the city cash pool.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

Nonoperating expenses were slightly lower by \$1.4 million to \$77.9 million. Higher interest charged to construction projects of \$1.9 million was the main component as there was increased focus on capital work during the year.

Capital contributions and grants decreased by \$21.3 million to \$28.4 million in 2014. Capital contributions were lower by \$20.2 million primarily due to lower in-kind contributions totaling \$21.8 million. The decrease of in-kind amounts from 2013 was primarily for the Mercer East corridor project and other private construction.

#### RISK MANAGEMENT

The Department began implementing an Enterprise-wide Risk Management (ERM) process in 2008 to establish a full spectrum approach to risk management that links important decision making functions through a standardized process of identifying, assessing, monitoring, and mitigating risks across all Business Units and Divisions of the Department.

Risk Oversight Council (ROC) oversees wholesale power marketing activities. It is comprised of the Chief Financial Officer (Chair), Power Supply & Environmental Affairs Officer, Director of Risk Oversight, Director of Power Operations and Marketing (non-voting), Director of Power Contracts & Resource Acquisition (non-voting), and Manager of Financial Planning (non-voting). The ROC guides the continuous improvement of energy risk management activities and capabilities, approves hedging strategies, hedging plans, and approves changes to relevant operating procedures.

The Risk Oversight Division, in addition to the ERM, manages the market and credit risk related to all wholesale marketing activities, and carries out the middle office functions of the Department. This includes confirmations, risk controls, independent reporting of market positions, counterparty credit risk, settlements, and ensuring adherence to Wholesale Energy Risk Management (WERM) policy and procedures.

#### **Hydro Risk**

Due to the Department's primary reliance on hydroelectric generation, weather can significantly affect its operations. Hydroelectric generation depends on the amount of snow-pack in the mountains upstream of the Department's hydroelectric facilities, springtime snow-melt, run-off and rainfall. Hydroelectric operations are also influenced by flood control and environmental matters, including protection of fish. In low-water years, the Department's generation is reduced and the use of wholesale purchased power may increase in order to meet load. Normally, the Department experiences electricity usage peaks in winter; however, extreme weather conditions affecting either heating or cooling needs could cause the Department's seasonal fluctuations to be more pronounced and increase costs. In addition, economic trends (increase or decrease in business activity, housing sales and development of properties) can affect demand and change or increase costs.

#### **Energy Market Risk**

For the Department, energy market risk is the risk of adverse fluctuations in the price of wholesale electricity, which is compounded by volumetric changes affecting the availability of, or demand for electricity. Factors that contribute to energy market risk include: regional planned and unplanned generation plant outages, transmission constraints or disruptions, the number of active creditworthy market participants willing to transact, and environmental regulations that influence the availability of generation resources.

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 and 2014

The Department's exposure to hydro volumetric and energy market risk is managed by the ROC and the approved strategies are executed by the Power Operations and Marketing Division. The Department engages in market transactions to meet its load obligations and to realize earnings from surplus energy resources.

With a significant portion of the Department's revenue expected from wholesale energy market sales, great emphasis is placed on the management of risks associated with this activity. Policies, procedures, and processes designed to manage, control and monitor these risks are in place. A formal front, middle, and back office structure is in place to ensure proper segregation of duties.

The Department measures the risk in its energy portfolio using a model that utilizes historical simulation methodology and incorporates not only price risk, but also the volumetric risk associated with its hydrodominated power portfolio. Scenario analysis is used for stress testing.

#### **Credit Risk**

Credit risk is the risk of loss that would be incurred as a result of nonperformance by counterparties of their contractual obligations. If a counterparty failed to perform on its contractual obligation to deliver electricity, then the Department may find it necessary to procure electricity at current market prices, which may be higher than the contract price. If a counterparty failed to pay its obligation in a timely manner, this would have an impact on the Department's revenue and cash flow. As with market risk, the Department has policies governing the management of credit risk.

Wholesale counterparties are assigned credit limits based on publicly available and proprietary financial information. Along with ratings provided by national ratings agencies, an internal credit scoring model is used to classify counterparties into one of several categories with permissible ranges of credit limits. Specific counterparty credit limits are set within this prescribed range based on qualitative and quantitative factors. Credit limits are also used to manage counterparty concentration risk. The Department is actively reducing concentration of credit risk related to geographic location of counterparties as it only transacts in the western energy markets. This geographic concentration of counterparties may impact the Department's overall credit exposure, because counterparties may be affected by similar conditions.

Credit limits, exposures and credit quality are actively monitored on a daily basis. Despite such efforts, there is potential for default, however the Department has not had a counterparty default in the last 10 years. The Department transacts with counterparties on an uncollateralized and collateralized basis. Posted collateral may be in the form of cash, letters of credit, or parental guarantees.

#### REQUESTS FOR INFORMATION

For more information about Seattle City Light, contact Marketing and Communications at 206-684-3090 or at P.O. Box 34023, Seattle, WA 98124-4023

# BALANCE SHEETS - ASSETS AND DEFERRED OUTFLOWS OF RESOURCES AS OF DECEMBER 31, 2015 AND 2014

(\$ in millions)	2015	2014
ASSETS		
UTILITY PLANT—At original cost:		
Plant-in-service—excluding land	\$ 4,168.2	\$ 3,936.0
Less accumulated depreciation and amortization	(1,671.8)	(1,612.9)
Total plant-in-service—net	2,496.4	2,323.1
Construction work-in-progress	319.8	252.4
Nonoperating property—net of accumulated depreciation	11.8	10.5
Assets held for future use	60.8	71.8
Land and land rights	72.7	70.5
Total utility plant—net	2,961.5	2,728.3
RESTRICTED ASSETS:		
Rate stabilization account	91.0	114.4
Municipal light and power bond reserve account	73.7	47.9
Construction account	88.7	123.8
Special deposits and other restricted assets	11.7	12.3
Total restricted assets	265.1	298.4
CURRENT ASSETS:		
Cash and equity in pooled investments	152.5	128.3
Accounts receivable (includes \$1.5 and \$1.6 at fair value),		
net of allowance of \$8.4 and \$7.7	78.7	73.1
Interfund receivables	3.5	1.5
Unbilled revenues	70.5	64.6
Materials and supplies at average cost	32.8	30.8
Prepayments, interest receivable, and other current assets	1.6	0.5
Total current assets	339.6	298.8
OTHER ASSETS:		
Conservation costs—net	243.8	228.1
Environmental costs—net	31.2	34.5
Other charges and assets—net	64.5	57.1
Total other assets	339.5	319.7
TOTAL ASSETS	3,905.7	3,645.2
DEFERRED OUTFLOWS OF RESOURCES		
Unrealized contributions and losses related to Pension	33.4	-
Charges on advance refunding	16.4	19.3
TOTAL DEFERRED OUTFLOWS OF RESOURCES	49.8	19.3
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 3,955.5	\$ 3,664.5

# BALANCE SHEETS - LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION AS OF DECEMBER 31, 2015 AND 2014

(\$ in millions)	2015	2014
LIABILITIES		
LONG-TERM DEBT:		
Revenue bonds	\$ 2,070.8	\$ 1,903.8
Plus bond premium—net	125.9	126.3
Less revenue bonds—current portion	(105.9)	(104.9)
Total long-term debt	2,090.8	1,925.2
NONCURRENT LIABILITIES:		
Net pension liability	271.8	-
Accumulated provision for injuries and damages	42.3	42.9
Compensated absences	19.4	16.7
Other noncurrent liabilities	8.0	7.7
Total noncurrent liabilities	341.5	67.3
CURRENT LIABILITIES:		
Accounts payable and other current liabilities	106.6	101.3
Interfund payables	11.0	10.9
Accrued payroll and related taxes	10.3	9.2
Compensated absences	3.6	2.0
Accrued interest	34.0	30.0
Long-term debt—current portion	105.9	104.9
Total current liabilities	271.4	258.3
OTHER LIABILITIES	29.7	26.7
TOTAL LIABILITIES	2,733.4	2,277.5
DEFERRED INFLOWS OF RESOURCES		
Rate stabilization unearned revenue	66.0	89.4
Other deferred inflows of resources (includes \$0.6 and \$0.1 at fair value)	23.9	22.1
TOTAL DEFERRED INFLOWS OF RESOURCES	89.9	111.5
NET POSITION		
Net investment in capital assets	1,169.6	1,100.8
Restricted:	,	,
Rate stabilization account	25.0	25.0
Special deposits and other purposes	-	-
Total restricted	25.0	25.0
Unrestricted—net	(62.4)	149.7
Total net position	1,132.2	1,275.5
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION	\$ 3,955.5	\$ 3,664.5

See notes to financial statements.

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# STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

(\$ in millions)	2015	2014
OPERATING REVENUES:		
Retail power revenues	\$ 736.6	\$ 720.8
Short-term wholesale power revenues	61.2	96.8
Other power-related revenues	36.8	50.8
Transfers from/(to) rate stabilization account	23.4	(4.4)
Other operating revenues	24.9	22.4
Total operating revenues	882.9	886.4
OPERATING EXPENSES:		
Long-term purchased power—Bonneville and other	213.6	214.3
Short-term wholesale power purchases	26.8	14.9
Other power expenses	59.6	65.9
Transmission	54.3	52.8
Distribution	65.1	59.7
Customer service	38.3	37.6
Conservation	29.1	27.3
Administrative and general	92.1	75.8
Taxes	81.1	80.0
Depreciation and amortization	112.0	105.8
Total operating expenses	772.0	734.1
OPERATING INCOME	110.9	152.3
NONOPERATING REVENUES AND (EXPENSES):		
Other revenues and (expenses)—net	16.7	18.5
Interest expense		
Interest expense—net	(85.7)	(85.3)
Amortization of bond costs—net	9.2	7.4
Total interest expense	(76.5)	(77.9)
Total nonoperating expenses	(59.8)	(59.4)
INCOME BEFORE CAPITAL CONTRIBUTIONS AND GRANTS	51.1	92.9
CAPIT AL CONTRIBUTIONS AND GRANTS:		
Capital contributions	39.0	27.7
Capital grants	0.4	0.7
Total capital contributions and grants	39.4	28.4
CHANGE IN NET POSITION	90.5	121.3
NET POSITION:		
Beginning of year	1,275.5	1,154.2
Adjustment for the implementation of GASB Statement No. 68, Accounting and Financial Reporting		
for Pensions – an amendment of GASB Statement No. 27	(233.8)	
Beginning of year, as adjusted	1,041.7	
End of year	\$ 1,132.2	\$ 1,275.5

See notes to financial statements.

# STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

(\$ in millions)		2015		2014
OPERATING ACTIVITIES:				
Cash received from customers and counterparties	\$	836.6	\$	867.4
Interfund operating cash received		1.9		1.7
Cash paid to suppliers and counterparties		(326.5)		(287.1)
Cash paid to employees		(177.0)		(173.6)
Interfund operating cash paid		(28.4)		(28.5)
Taxes paid		(78.5)		(82.3)
Net cash provided by operating activities		228.1	_	297.6
NONCAPITAL FINANCING ACTIVITIES:				
Principal paid on long-term debt		(12.3)		(37.3)
Interest paid on long-term debt		(10.5)		(33.7)
Noncapital grants received		4.6		5.2
Bonneville receipts for conservation		2.2		6.7
Payment to vendors on behalf of customers for conservation		(35.2)		(33.1)
Net cash used in noncapital financing activities		(51.2)	_	(92.2)
CAPITAL AND RELATED FINANCING ACTIVITIES:				
Proceeds from long-term debt		271.8		265.2
Proceeds from long-term debt premiums		11.9		34.2
Payment to trustee for defeased bonds		0.0		(127.1)
Bond issue costs paid		(1.0)		(1.7)
Principal paid on long-term debt		(92.6)		(62.4)
Interest paid on long-term debt		(79.2)		(56.5)
Acquisition and construction of capital assets		(306.1)		(276.1)
Interfund payments for acquisition and construction of capital assets		(23.0)		(10.9)
Capital contributions		38.0		26.5
Interfund receipts for capital contributions		0.3		0.8
Capital grants received/(paid)		(3.6)		(3.0)
Interest received for suburban infrastructure improvements		2.1		2.1
Proceeds on sale of property (Increase) Decrease in other assets		1.1 (9.8)		2.0 1.6
Net cash used in capital and related financing activities	-	(190.1)	_	(205.3)
INVESTING ACTIVITIES: Interest received (paid) on cash and equity in pooled investments		4.1		5.8
Net cash provided by (used in) investing activities		4.1	_	5.8
NET INCREASE (DECREASE) IN CASH AND EQUITY IN POOLED INVESTMENTS		(9.1)		5.9
CASH AND EQUITY IN POOLED INVESTMENTS:				
Beginning of year		426.7		420.8
End of year	\$	417.6	\$	426.7

See notes to financial statements.

# STATEMENTS OF CASH FLOWS - RECONCILIATION FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

(\$ in millions)	2015	2014
RECONCILIATION OF OPERATING INCOME TO		
NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$ 110.9	\$ 152.3
Adjustments to reconcile operating income to net cash		
provided by operating activities:		
Non-cash items included in operating income:		
Depreciation	118.3	108.1
Amortization of other liabilities	(0.9)	(0.6)
Amortization of other assets	24.3	22.7
Bad debt expense	3.0	2.1
Power revenues	(31.5)	(48.4)
Power expenses	32.9	49.1
Provision for injuries and damages	0.6	(0.3)
Other non-cash items	7.6	5.8
Change in:		
Accounts receivable	(5.6)	(10.7)
Unbilled revenues	(5.9)	14.2
Materials and supplies	(7.6)	6.6
Prepayments, interest receivable, and other receivables	(0.8)	0.6
Other assets	2.7	(2.9)
Provision for injuries and damages and claims payable	1.4	(13.8)
Accounts payable and other payables	2.1	8.4
Rate stabilization unearned revenue	 (23.4)	 4.4
Total adjustments	 117.2	 145.3
Net cash provided by operating activities	\$ 228.1	\$ 297.6
SUPPLEMENTAL DISCLOSURES OF NONCASH ACTIVITIES:		
In-kind capital contributions	\$ 1.4	\$ 3.6
Amortization of debt related costs—net	9.2	7.4
Allowance for funds used during construction	8.9	5.8
Power exchange revenues	17.0	25.3
Power exchange expenses	(17.6)	(25.6)
Power revenue netted against power expenses	6.5	6.1
Power expense netted against power revenues	(8.5)	(17.1)

See notes to financial statements.

### **REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**

### 1. OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The City Light Department (the Department) is the public electric utility of The City of Seattle (the City). The Department is an enterprise fund of the City. The Department owns and operates certain generating, transmission, and distribution facilities and supplies electricity to approximately 423,000 residential, commercial, and public customers in the city of Seattle. The Department also supplies electrical energy to other City agencies at rates prescribed by City ordinances, and to certain neighboring communities under franchise agreements. The establishment of the Department's rates is within the exclusive jurisdiction of the Seattle City Council. A requirement of Washington State law provides that rates must be fair, nondiscriminatory, and fixed to produce revenue adequate to pay for operation and maintenance expenses and to meet all debt service requirements payable from such revenue. The Department pays occupation taxes to the City based on total revenues.

The Department's revenues for services provided to other City departments were \$18.0 million and \$18.8 million in 2015 and 2014, respectively, and \$2.2 million and \$3.0 million for non-energy services, respectively.

The Department receives certain services from other City departments and paid \$64.8 million in 2015 and \$50.8 million in 2014, for such services. Amounts paid include central cost allocations from the City for services received including treasury services, risk financing, purchasing, data processing systems, vehicle maintenance, personnel, payroll, legal, administrative, and building rentals, including for the Department's administrative offices.

The Department's receivables from other City departments totaled \$3.5 million and \$1.5 million at December 31, 2015, and 2014, respectively. The Department's payables to other City departments totaled \$11.0 million and \$10.9 million at December 31, 2015, and 2014, respectively. The balances receivable and payable are the result of transactions incurred in the normal course of operations.

Basis of Presentation and Accounting Standards—The financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America as applied to governmental units. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Department has applied and is current through 2015 with all applicable GASB pronouncements.

Effective January 1, 2015, the Department adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27 and Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. Statement Nos. 68 and 71 establish new accounting and financial reporting requirements for state and local governments related to pensions, including changes to the recognition of liabilities, expenses, deferred outflows of resources, and deferred inflows of resources. See Note 11 Seattle City Employees' Retirement System for more information related to Statement Nos. 68 and 71.

The GASB has issued GASB Statement No. 72, *Fair Value Measurement and Application*, which provides guidance for determining a fair value measurement for reporting purposes, applying fair values to certain investments, and disclosures related to all fair value measurements. Statement No. 72 is the only new statement effective for the Department in 2016 and the Department is currently evaluating the impact that adoption of this statement will have on its financial statements.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

*Fair Value Measurements*—Descriptions of the Department's accounting policies on fair value measurements for items reported on the balance sheets at December 31, 2015 and 2014, are as noted in the following paragraph, Note 5 Accounts Receivable, and Note 17 Long-Term Purchased Power, Exchanges, and Transmission.

Fair Value of Financial Instruments—The Department's financial instruments reported on the balance sheets at December 31, 2015 and 2014, as Restricted assets and Cash and equity in pooled investments are measured at fair value. These instruments consist primarily of the Department's share of the Citywide pool of investments (see Note 4 Cash and Equity in Pooled Investments and Investments). Gains and losses on these financial instruments are reflected in Investment income in the statements of revenues, expenses, and changes in net position. Long-term debt at December 31, 2015 and 2014, is disclosed at fair value (see Note 8 Long-Term Debt).

*Net Position*—The Department classifies its net position into three components as follows:

- *Net investment in capital assets*—This component consists of capital assets, net of accumulated depreciation and amortization, reduced by the net outstanding debt balances related to capital assets net of unamortized debt expenses.
- Restricted—This component consists of net position with constraints placed on use. Constraints include those imposed by creditors (such as through debt covenants and excluding amounts considered in net capital, above), grants, or laws and regulations of other governments, or by enabling legislation, The City of Seattle Charter, or by ordinances legislated by the Seattle City Council.
- Unrestricted—This component consists of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that do not meet the definition of Net investment in capital assets or Restricted

**Restricted and Unrestricted Net Position**—The Department's policy is to use restricted net position for specified purposes and to use unrestricted net position for operating expenses. The Department does not currently incur expenses for which both restricted and unrestricted net position is available.

Assets Held for Future Use—These assets include property acquired but never used by the Department in electrical service and therefore, held for future service under a definitive plan. Also included is property previously used in service but retired and held pending its reuse in the future under a definitive plan. As of December 31, 2015 and 2014, Assets held for future use included the following electrical plant assets: land for future substations, ducts and vaults, transmission lines, and plans for additional hydraulic generating capacity totaling \$60.8 million and \$71.8 million, respectively.

*Materials and Supplies*—Materials and supplies are generally used for construction, operation and maintenance work, not for resale. They are valued utilizing the average cost method and charged to construction or expense when used.

**Revenue Recognition**—Service rates are authorized by City ordinances. Billings are made to customers on a monthly or bimonthly basis. Revenues for energy delivered to customers between the last billing date and the end of the year are estimated and reflected in the accompanying financial statements as unbilled revenue within Retail power revenues.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

The Department's customer base accounted for electric energy sales at December 31, 2015 and 2014, as follows:

	2015	2014
Residential	35.9 %	36.1 %
Nonresidential	64.1 %	63.9 %
Total	100.0 %	100.0 %

Revenues earned in the process of delivering energy to customers, wholesale energy transactions, and related activities are considered operating revenues in the determination of change in net position. Investment income, nonexchange transactions, and other revenues are considered Nonoperating revenues.

**Expense Recognition**—Expenses incurred in the process of delivering energy to customers, wholesale energy transactions, and related activities are considered operating expenses in the determination of net income. Debt interest expense, debt related amortization, and certain other expenses are considered Nonoperating expenses.

Administrative and General Overhead Costs Applied—Certain administrative and general overhead costs are allocated to construction work-in-progress, major data processing systems development, programmatic conservation, relicensing mitigation projects, and billable operations and maintenance activities based on rates established by cost studies. Pension and benefit costs are allocated to capital and operations and maintenance activities based on a percentage of labor dollars. The administrative and general overhead costs applied totaled \$52.1 million and \$48.1 million in 2015 and 2014, respectively. Pension and benefit costs were \$58.7 million and \$52.6 million in 2015 and 2014, respectively. Administrative and general expenses, net of total applied overhead, were \$92.1 million and \$75.8 million in 2015 and 2014, respectively.

Interest Charged to Construction—Interest is charged for funds used during construction of plant assets and to non-billable construction work-in-progress. Interest charged represents the estimated costs of financing construction projects and is computed using the Department's weighted-average interest rate for all bonds outstanding, the majority of which are tax exempt, and is revised when new bonds are issued and at the end of the year. Interest charged to construction totaled \$8.9 million and \$5.8 million in 2015 and 2014, respectively, and is reflected as a reduction of Interest expense in the statements of revenues, expenses, and changes in net position.

Nonexchange Transactions—Capital contributions and grants in the amount of \$44.0 million and \$32.2 million are reported for 2015 and 2014, respectively, in the statements of revenues, expenses, and changes in net position as nonoperating revenues from nonexchange transactions. Capital contributions and grants revenues are recognized based on the accrual basis of accounting. In-kind capital contributions are recognized at estimated fair value in the period when all eligibility requirements have been met as described in GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions. Federal and state grant revenues are recognized as earned and are subject to contract and other compliance audits.

**Compensated Absences**—Regular employees of the Department earn vacation time in accordance with length of service. A maximum of 480 hours may be accumulated for the most tenured employees and,

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

upon termination, employees are entitled to compensation for unused vacation. Upon retirement, employees receive compensation equivalent to 25% of their accumulated sick leave. Effective 2006, only employees represented by unions who voted in favor of a Healthcare Reimbursement Arrangement (HRA) receive 35% of their sick leave balance tax-free through an HRA account for healthcare expenses post retirement. Because of the special tax arrangement, the sick leave balance may only go into the HRA account; it may not be taken as a cashout. The HRA program is administered by an independent third party administrator, Meritain Health. HRA investments are managed by HRA Voluntary Employee Beneficiary Association (VEBA) Trust. The Department accrues all costs associated with compensated absences, including payroll taxes.

*Use of Estimates*—The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements. The Department used significant estimates in determining reported allowance for doubtful accounts, unbilled revenues, power exchanges, accumulated provision for injuries and damages and workers' compensation, environmental liabilities, accrued sick leave, net pension liability, other postemployment benefits, and other contingencies. Actual results may differ from those estimates.

Significant Risk and Uncertainty—The Department is subject to certain business risks that could have a material impact on future operations and financial performance. These risks include financial market liquidity and economic uncertainty; prices on the wholesale markets for short-term power transactions; interest rates and other inputs and techniques for fair valuation; water conditions, weather, climate change, and natural disaster-related disruptions; terrorism; collective bargaining labor disputes; fish and other Endangered Species Act (ESA) issues; Environmental Protection Agency (EPA) regulations; compliance with clean and renewable energy legislation; local and federal government regulations or orders concerning the operations, maintenance, and/or licensing of hydroelectric facilities; other governmental regulations; restructuring of the electrical utility industry; and the costs of constructing transmission facilities that may be incurred as part of a northwest regional transmission system, and related effects of this system on transmission rights, transmission sales, surplus energy, and governance.

**Reclassifications**—Certain 2014 account balances have been reclassified to conform to the 2015 presentation.

### 2. UTILITY PLANT

Utility Plant—Utility plant is recorded at original cost, which includes both direct costs of construction or acquisition and indirect costs, including an allowance for funds used during construction. The capitalization threshold for tangible assets was \$5,000, and for intangible assets, \$500,000 in 2015 and 2014. Plant constructed with capital contributions or contributions in-aid-of construction received from customers is included in Utility plant. Capital contributions and capital grants totaled \$39.4 million in 2015 and \$28.4 million in 2014. The Department uses a straight-line composite method of depreciation and amortization and, therefore, groups assets into composite groups for purposes of depreciation. Estimated economic lives range from 4 to 57 years. The Department uses a half-year convention method on the assumption that additions and replacements are placed in service at mid-year. Depreciation and amortization expense as a percentage of depreciable utility plant-in-service was approximately 2.7% in 2015 and 2.7% in 2014. When operating plant assets are retired, their original cost together with retirement costs and removal costs, less salvage, is charged to accumulated depreciation or amortization, if applicable. The cost of maintenance and repairs is charged to expense as incurred, while the cost of

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

replacements and betterments are capitalized. The Department periodically reviews long-lived assets for impairment to determine whether any events or circumstances indicate the carrying value of the assets may not be recoverable over their economic lives. No impairments were identified in 2015 or 2014.

At December 31, 2015, several assets previously listed as Assets Held for Future Use have been placed in service totaling \$11.1 million. At December 31, 2014, assets totaling \$1.8 million were transferred to Assets Held for Future Use.

Intangible assets are those that lack physical substance, are nonfinancial in nature, and have useful lives extending beyond a single reporting period. The Department's intangible assets are reported as capital assets under Utility Plant. The Department's intangible assets consist of easements, purchased and internally developed software, transmission rights, capitalized relicensing costs for Skagit and Boundary hydroelectric projects, Tolt hydroelectric project mitigation costs, and costs capitalized under the High Ross Agreement.

Utility plant-in-service at original cost, excluding land, at December 31, 2015, and 2014, was:

2015 (\$ in millions)	roelectric oduction	Tran	smission	D	istribution		General	Intangible	Total
Original cost: Beginning balance Capital acquisitions Dispositions Transfers and adjustments	\$ 763.6 59.3 (1.8)	\$	207.8 25.7 (2.6)	\$	2,194.2 140.2 (38.8)	\$	313.9 29.0 (4.4)	\$ 456.5 25.6	\$ 3,936.0 279.8 (47.6)
Total original cost	 821.1		230.9		2,295.6		338.5	 482.1	 4,168.2
Accumulated depreciation and amortization: Beginning balance Increase in accumulated depreciation and	338.9		81.5		813.6		199.4	179.5	1,612.9
amortization Retirements PY Adjustments	 15.2 (6.4)		4.8 (3.8)		69.0 (46.6)	_	18.5 (4.7) 1.1	12.7 - (0.9)	120.2 (61.5) 0.2
Total accumulated depreciation and amortization	 347.7		82.5		836.0	_	214.3	 191.3	 1,671.8
Ending balance	\$ 473.4	\$	148.4	\$	1,459.6	\$	124.2	\$ 290.8	\$ 2,496.4

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

<b>2014</b> (\$ in millions)	roelectric oduction	Tran	smission	Γ	Distribution	General	I	ntangible	Total
Original cost: Beginning balance	\$ 761.2 28.6	\$	201.9	\$	2,086.4 118.9	\$ 305.2 18.1	\$	440.6 27.4	\$ 3,795.3
Capital acquisitions Dispositions	(26.2)		6.0 (0.1)		(11.1)	(9.4)		(11.5)	199.0 (58.3)
Transfers and adjustments	 					 	-		 
Total original cost	 763.6		207.8		2,194.2	 313.9		456.5	 3,936.0
Accumulated depreciation and amortization: Beginning balance Increase in accumulated	350.3		77.6		765.0	193.9		177.2	1,564.0
depreciation and amortization	15.1		4.5		65.1	15.1		13.8	113.6
Retirements	 (26.5)		(0.6)		(16.5)	 (9.6)		(11.5)	 (64.7)
Total accumulated depreciation and amortization	 338.9		81.5	_	813.6	 199.4		179.5	1,612.9
Ending balance	\$ 424.7	\$	126.3	\$	1,380.6	\$ 114.5	\$	277.0	\$ 2,323.1

Note: 2014 Accumulated Depreciation and Amortization section has been revised to reflect 2015 reclassification of Removal work-in-progress from Accumulated Depreciation to Construction work-in-progress.

### 3. RATE STABILIZATION ACCOUNT

The Rate Stabilization Account (RSA) is a restricted cash reserve established to reduce the need for rapid and substantial rate increases solely to comply with the Department's bond covenants.

In March 2010 the Seattle City Council adopted Resolution No. 31187 and Ordinance No. 123260, establishing revised financial policies and parameters for the operation of the RSA created by Ordinance No. 121637 in 2004. Ordinance No. 123260 identified the sources of significant funding of the RSA and specified parameters for its operation. The RSA is drawn down to supplement revenues when surplus power sales revenues are below the budgeted amount, and conversely, deposits are to be made to the RSA when the surplus power sales revenues are greater than budgeted. Deposits or withdrawals may be made up to and including the date 90 days after the end of the applicable year.

Ordinance No. 123260 established a target size for the RSA of no less than \$100.0 million and no greater than \$125.0 million, and authorized the imposition of automatic temporary surcharges on electric rates when the RSA balance is within the below specified levels:

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

RSA Balance	Action
Less than or equal to \$90.0 million but greater than \$80.0 million	Automatic 1.5% surcharge
Less than or equal to \$80.0 million but greater than \$70.0 million	Automatic 3.0% surcharge
Less than or equal to \$70.0 million but greater than \$50.0 million	Automatic 4.5% surcharge
Less than or equal to \$50.0 million	City Council must initiate rate review within 45 days and determine actions to replenish RSA to \$100.0 million within 12 months

In February 2014 the Seattle City Council adopted Ordinance No. 124426 (retroactive to December 2013), directing specific cash transfers to the RSA with the intention of reducing the likelihood of future rate surcharges.

Ordinance No. 123260 originally required a rate review whenever the RSA balance exceeded \$125.0 million, along with the implementation of measures to reduce the RSA balance to \$125.0 million within a period of 12 months or less. Subsequently, the Seattle City Council adopted Ordinance No. 124108 in February 2013 (retroactive to January 1, 2013) which extended the timing of this required rate review and associated action to an effective date of January 1, 2014.

In 2015, actual net wholesale revenue was \$24.7 million less than budgeted due to an unusually warm and dry winter which yielded lower-than-normal hydro generation volumes, coupled with low wholesale energy market prices. Hence, net transfers of \$24.7 million were made to the operating cash account during the year. Interest income of \$1.3 million was earned on the RSA. The RSA ending balance was \$91.0 million at December 31, 2015, and no surcharges were in effect during 2015.

In 2014, actual surplus power sales revenues were greater than budgeted and funds of \$3.4 million were transferred to the RSA from operating cash. Interest income of \$1.0 million was earned on the RSA. Total net increase to the RSA was \$4.4 million. The RSA balance was \$114.4 million at December 31, 2014, and no surcharges were in effect during 2014.

The RSA at December 31, 2015, and 2014, consisted of cash from the following sources:

(\$ in millions)	2015	2014
Rate Stabilization Account Beginning balance RSA interest income Operating revenue	\$ 114.4 1.3 (24.7)	\$ 110.0 1.0 3.4
Ending balance	\$ 91.0	<u>\$ 114.4</u>

RSA transactions are recorded in accordance with GASB Statement No. 62 Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

The regulatory deferred inflow of resources rate stabilization unearned revenue account at December 31, 2015, and 2014, consisted of the following:

(\$ in millions)	2015	2014
Unearned revenue - Rate Stabilization Account Beginning balance RSA interest income Operating revenue	\$ 89.4 1.3 (24.7)	\$ 85.0 1.0 3.4
Ending balance	\$ 66.0	\$ 89.4

The initial \$25.0 million transfer from the Contingency Reserve Account to the RSA in May 2010 is not included in the Rate stabilization unearned revenue balance, and is not available to be transferred to current revenue in the event that net wholesale revenues are less than the budgeted amount. The Contingency Reserve Account was established in 2005 with proceeds that had been deposited in the Bond Reserve Fund, which was replaced with a surety bond.

Transfers from/(to) the RSA in the statements of revenues, expenses and net position at December 31, 2015, and 2014 were as follows:

(\$ in millions)	2015	2014
Transfers from/(to) Rate Stabilization Account	\$ 23.4	\$ (4.4)

### 4. CASH AND EQUITY IN POOLED INVESTMENTS AND INVESTMENTS

Cash and Equity in Pooled Investments—Cash resources of the Department are combined with cash resources of the City to form a pool of cash that is managed by the City's Department of Finance and Administrative Services (FAS). Under the City's investment policy, all temporary cash surpluses in the pool are invested. The Department's share of the pool is included on the balance sheets as Cash and Equity in Pooled Investments or as restricted assets. The pool operates like a demand deposit account in that all departments, including the Department, may deposit cash at any time and can also withdraw cash, out of the pool, up to the amount of the Department's fund balance, without prior notice or penalty. Accordingly, the statements of cash flows reconcile to cash and equity in pooled investments. The City considers investments in financial instruments having a maturity of 90 days or less as a cash equivalent.

Custodial Credit Risk of Deposits—Custodial risk is the risk that, in the event of bank failure for one of the City's depository institutions, the City's deposits may not be returned in a timely manner, or in the case of collateralized securities, the City may not be able to recover the collateral held in the possession of an outside party.

As of December 31, 2015 and 2014, the City did not have custodial risk. The City's deposits are covered by insurance provided by the Federal Deposit Insurance Corporation (FDIC) and the National Credit Union Association (NCUA) as well as protection provided by the Washington State Public Deposit Protection Commission (PDPC) as established in the Revised Code of Washington (RCW) 39.58. The PDPC makes and enforces regulations and administers a program to ensure public funds deposited in banks and thrifts are protected if a financial institution becomes insolvent. The PDPC approves which banks, credit unions, and thrifts can hold state and local government deposits and monitors collateral

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

pledged to secure uninsured public deposits. This secures public treasurers' deposits when they exceed the amount insured by the FDIC or NCUA by requiring banks, credit unions, and thrifts to pledge securities as collateral.

As of December 31, 2015 and 2014, the City held \$95,000 in its cash vault. Additional small amounts of cash were held in departmental revolving fund accounts with the City's various custodial banks, all of which fell within the NCUA and FDIC's \$250,000 standard maximum deposit insurance amount. Any of the City's cash not held in its vault, or a local depository, was held in the City's operating fund (investment pool), and at the close of every business day, any cash remaining in the operating fund is swept into an overnight repurchase agreement that matures the next day.

*Investments*—The Department's cash resources may be invested by FAS separate from the cash and investments pool. Investments are managed in accordance with the City's Statement of Investment Policy, with limits and restrictions applied at the City-wide level rather than to specific investments of the Department.

Eligible investments are those securities and deposits authorized by statute (chapters 35.39, 39.58, 39.59, 39.60, and 43.250 RCW; RCW 43.84.080, 43.180.190). Eligible investments include, but are not limited to:

- U.S. Government obligations,
- U.S. Government Agency obligations,
- U.S. Agency Mortgaged-Backed securities,
- Repurchase Agreements,
- Municipal bonds,
- Washington State Local Government Investment Pool,
- Bankers' Acceptances,
- Commercial Paper,
- Bank Notes,
- Non-negotiable Certificates of Deposit and Demand Deposits,
- Mutual Funds and Money Market Funds

The City of Seattle has three objectives in managing its investments that define its risk profile and guide implementation of its investment strategy. In order of importance they are Safety of Principal, Maintenance of Liquidity, and Return on Investment.

The City follows a set of Standards of Care when it comes to its investments that include the following:

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

- Social Policies: A City social policy shall take precedence over furthering the City's financial objectives when expressly authorized by City Council resolution, except where otherwise provided by law or trust principles.
- Prudence: The standard of prudence to be used by investment personnel shall be the "Prudent Investor Rule" and will be applied in the context of managing an overall portfolio.
- Ethics and Conflict of Interest: Investment officers shall comply with the City's Ethics Code (SMC 4.16.080) and annually submit a Financial Interest Statement to the city's Ethics & Elections Commission that identifies any potential financial interest that could be related to the performance of the City's investment portfolio.
- Delegation of Authority: The Director of Finance and Administrative Services has delegated
  management responsibility for the City's investment program to the Director of Finance who has
  designated day to day management responsibility to investment officers under the supervision of the
  City's Treasury Services Director. No persons may engage in an investment transaction except as
  provided under the terms of the City Statement of Investment Policy and the procedures established
  therein.

Investments are recorded at fair value based on quoted market prices in accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*. Fair value is the amount at which a financial instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

As of December 31, 2015 and 2014, the Department did not have any dedicated investments. The City's pooled investments were as follows:

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2015 (\$ in millions)	Fair Value City Pooled Investmen		Weighted Average Maturity (Days)		
Repurchase Agreements	\$	55.1	4		
U.S. Treasury and U.S. Government- Backed Securities	2	155.8	487		
U.S. Government Agency Securities	2	182.7	1,213		
U.S. Government Agency Mortgage- Backed Securities	2	219.8	1,906		
Commercial Paper	2	219.9	25		
Municipal Bonds	2	277.6	1084		
Bank Note		49.4	879		
Total	\$ 1,7	760.3			

Weighted Average Maturity of the City's Pooled Investments

2014 (\$ in millions)	fair Value City Pooled vestments	Weighted- Average Maturity (Days)
Repurchase Agreements	\$ 73.8	2
U.S. Treasury and U.S. Government- Backed Securities	252.2	800
U.S. Government Agency Securities	550.3	1,208
U.S. Government Agency Mortgage- Backed Securities	171.4	2,054
Commercial Paper	319.4	44
Municipal Bonds	227.2	976
Non-negotiable CD	 30.0	30
Total	\$ 1,624.3	

Weighted Average Maturity of the City's Pooled Investments 894

As of December 31, 2015 and 2014, the Department's share of the City pool was as follows:

(\$ in millions)	2015	2014
Cash and equity in pooled investments: Restricted assets Current assets	\$ 265.1 152.5	\$ 298.4 128.3
Total	\$ 417.6	\$ 426.7
Balance as a percentage of City pool	23.7 %	26.3 %

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Fair Value of Pooled Investments— Fair value of the City's pooled investments fluctuates with changes in interest rates and the underlying size of the Pooled investment portfolio. To mitigate interest rate risk in the City's Pooled investment portfolio, the City typically holds its investments to maturity and manages its maturities to ensure sufficient monthly cash flow to meet its liquidity requirements. Overall interest rates for U.S. Treasury Securities declined considerably over the first quarter of 2016 so the net change in the fair value of the City's Pooled investments was quite favorable. As a result the Department's share in the Pooled investments was also favorable.

*Interest Rate Risk*—Interest rate risk is the risk that changes in overall interest rates for U.S. Treasury Securities over time will adversely affect the fair value of an investment. To mitigate interest rate risk the City intentionally immunizes its known and expected cash flow needs.

*Investment Strategy*—To best accomplish meeting its investment objectives, the City has divided the Pool into two separate portfolios: Operating and Strategic.

The Operating Portfolio is invested to meet reasonably expected liquidity needs over a period of twelve to eighteen months. This portfolio has low duration and high liquidity. Consistent with this profile, and for the purpose of comparing earnings yield, its benchmark is the net earnings rate of the State of Washington's Local Government Investment Pool (LGIP).

The Strategic Portfolio consists of cash that is in excess of known and expected liquidity needs. Accordingly, this portfolio is invested in debt securities with longer maturities than the Operating Portfolio, which over a market cycle, is expected to provide a higher return and greater investment income. Consistent with this profile, and for the purpose of comparing duration, yield and total return, the benchmark for the Strategic portfolio is the Barclays U.S. Government 1-7 year index. The duration of the Strategic Portfolio is targeted between 75% and 125% of the benchmark.

To further mitigate interest rate risk a minimum of 60% of the Operating Portfolio and 30% of the Strategic Portfolio must be invested in asset types with high liquidity, specifically U.S. Government obligations, U.S. Government Agency obligations, LGIP, Demand Accounts, Repo, Sweep, and Commercial Paper.

Credit Risk and Concentration of Credit Risk - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Concentration of credit risk is the risk of loss attributed to the magnitude of investments in a single issuer. The City manages concentration risk by limiting its investments in any one issuer in accordance with the City's investment policy and state statutes.

The City has credit risk from its investments in commercial paper, bank notes and taxable municipal bonds and may not hold more than 50% of the total Pooled assets combined in these credit sensitive sectors. The City's investments in commercial paper may not exceed 25% of the total Pooled investments and no single issuer may account for more than 5% of the Pooled investments. Commercial paper investments must be purchased in the secondary market and are limited to those with maturities not longer than 180 days from the date of purchase and with the highest credit rating by at least two nationally recognized statistical rating organizations (NRSROs). As of December 31, 2015 and 2014, the City's investments in commercial paper had minimum credit ratings of P-1 by Moody's Investors Service, A-1 by Standard & Poor's Rating Service, and F-1 by Fitch Ratings. Furthermore, commercial paper purchases must adhere to the investment policies and procedures adopted by the Washington State Investment Board Policy No. 2.05.500.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

In accordance with the City's investment policy, issuers of bank notes and taxable municipal bonds must have a minimum credit rating of "A" by one of the NRSROs. There are no maturity limits, nor percentage allocation limits, for these investments. As of December 31, 2015, the City's investments in bank notes, a new investment for 2015, had minimum credit ratings of Aa3 by Moody's, A+ by S&P, and AA- by Fitch. The City's investments in taxable municipal bonds had minimum credit ratings of Aa3 by Moody's, A+ by S&P, and A+ by Fitch.

The City also purchases obligations of U.S. government-sponsored enterprises which are eligible as collateral for advances to member banks as determined by the Board of Governors of the Federal Reserve System. These include, but are not limited to, debt securities of Federal Home Loan Bank, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation. As of December 31, 2015 and 2014, these investments were rated Aaa by Moody's Investors Service and AA+ by Standard & Poor's Rating Service. However, state statute and the City's Statement of Investment Policy do not stipulate credit quality requirements for U.S. Government or U.S. Government Agency Obligations.

Additionally, the City mitigates counterparty risk by settling its trades delivery-versus-payment and maintaining a list of approved securities dealers for transacting business. The City also conducts its own due diligence as to the financial wherewithal of its counterparties.

At December 31, 2015 and 2014, the City did not have the following investments: bankers' acceptances, reverse repurchase agreements and local government investment pool.

The City's investments in single issuers, including those maturing less than one year from date of purchase, and amounting to 5% or more of the total portfolio as of December 31, 2015, and 2014, are shown in the following table.

(\$ in millions)	2	015	2014			
Issuer	Fair Value	Percent of Total Investments	Fair Value	Percent of Total Investments		
Federal Home Loan Mortgage Corporation (Freddie Mac) Federal National Mortgage Association	\$ 220.6	13 %	\$ 268.6	17 %		
(Fannie Mae)	243.7	14	249.8	15		
Federal Farm Credit Bank Federal Home Loan Bank	104.3 133.9	6 8	121.7 81.7	7 5		
Total	\$ 702.5	41 %	\$ 721.8	44 %		

Custodial Credit Risk—Investments—The custodial credit risk for investments is the risk that in the event of failure of the counterparty, the City will not have access to, or be able to recover, its investments or collateral securities that are in the possession of an outside party. The City mitigates custodial credit risk for its investments by having its investment securities held by the City's contractual custodial agent, BNY Mellon, and not by the counterparty or the counterparty's trust department or agent.

A sweep account is maintained with Wells Fargo for overnight repo with safekeeping of the underlying collateral at Wells Fargo Bank, N.A. Custodial risk is mitigated because the repo with Wells Fargo is overcollateralized at 102%.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Foreign Currency Risk—The City Treasury pooled investment do not include securities denominated in in foreign currencies.

**Reverse Repurchase Agreements**—RCW 35.39.030 and City investment policy allow the investment of City monies in excess of current City needs in reverse repurchase agreements. However, at this time, the City does not engage itself in this type of investment strategy.

The City of Seattle's Comprehensive Annual Financial Report may be obtained by writing to The City of Seattle, Department of Finance and Administrative Services, P.O. Box 94680, Seattle, WA 98124-4689; telephone: (206) 684-2489, or obtained on-line at http://www.seattle.gov/financial-services/comprehensive-annual-financial-report.

### 5. ACCOUNTS RECEIVABLE

Accounts receivable at December 31, 2015 and 2014, consist of:

(\$ in millions)		Retail Electric		Wholesale Power		Other Operating		Operating Subtotal		Nonoperating Subtotal		Total
2015												
Accounts receivable Less allowance for doubtful accounts	\$	46.3 (2.8)	\$	9.8	\$	11.5 (5.6)	\$	67.6 (8.4)	\$	19.5	\$	87.1 (8.4)
	\$	43.5	\$	9.8	\$	5.9	\$	59.2	\$	19.5	\$	78.7
2014												
Accounts receivable	\$	42.3	\$	14.8	\$	9.9	\$	67.0	\$	13.8	\$	80.8
Less allowance for doubtful accounts		(2.8)				(4.9)		(7.7)				(7.7)
	\$	39.5	\$	14.8	\$	5.0	\$	59.3	\$	13.8	\$	73.1

Wholesale power receivable includes \$1.5 million at December 31, 2015, and \$1.6 million at December 31, 2014, for exchange energy at fair value under long-term contracts (see Note 17 Long-Term Purchased Power, Exchanges, and Transmission).

### 6. OTHER ASSETS

Seattle City Council passed resolutions authorizing debt financing and reporting as regulatory assets certain costs in accordance with Statement No. 62 of the GASB, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB & AICPA Pronouncements. Programmatic conservation costs incurred by the Department and not funded by third parties and Endangered Species Act costs are reported as regulatory assets in accordance with GASB Statement No. 62 and amortized over 20 years. Endangered Species Act costs are amortized over the remaining license period (see Note 16 Commitments and Contingencies). Environmental costs reported as regulatory assets are amortized over 25 years, beginning in the year costs are paid.

Other assets, which are not covered under GASB Statement No. 62, consist of:

• Suburban infrastructure long-term receivables are underground electrical infrastructure costs for suburban jurisdictions, which are recovered through rates from customers within the respective jurisdictions for a period of approximately 25 years, as approved by the Seattle City Council.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

- Long-term interfund receivable for expected recoveries related to environmental costs covered under GASB Statement No. 49, Accounting and Financial Reporting for Pollution Remediation Obligations (see Note 11 Environmental Liabilities).
- Puget Sound Energy interconnection and substation costs are being amortized to expense over 25 years.
- Studies, surveys, and investigations are reported as regulatory assets until such time they result in active projects, or when it is determined no assets will result, at which time they are expensed.
- Long-term customer loans receivable and the remaining components of other assets, are not amortized.

Regulatory assets and other assets, net, at December 31, 2015 and 2014, consisted of the following:

(\$ in millions)	2015	2014
Regulatory assets:		
Conservation costs—net	\$ 243.8	\$ 228.1
Endangered Species Act costs—net	2.0	2.2
Environmental costs	31.2	34.5
	277.0	264.8
Other charges and assets—net:		
Suburban infrastructure long-term receivables	53.7	43.1
Long-term interfund receivable for environmental costs	4.1	4.1
Long-term customer notes receivable	0.7	0.7
Puget Sound Energy interconnection and substation	0.4	0.6
Studies, surveys, and investigations	2.8	2.8
Other	0.8	3.6
	62.5	54.9
Total Other Assets	\$ 339.5	\$ 319.7

### 7. DEFERRED OUTFLOWS OF RESOURCES

Effective January 1, 2015, the Department adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27 and Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. GASB Statement Nos. 68 and 71 require that employer contributions made between the pension plan measurement date and the employer's fiscal year end be recognized as deferred outflows of resources. Also to be recognized as deferred outflows of resources are losses resulting from differences between projected and actual earnings on plan investments, which are amortized over a closed five-year period, and losses related to differences between expected and actual experience with regard to economic or demographic factors in the measurement of total pension liability, which are

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

amortized to pension expense over a period equal to the expected remaining service life of employees receiving pension benefits. See Note 11 Seattle City Employees' Retirement System.

The excess of costs incurred over the carrying value of bonds refunded on early extinguishment of debt are reported as Deferred outflows of resources and amortized as a component of interest expense using the effective interest method over the terms of the issues to which they pertain. See Note 8 Long-term Debt.

Deferred outflows of resources at December 31, 2015 and 2014 consisted of the following:

(\$ in millions)	2015	2014		
Deferred outflows of resources: Unrealized contributions and losses related to pension Charges on advance refunding	\$ 33.4 16.4	\$	19.3	
Total	\$ 49.8	\$	19.3	

### 8. LONG-TERM DEBT

At December 31, 2015 and 2014, the Department's long-term debt consisted of the following prior lien or parity bonds:

LONG-TE	<del></del>		Maturity	Original		
ъ. т.	D 1	Fixed Rate	Year	Issuance	2015	2014
Prior Lie	n Bonds:					
2015A	ML&P Revenue Bonds	4.000%-5.000%	2045	\$ 171.9	\$ 171.9	\$ -
2015B1	ML&P Adjustable Rate Revenue Bonds	variable rates	2045	50.0	50.0	-
2015B2	ML&P Adjustable Rate Revenue Bonds	variable rates	2045	50.0	50.0	-
2014	ML&P Improvement and Refunding Revenue Bonds	4.000%-5.000%	2044	265.2	250.0	265.2
2013	ML&P Improvement and Refunding Revenue Bonds	2.000%-5.000%	2043	190.8	184.8	187.7
2012A	ML&P Improvement and Refunding Revenue Bonds	2.000%-5.000%	2041	293.3	272.5	284.8
2012C	ML&P Clean Renewable Energy Bonds	3.400%-3.750%	2033	43.0	43.0	43.0
2011A	ML&P Improvement and Refunding Revenue Bonds	1.000%-5.500%	2036	296.3	253.0	266.0
2011B	ML&P Clean Renewable Energy Bonds	5.750%-5.750%	2027	10.0	10.0	10.0
2010A	ML&P Build America Bonds	4.447%-5.570%	2040	181.6	181.6	181.6
2010B	ML&P Improvement and Refunding Revenue Bonds	2.000%-5.000%	2026	596.9	421.2	466.4
2010C	ML&P Recovery Zone Economic Development Bonds	5.590%-5.590%	2040	13.3	13.3	13.3
2008	ML&P Revenue and Refunding Revenue Bonds	4.000%-6.000%	2029	257.4	169.5	185.8
Total pri	or lien bonds			\$ 2,419.7	\$ 2,070.8	\$ 1,903.8

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

The Department had the following activity in long-term debt during 2015 and 2014:

(\$ in millions)	Balance at			Balance at	Current
2015	1/1/15	Additions	Reductions	12/31/15	Portion
Prior Lien Bonds - fixed rate Prior Lien Bonds - variable rate	\$ 1,903.8	\$ 171.9 100.0	\$ (104.9)	\$ 1,970.8 100.0	\$ 105.9
	\$ 1,903.8	\$ 271.9	\$ (104.9)	\$ 2,070.8	\$ 105.9
	Balance at 1/1/14	Additions	Reductions	Balance at 12/31/14	Current Portion
<b>2014</b> Prior Lien Bonds - fixed rate	\$ 1,863.3	\$ 265.2	\$ (224.7)	\$ 1,903.8	\$ 104.9

*Prior Lien Bonds*—In July 2015 the Department issued \$171.9 million of tax exempt Municipal Light and Power (ML&P) Revenue Bonds (2015A Bonds), and \$100.0 million of tax exempt variable rate Municipal Light and Power (ML&P) Revenue Bonds (2015B Bonds). The 2015A Bonds had coupon interest rates ranging from 4.00% to 5.00% and mature serially from May 1, 2016 to May 1, 2040 with term Bonds maturing May 1, 2045. The 2015B Bonds had coupon interest rates ranging from .69% to .71% during 2015 with term bonds maturing annually from May 1, 2026 to May 1, 2045. The 2015B Bonds bear interest at the adjusted Securities Industry and Financial Markets Association (SIFMA) interest rate which is the SIFMA Index plus the Index floating rate spread. The arbitrage yield was 3.52% for the 2015A Bonds and 3.47% for the 2015B Bonds. Arbitrage yield, when used in computing the present worth of all payments of principal and interest on the Bonds in the manner prescribed by the Internal Revenue Code, produces an amount equal to the issue price of the Bonds. Proceeds from the 2015 Bonds are being used to finance certain capital improvement and conservation programs and to make a deposit to the Reserve Fund.

The debt service on the 2015A Bonds requires a cash flow over the life of the bonds of \$286.0 million, including \$114.1 million in interest, and the debt service on the 2015B Bonds requires a cash flow over the life of the bonds of \$177.4 million including \$77.4 million in estimated interest.

In November 2014 the Department issued \$265.2 million of tax exempt Municipal Light and Power (ML&P) Improvement and Refunding Revenue Bonds (2014 Bonds). Coupon interest rates range from 4.00% to 5.00% and mature serially from September 1, 2015 to September 1, 2038 with term Bonds maturing September 1, 2044. The arbitrage yield of the 2014 Bonds was 2.58%. Proceeds from the 2014 Bonds were used to finance certain capital improvement and conservation programs, to advance refund \$125.0 million of the 2004 series outstanding prior lien bonds, and to make a deposit to the Reserve Fund.

The debt service on the 2014 Bonds requires a cash flow over the life of the bonds of \$414.4 million, including \$149.2 million in interest. The difference between the cash flows required to service the old and new debt and to complete the refunding totaled \$20.5 million, and the aggregate economic gain on refunding totaled \$19.0 million at net present value. The accounting loss on refunding was \$1.3 million.

The Department has certain bonds outstanding that provide a refundable tax credit, or federal subsidy, paid to state or local governmental issuers by the U.S. Treasury. The amount of the federal subsidy is equal to the lesser of the amount of interest payable based on the coupon interest rate or a percentage of the amount of interest payable based on the tax credit rate on the sale date with respect to those bonds. This federal subsidy ultimately results in a net decrease to debt service, although debt service payments

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

are paid gross. The federal subsidies are recorded as nonoperating revenues on the statements of revenues, expenses, and changes in net position.

Pursuant to the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, certain automatic reductions were effective March 1, 2013 for qualified bonds including the Department's 2012C series Bonds, 2011B series Bonds, 2010A series Bonds, and 2010C series Bonds. Federal subsidies for these bonds were reduced by 7.3% through the end of the federal fiscal year (September 30, 2015) at which time the automatic reductions were adjusted to 6.8%. The effect for the accrual of federal subsidies as of December 31, 2015 was inconsequential. The effect during 2016 is estimated to be lower federal subsidies by approximately \$0.4 million. The effect thereafter for federal subsidies is indeterminable.

Debt service requirements for prior lien bonds, excluding federal subsidies for the 2012, 2011 and 2010 bonds are shown in the table below. Future debt service requirements on the variable 2015B Bonds are based on actual interest rates in effect as of December 31, 2015.

Years Ending December 31 (\$ in millions)	Fixed F	Rate B	onds		Variable R	ate Bo	onds	Total
	Principal demptions	Re	Interest quirements	Principal Interest ts Redemptions Requirements		Total		
2016	\$ 105.9	\$	96.2	\$	-	\$	0.7	\$ 202.8
2017	109.1		88.4		-		0.7	198.2
2018	109.6		83.2		-		0.7	193.5
2019	106.2		77.9		-		0.7	184.8
2020	105.6		72.5		-		0.7	178.8
2021 - 2025	523.0		282.9		-		3.5	809.4
2026 - 2030	325.8		169.8		18.0		3.1	516.7
2031 - 2035	241.9		106.6		22.0		2.4	372.9
2036 - 2040	232.5		50.5		27.0		1.6	311.6
2041 – 2045	 111.2		10.2		33.0		0.6	 155.0
Total	\$ 1,970.8	\$	1,038.2	\$	100.0	\$	14.7	\$ 3,123.7

The Department is required by Ordinance No. 124633 (the bond ordinance) to fund reserves for the 2015 Bonds and other parity bonds in the Municipal light and power bond reserve fund (Reserve Fund) for the purpose of securing the payment of principal and interest on all parity bonds outstanding. The Reserve Fund is an account within the books of the Department.

The Department has covenanted and agreed that it will pay into the Reserve Fund, out of parity bond proceeds or out of gross revenues, within five years from the date of issuance of the parity bonds, such sums as will, together with money presently in the Reserve Fund, provide for the Reserve Fund Requirement. The bond legislation provides that, in calculating the Reserve Fund Requirement, the direct payments the Department expects to receive from the U.S. Treasury with respect to any federal subsidy bonds may be deducted from annual debt service.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

For the Parity Bonds issued prior to 2011, Reserve Fund Requirement means, at any time, the lesser of (i) the maximum Annual Debt Service on all Parity Bonds then outstanding and (ii) the maximum amount permitted by the Code as a "reasonably required reserve or replacement fund." Thereafter, the definition of Reserve Fund Requirement was amended to mean, for any issue of Parity Bonds, the Reserve Fund Requirement established in the authorizing resolution approving that issue.

The Reserve Fund Requirement for the 2011 Bonds and 2012 Bonds was established as the lesser of (i) the 2011 Bonds' and 2012 Bonds' proportionate share of the maximum Annual Debt Service on all Parity Bonds outstanding at the time of issuance, and (ii) the maximum amount permitted by the Code as a "reasonably required reserve or replacement fund."

The Reserve Fund Requirement for the 2013 Bonds, the 2014 Bonds, and the 2015A Bonds was established as the additional amount necessary at the time of issuance to achieve an overall Reserve Fund Requirement for all outstanding Parity Bonds and the Parity Bonds then being issued equal to the maximum amount permitted by the Code as a "reasonably required reserve or replacement fund."

The bond legislation has established the Reserve Fund Requirement for the 2015B Bonds as zero. For any issue of future parity bonds, the "Reserve Fund Requirement" will mean the Reserve Fund Requirement specified for that issue in the legislation authorizing such bonds.

The aggregate Reserve Fund Requirement for all Parity Bonds outstanding, which is the sum of the Reserve Fund Requirements for each issue of Parity Bonds outstanding, including the 2015 Bonds, is \$120.0 million. The maximum annual debt service on prior lien bonds is \$202.8 million due in 2016 and the average annual debt service was \$112.7 million at issuance of the 2015B Bonds.

Under the bond legislation, the Department is permitted to provide for the Reserve Fund Requirement with a surety bond or letter of credit consistent with the Bond Legislation requirements. The Department currently has a surety bond authorized under previous bond legislation (the "Surety Bond") purchased from Financial Security Assurance, Inc. ("FSA") in the amount of \$77.1 million, expiring on August 1, 2029, providing the majority of the Reserve Fund Requirement. Upon issuance of the 2015B Bonds, there was a cash balance of \$63.4 million in the Reserve Fund, which, together with the Surety Bond, fully satisfies the Reserve Fund Requirement for the Outstanding Parity Bonds and the Bonds. In addition, the Department deposited \$20.5 million in the Reserve Fund that is expected to be used toward the eventual replacement of the Surety Bond upon its expiration. The Reserve Fund balance was \$73.7 million and \$47.9 million at December 31, 2015 and 2014, respectively.

FSA was acquired by Assured Guaranty Corporation in 2009. In 2009, Assured Guaranty Corporation changed the name of its FSA subsidiary to Assured Guaranty Municipal Corporation ("AGM"). AGM is currently rated A2 and AA by Moody's Investors Service and Standard & Poor's Ratings Services, Inc., respectively. The bond legislation does not require that the Reserve Fund be funded with cash or a substitute surety bond or letter of credit if the provider of qualified insurance is downgraded. Under the bond legislation, a surety bond qualifies as Qualified Insurance for purposes of satisfying the Reserve Fund Requirement if the provider's ratings are in one of the top two rating categories at the time the policy is issued.

There were no bonds advance refunded or defeased in 2015. A portion of the 2014 Bonds proceeds were placed in a separate irrevocable trust account to provide for all future debt service payments on certain 2004 prior lien bonds that were defeased. All funds in irrevocable trust accounts from prior years were fully drawn to pay for debt service on certain advance refunded bonds prior to 2015. Therefore, there was no outstanding principal balance of defeased bonds and there were no irrevocable trust account assets as of December 31, 2015 and 2014.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

**Bond Ratings**—The 2015 and 2014 Bonds, along with other outstanding parity bonds, were rated "Aa2" and "AA"; and "Aa2" and "AA", by Moody's Investors Service, Inc. and Standard Poor's Rating Services, respectively.

**Revenue Pledged**—Revenue bonds are special limited obligations payable from and secured solely by the gross revenues of the Department, less charges for maintenance and operations, and by money in the debt service account and Reserve Fund. Principal and interest paid for 2015 and 2014 was \$194.6 million and \$189.9 million, respectively. Total revenue available for debt service as defined for the same periods was \$303.6 million and \$341.4 million, respectively. Annual interest and principal payments are expected to require 65.8% of revenues available for debt service for 2016 and required 56.9% in 2015.

**Federal Arbitrage Regulations**—Revenue bonds are subject to federal arbitrage regulations and the Department has complied with these regulations. There was no federal arbitrage rebate due in 2015 or 2014.

*Other*—There were no liens on property or revenue pertaining to parity bonds and all bond covenants were in compliance for the Department's prior lien bonds as of December 31, 2015 and 2014, respectively.

**Fair Value**—Fair values at December 31, 2015 and 2014 were provided by the Department's financial advisor, Piper Jaffray & Company. The fair value for the Department's bonds are estimated based on the quoted market prices for the same or similar issues or on the current rates offered to the Department for debt of the same remaining maturities. Carrying amounts (net of premiums and discounts) and fair values at December 31, 2015 and 2014, were as follows:

(\$ in millions)	20	)15	2014		
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	
Long-term debt:					
Prior lien bonds	\$ 2,196.7	\$ 2,304.6	\$ 2,030.1	\$ 2,145.2	

**Amortization**—Discounts and premiums are amortized using the effective interest method over the term of the bonds.

The excess of costs incurred over the carrying value of bonds refunded on early extinguishment of debt is amortized as a component of interest expense using the effective interest method over the terms of the issues to which they pertain. Charges on advance refunding amortized to interest expense totaled \$2.9 million in 2015 and \$3.8 million in 2014. Charges on advance refunding in the amount of \$16.4 million and \$19.3 million are included as a component of Deferred Outflows of Resources on the 2015 and 2014 balance sheets, respectively.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

*Noncurrent Liabilities*—The Department had the following activities during 2015 and 2014:

(\$ in millions)	Beginning Balance at 1/1/15, as Adjusted		Ad	ditions	Re	ductions	Balance at 12/31/15		
2015									
Net pension liability	\$	255.9	\$	38.0	\$	(22.1)	\$	271.8	
Accumulated provision for injuries									
and damages		42.9		0.1		(0.7)		42.3	
Compensated absences		16.7		2.7		-		19.4	
Other		7.7		0.4		(0.1)		8.0	
Total	\$	323.2	\$	41.2	\$	(22.9)	\$	341.5	
	Balance at 1/1/14		Additions Reductions		ductions	Balance at 12/31/14			
2014									
Accumulated provision for injuries									
and damages	\$	54.9	\$	0.3	\$	(12.3)	\$	42.9	
Compensated absences		15.5		1.2		-		16.7	
Other		7.7						7.7	
Total	\$	78.1	\$	1.5	\$	(12.3)	\$	67.3	

Beginning balance for 2015 was adjusted to record Net pension liability for the Department in accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27.* Additional information on the Net pension liability can be found in Note 11 Seattle City Employees' Retirement System. Information about the provision for injuries and damages can be found in Note 9 Provision for Injuries and Damages and Note 13 Environmental Liabilities. Other includes primarily a liability for Other Postemployment Benefits; see Note 12 Other Postemployment Benefits.

### 9. PROVISION FOR INJURIES AND DAMAGES

The Department establishes liabilities for claims based on estimates of the ultimate projected cost of claims. Environmental related expenses are discussed in Note 13 Environmental Liabilities. The length of time for which such costs must be estimated varies depending on the nature of the claim. Actual claims costs depend on such factors as inflation, changes in doctrines of legal liability, damage awards, and specific incremental claim adjustment expenses. Claims liabilities are recomputed periodically using actuarial and statistical techniques to produce current estimates, which reflect recent settlements, claim frequency, industry averages, City-wide cost allocations, and economic and social factors. For 2015 and 2014, liabilities for lawsuits, claims, and workers' compensation were discounted over a period of 23 to 27 years at the City's average annual rate of return on investments, which was 0.931% and 0.931%, respectively.

To address the risk for certain losses arising from personal and property damage claims by third parties and for job-related illnesses and injuries to employees, the Department as part of the City of Seattle, has been self-insured for most of its general liability risks, for workers' compensation, and for employees' health care benefits. Beginning December 31, 2011, the City had general liability insurance coverage for losses over a \$6.5 million self-insured retention per occurrence, with a \$40.0 million limit per

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

occurrence in the aggregate. Effective June 1, 2014 the limit was increased to \$60.0 million. The Department had no settled claims exceeding coverage in the last three years.

The City also purchased an all risk comprehensive property insurance policy that provides \$500.0 million in limits subject to various deductible levels depending on the type of asset and value of the building. This includes \$100.0 million in earthquake and flood limits. Hydroelectric and certain other utility producing and processing projects are not covered by the property policy. The City also purchased insurance for excess workers' compensation, fiduciary and crime liability, inland marine transportation, volunteers, and an assortment of commercial general liability, medical, accidental death and dismemberment, and miscellaneous policies. Bonds are purchased for public officials, public notaries, pension exposures, and specific projects and activities as necessary.

The changes in the provision for injuries and damages at December 31, 2015, 2014, and 2013 are as follows:

(\$ in millions)	2015		2014	2013		
Beginning unpaid claims liability Payments Incurred claims	\$	12.9 (5.2) 5.1	\$ 11.7 (3.1) 4.3	\$	11.5 (5.0) 5.2	
Ending unpaid claims liability	\$	12.8	\$ 12.9	\$	11.7	

The provision for injuries and damages included in current and noncurrent liabilities at December 31, 2015, 2014, and 2013 is as follows:

(\$ in millions)		2014	2013		
Noncurrent liabilities Accounts payable and other current liabilities	\$	8.7 4.1	\$ 8.9 4.0	\$	8.6 3.1
Total liability	\$	12.8	\$ 12.9	\$	11.7

### 10. ACCOUNTS PAYABLE

*Accounts Payable and Other Current Liabilities*—The composition of accounts payable and other current liabilities at December 31, 2015 and 2014, is as follows:

(\$ in millions)	2	015	2014		
Vouchers payable	\$	51.1	\$	38.4	
Power accounts payable		23.5		22.6	
Taxes payable		9.4		7.8	
Claims payable		16.4		27.7	
Guarantee deposit and contract retainer		3.0		2.5	
Other accounts payable		3.2		2.3	
Total	\$	106.6	\$	101.3	

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

### 11. SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM

Effective January 1, 2015, the Department implemented GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27 and Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. The cumulative effect of the change in Net position due to the change in accounting standard was a decrease of \$233.8 million and is shown as an adjustment to beginning Net position for 2015. The prior year balances for Deferred outflows of resources, the Net pension liability, and the Statement of Revenue, Expenses, and Changes in Net position were not restated as the required information was unavailable. For this reason, the applicable disclosures for year ending December 31, 2014, relate to GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers.

*Plan Description* - The Seattle City Employees' Retirement System (SCERS) is a cost-sharing multiple-employer defined benefit public employee retirement system, covering employees of the City and administered in accordance with Chapter 41.28 of the Revised Code of Washington and Chapter 4.36 of the Seattle Municipal Code. SCERS is a pension trust fund of the City. SCERS is administered by the Retirement System Board of Administration (the Board). The Board consists of seven members including the Chair of the Finance Committee of the Seattle City Council, the City of Seattle Finance Director, the City of Seattle Personnel Director, two active members and one retired member of the System who are elected by other system members, and one outside board member who is appointed by the other six board members. Elected and appointed board members serve for three-year terms.

All employees of the City are eligible for membership in SCERS with the exception of uniformed police and fire personnel who are covered under a retirement system administered by the State of Washington. Employees of the King County Departments of Transportation and Public Health who established membership in SCERS when these organizations were City departments were allowed to continue their SCERS membership. Following is membership data for employees covered by the benefit terms as of the reporting date, December 31, 2015, and the measurement date, December 31, 2014:

	2015	2014
Active members	8,853	8,746
Retired members and beneficiaries receiving benefits	6,222	6,020
Vested terminated employees entitled to benefits	1,246	1,188

Summary of Significant Accounting Policies – SCERS financial statements and schedules are presented using the economic resources measurement focus and the accrual basis of accounting. For purposes of measuring the net pension liability (NPL), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of SCERS and additions to and deductions from SCERS fiduciary net position have been determined on the same basis as they are reported by SCERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

The NPL was measured as of December 31, 2014, and the total pension liability used to calculate the NPL was based on an actuarial valuation as of December 31, 2013, rolled forward to December 31, 2014.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

**Pension Benefits** – Service retirement benefits are calculated on the basis of age, salary, and service credit. Members are eligible for retirement benefits after 30 years of service, at age 52 after 20 years of service, at age 57 after 10 years of service, and at age 62 after 5 years of service. Annual retirement benefits are calculated as 2% multiplied by years of creditable service, multiplied by average salary, based on the highest 24 consecutive months, excluding overtime. Members who retire before meeting the age and/or years of service requirement receive a 0.1% reduction for each year that retirement precedes the date of eligibility. Retirement benefits vest after 5 years of credited service.

**Disability Benefits** – An active member is eligible to receive disability benefits when: (a) member has achieved 10 years of credited service within the 15 years preceding disability retirement, or (b) the disability occurs in the course of City employment in which no service requirement exists. The amount of the disability benefit is the greater of (a) 1.5% times the final compensation times completed years of creditable service, or (b) 1.5% times final compensation total years of service that could have been earned to age 62, but not to exceed one-third of final compensation. Disability benefits vest after 10 years of credited service.

**Death Benefits** – Death benefits may be paid to a member's designated beneficiary. If a member's death occurs before retirement, the benefit options available are (a) payment to the beneficiary of accumulated contributions, including interest, or (b) if the member had completed 10 years of service at the time of death, a surviving spouse or registered domestic partner may elect to receive, in place of (a) above, either: (1) A monthly allowance for life equal to the benefit the spouse would have received had the member just retired with a 100% contingent annuitant option in force, or (2) A cash payment of no more than one-half of the member's accumulated contributions, along with a correspondingly reduced retirement allowance. If a member's death occurs after retirement, the death benefit received by the beneficiary (if any) is based on the retirement plan the member selected at retirement. Death benefits vest after 10 years of credited service.

Contributions – Member and employer contributions rates are established by Seattle Municipal Code Chapter 4.436. The overall contribution rate is determined by the actuarial formula identified as the Entry Age Cost Method. Member contribution rates are also set via collective bargaining contracts. The overall formula determines the amount of contributions necessary to fund the current service cost, representing the estimated amount necessary to pay for benefits earned by the employees during the current service year and the amount of contributions necessary to pay for prior service costs. Total required contributions, including amounts necessary to pay administrative costs, are determined through annual actuarial valuations. Contribution rates and amounts were as follows as of the reporting date, December 31, 2015, and the measurement date, December 31, 2014:

	Contributions						
(\$ in millions)		Rates	Amounts				
	Employer	Most members	City	Department			
2015	15.73%	10.03%	\$101.0	\$ 24.9			
2014	14.31%	10.03%	\$ 89.8	\$ 22.0			

**Net Pension Liability** – At December 31, 2015, the Department reported a liability of \$271.8 million for its proportionate share of net pension liability. The Department's proportion of the NPL was based on contributions to SCERS during the fiscal year ended December 31, 2014. At December 31, 2014, the Department's proportionate share percent was 24.53%. The net pension liability was measured as of December 31, 2014, and the total pension liability used to calculate the net pension liability was based on an actuarial valuation as of December 31, 2013, rolled forward to December 31, 2014.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

**Actuarial assumptions** – There were no changes of benefit assumptions for the year ended December 31, 2014. The total pension liability as of December 31, 2015, was based on an actuarial valuation as of December 31, 2013, using the following actuarial methods and assumptions:

Actuarial Cost Method Individual Entry Age Normal

Amortization Method

Level percent or level dollar Level percent Closed, open, or layered periods Closed

Amortization Period and Start Date 30 years as of January 1, 2013 Valuation

Amortization Growth Rate 4.00%

Asset Valuation Method

Smoothing period 5 years

Recognition method Non-asymptotic

CorridorNoneInflation3.25%Investment Rate of Return7.50%Post-retirement benefit increases1.50%Cost-of-living year-end bonus dividend0.00%

Mortality Various rates based on RP-2000 mortality tables

and using generational projection of improvement using Projection Scale AA.

All other actuarial assumptions used in the December 31, 2013 valuation were based on the results of an actuarial experience study for the period January 1, 2010 through December 31, 2013, including updates to salary increase, mortality and retirement rates.

**Discount Rate** – The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the participating governmental entity contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods on projected benefit payment to determine the total pension liability.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and gross of administrative expenses) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The following table reflects long-term expected (30 year) real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. The expected inflation rate is projected at 3.25% for the same period.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Asset Category	Target Allocation	Geometric Expected Return
Core Bonds	20.0%	4.90%
Broad US Equities	10.0%	7.60%
Large Cap US Equities	13.0%	7.50%
Small Cap US Equities	2.0%	7.75%
Developed Foreign Equities	22.0%	7.50%
<b>Emerging Market Equities</b>	4.0%	8.25%
Private Equity	7.0%	8.75%
Real Return	3.0%	6.00%
Real Estate (Property)	13.0%	7.00%
Commodities	6.0%	5.25%

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents the Department's proportionate share of the net pension liability of SCERS, calculated using a discount rate of 7.50%, as well as what the Department's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.50%) or 1 percentage point higher (8.50%):

(\$ in millions)	1.00% Decrease	Current Discount Rate	1.00% Increase
Employer's proportionate share of the Net	6.50%	7.50%	8.50%
Pension Liability	\$375.1	\$271.8	\$185.0

**Plan Fiduciary Net Position** – Detailed information about the SCERS's fiduciary net position is available in the separately issued, audited financial statements as of December 31, 2014, which are publicly available at http://www.seattle.gov/retirement/about-us/financials-and-governance.

**Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pension** – For the year ended December 31, 2015, the Department recognized pension expense of \$29.5 million.

As of December 31, 2015, the Department reported deferred outflows of resources as follows:

(\$ in millions)	Out	eferred flows of sources
Differences between expected and actual experience Changes of assumptions	\$	-
Net difference between projected and actual earnings		8.5
Contributions made subsequent to measurement date		24.9
Total	\$	33.4

Department contributions subsequent to the measurement date of \$24.9 million are reported as deferred outflows of resources and will be recognized as a reduction of the net pension liability in the year ended December 31, 2016. Contributions made in 2015, along with the net difference between projected and actual earnings reported as deferred outflows of resources will be recognized as pension expense in the

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

future as shown in the following table. Note that additional future deferred outflows and inflows of resources may impact these amounts.

Year Ending December 31 (\$ in millions)	Amortization
2016	\$ 27.1
2017	2.1
2018	2.1
2019	2.1
Total	<u>\$ 33.4</u>

Following are the disclosures for December 31, 2014, following disclosure guidance under GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*.

**Pension Benefits**—As of December 31, 2014, there were 6,020 retirees and beneficiaries receiving benefits and 8,746 active members of SCERS. In addition, 1,188 vested terminated employees were entitled to future benefits.

In 2014, the City's contribution rate was increased from 12.89% to 14.31% for a total combined contribution rate of 24.34% in accordance with Resolution No. 31474 adopted in August 2013. In September 2014, the City Council adopted Resolution No. 31540, amending Resolution No. 31474, and increasing the City's contribution rate from 14.31% to 15.73% for a total contribution rate of 25.76% effective 2015, to reflect the results of the January 1, 2014 actuarial valuation study. This reflects the City's commitment to fund the actuarial required contribution rate.

Resolution No. 31474 clarified the City's approach toward amortizing the unfunded liability of SCERS and requested that the SCERS Board of Administration and its actuary deliver to the City Council in 2014 an analysis of other potential assumption and policy changes designed to further strengthen the retirement system. Resolution No. 31474 ended the rolling amortization practice that was effective with the January 1, 2013 actuarial valuation and revised the amortization period to amortize the UAAL to 29 years. Previously, the January 1, 2013 actuarial valuation required amortization for the unfunded liability as a closed, fixed period of 30 years. The change was retro-active to January 1, 2013.

Under the authority of the state and City, SCERS operates a securities lending program, and there were transactions during 2014. In 2014, SCERS did not incur a loss as a result of borrower default. SCERS did not have negative credit exposure at December 31, 2014.

Employer contributions for the City were \$89.8 million, and \$76.6 million, in 2014, and 2013, respectively. Employer contributions for the Department were \$22.0 million, and \$18.4 million, in 2014 and 2013, respectively.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

### **Actuarial Data**

Valuation date	January 1, 2014
Actuarial cost method	Entry age
Amortization method	Level percent
Remaining amortization period	29 years*

Amortization period Maximum of 30 years
Asset valuation method 5-Year Smoothing

# **Actuarial Assumptions\***

Price inflation	3.25%
Investment rate of return	7.75%
Projected general wage increases	4.00%
Postretirement benefit increases	1.50%
Cost-of-living year-end bonus dividend	0.00%

<sup>\*</sup> The revised contribution rate of 24.34% was in effect as of the January 1, 2014 valuation.

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

# **SCERS Annual Pension Cost and Net Pension Obligation**

For Fiscal Year Ending December 31, 2014 Based on January 1, 2013 Valuation\*

	(\$ in millions)	Year Ended ember 31 2014
1a 1b 1c	Total normal cost rate Employee contribution rate Employer normal cost rate (1a-1b)	14.95 % 10.03 % 4.92 %
2a 2b 2c 2d	Total employer contribution rate Amortization payment rate (2a-1c) Amortization period* GASB 27 amortization rate	14.31 % 9.39 % 35 years 10.68 %
3	Total annual required contribution (ARC) rate (1c+2d)**	16.50 %
4	Covered employee payroll***	\$ 598.0
5a 5b 5c	ARC (3x4) Interest on net pension obligation (NPO) ARC adjustment	\$ 83.9 (0.2) 0.1
5d	Annual pension cost (APC) (5a+5b+5c)	\$ 83.8
6	Employer contribution	\$ 77.1
7a 7b	Change in NPO (5d-6) NPO at beginning of year	\$ 6.7 (2.6)
7c	NPO at end of year (7a+7b)	\$ 4.1

- \* Beginning with the January 1, 2013 actuarial valuation report, GASB calculations take into account the lag between determination of the actuarial contribution rate. For example, the January 1, 2012 actuarial valuation calculates the contribution rate beginning January 1, 2013 (for fiscal year ending December 31, 2013). This change was made due to SCERS' new funding policy, adopted in 2011, to contribute the actuarially determined contribution rate (previously, a fixed rate was contributed).
- \*\* If the amortization period determined by the actual contribution rate exceeds the maximum amortization period required by GASB Statement No. 27, the ARC is determined using an amortization of the UAAL over 30 years.
- \*\*\* Covered payroll includes compensation paid to all active employees on which contributions were made in the year preceding the valuation date.
- \*\*\*\* Items 5a-5d were calculated using prior year total ARC rate. In 2012, total ARC rate was 11.84%.

NOTES TO FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

### 12. OTHER POSTEMPLOYMENT BENEFITS

Health care plans for active and retired employees are administered by the City of Seattle as single-employer defined benefit public employee health care plans.

Employees retiring under the City may continue their health insurance coverage under the City's health insurance plans for active employees. When a retired participant dies, the spouse remains fully covered until age 65 and covered by the Medicare supplement plan thereafter. Employees that retire with disability retirement under the City may continue their health coverage through the City with same coverage provisions as other retirees. Eligible retirees self-pay 100 percent of the premium based on blended rates which were established by including the experience of retirees with the experience of active employees for underwriting purposes. The City provides an implicit subsidy of the post-retirement health insurance costs and funds the subsidy on a pay-as-you-go basis. The postemployment benefit provisions are established and may be amended by ordinance of the Seattle City Council and as provided in Seattle Municipal Code 4.50.020.

The City's expected contribution for employer-paid benefits was \$1.1 million, \$1.0 million, and \$2.4 million in 2015, 2014, and 2013, respectively. The Department's portion of the expected contribution was \$0.2 million, \$0.2 million, and \$0.4 million in years 2015, 2014 and 2013, respectively. The City recorded an expense and liability for OPEB of \$2.6 million in 2015 and \$2.5 million in 2014. The Department recorded expense and an increase in liability for OPEB of \$0.5M in 2015, and a reduction to an expense and liability for OPEB of \$13.1 thousand in 2014.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future. Actuarial calculations reflect a long-term perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets. Based on the latest biennial actuarial valuation date the significant methods and assumptions are as follows:

### NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

### Actuarial data and assumptions

Valuation date January 1, 2014
Actuarial cost method Entry age normal
Amortization method Level dollar
Initial amortization period 30 years, open
Discount rate 3.48%

Health care cost trend rates—medical: Aetna plans: 8.0%, decreasing by 0.5% each year for 2 years with

varying rate changes thereafter.

Group Health plans: 7.5%, decreasing by 0.5% each year for 3 years

with varying rate changes thereafter.

Participation 40% of Active Employees who retire participate

Mortality General Service Actives and Retirees based on RP-2000 Table and RP-

2000 Combined Healthy, respectively, with ages set back six years for male and female actives; set back two years for male and female retirees. Rates are generational for both males and females using

Projection Scale AA.

Marital status 45% of members electing coverage: married or have a registered

domestic partner. Male spouses two years older than their female

spouses.

Morbidity factors

Aetna Traditional & Aetna Preventive Per-capita claim costs for the two Aetna plans were developed based on

a blending of the following with equal weights (25% each): self-funding premium equivalent rates provided by City of Seattle, Aon Hewitt's internal manual rate, retiree claim experience specific to each plan from 1/1/2012 to 8/31/2014, and active claim experience specific

to the Aetna plans from 1/1/2012 to 8/31/2014.

For the Aetna plans, because the retirees' spouses pay a lower premium for health care coverage than retirees, the net cost to the City for the spouse coverage is greater than for a retiree of the same age and gender. The morbidity factors were adjusted to reflect this discrepancy.

Group Health Standard and Deductible Plans Per-capita claim costs for the two Group Health plans were developed

based on a blending of the following with equal weights (33.3% each): self-funding premium equivalent rates provided by City of Seattle, Aon Hewitt's internal manual rate, and retiree claim experience specific to

each plan from 1/1/2012 to 8/31/2014.

Other considerations Active employees with current spouse and/or dependent coverage elect

same plan and coverage. After retirement, it is assumed that children

will have aged off of coverage and will have \$0 liability.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Based on the actuarial valuation date of January 1, 2014, the City's annual cost for fiscal years ended December 31, 2015 and 2014, the amount of expected contribution to the plan, and changes in net obligation are as follows:

(\$ in millions)	2015*		2014	
Annual required contribution	\$	4.6	\$	4.4
Interest on net OPEB obligation		1.6		1.5
Adjustment to annual required contribution		(2.5)		(2.4)
Annual OPEB cost (expense)		3.7		3.5
Expected contribution (employer-paid benefits)		(1.1)		(1.0)
Increase in net OPEB obligation		2.6		2.5
Net OPEB obligation - beginning of the year		46.8		44.3
Net OPEB obligation - end of year	\$	49.4	\$	46.8

<sup>\*</sup> Updated based on the latest actuarial valuation report dated January 1, 2014.

The schedules of funding progress (\$ in millions) (unaudited) are as follows:

Actuarial Valuation Date January 1	Valu Ass	uarial ue of sets A)	Ac Lia	tuarial crued bilities AAL) try Age (B)	Unfunded AAL (UAAL) (B-A)		Funding Ratio (A/B)	Covered Payroll (C)	UAAL as a Percentage of Covered Payroll ((B-A)/C)	
2010	\$	-	\$	93.5	\$	93.5	- %	\$ 869.1	10.8 %	
2012		-		74.4		74.7	-	891.6	8.4	
2014		-		41.8		41.8	-	1,004.0	4.2	

The Health Care Subfund of the General Fund is reported in The City of Seattle's Comprehensive Annual Financial Report.

### 13. ENVIRONMENTAL LIABILITIES

Environmental liabilities were \$45.9 million and \$57.6 million, at December 31, 2015, and 2014, respectively.

The following is a brief description of the significant Superfund sites:

- The Harbor Island Superfund Site—In 1983, the U.S. Environmental Protection Agency (EPA) designated this site as a federal Superfund site. The Department and other entities are sharing costs of investigating contamination in the East Waterway alongside Harbor Island. The Department's involvement stems from its sale of transformers to a company on Harbor Island. The City of Seattle is one of four parties who are conducting a remedial investigation and feasibility study that will delineate cleanup actions. The EPA approved the remedial investigation report. The final feasibility study will be issued in 2016. The Department's ultimate liability is indeterminate.
- The Lower Duwamish Waterway Superfund Site—In 2001, the EPA designated this site as a federal Superfund site for contaminated sediments. The Department's involvement is attributable to its land ownership or use of property along the river. The City of Seattle is one of four parties who

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

signed an Administrative Order on Consent (AOC) with the EPA and Washington State Department of Ecology to conduct a remedial investigation and feasibility study to prepare a site remedy. The EPA approved the feasibility study in November 2012. In February 2013, the EPA issued the Proposed Plan for cleanup of the Lower Duwamish Waterway Superfund Site. In November 2014, the EPA issued its final Record of Decision indicating its preferred alternative clean-up with an estimated cost of \$342.0 million. At this time, the cost of certain additional undefined requirements by the EPA is unknown. The Department's ultimate liability is indeterminate.

In November 2012, the EPA issued general notification letters to parties informing them of their potential liability for the Lower Duwamish Waterway cleanup. The City and other three parties who signed the AOC with the EPA agreed to invite some of those parties to participate in an alternative dispute resolution process (the "allocation process") to resolve their respective shares of past and future costs. 44 parties are participating. The City hired an allocator and the allocation process officially began in April 2014. The Department agreed to administer the allocator's contract, estimated to cost about \$4.0 million over a four year period. Parties participating in the allocation process will share the cost of the allocator and the process.

The City is also responsible for investigation and cleanup at the Port of Seattle Terminal 117. The City agreed to pay 40% of the costs to clean up the uplands and river sediment parts of the site, currently estimated to cost \$27.5 million, and 100% of the costs to clean up contamination in adjacent streets, estimated to cost \$10.5 million. The City's share for the uplands and sediments is paid 100% by the Department. The City's share for the adjacent streets is split between the Department and Seattle Public Utilities according to a Memorandum of Agreement (MOA) signed in August 2014. According to this MOA, Seattle Public Utilities will pay 2.5% for some portions of the construction and up to 100% for other parts of the cleanup and restoration. The cleanup of the sediments and the upland is complete. The cleanup of the streets began in 2015 and is expected to be finished in 2016.

• North Boeing Field/Georgetown Steam Plant—The City, King County, and Boeing signed an Administrative Order issued by the Washington State Department of Ecology (Ecology) requiring them to investigate and possibly remove contamination in an area that encompasses North Boeing Field, the Department's Georgetown Steam Plant, and the King County Airport. This site was also the subject of the lawsuit brought by the City against Boeing. Boeing agreed to pay 67% of the costs for Ecology's implementation of the current order. The order requires completion and then implementation of a remedial investigation/feasibility study work plan. The final remedial investigation work plan was issued in November 2013. In January 2015, all parties executed the First Amendment to the North Boeing Field/Georgetown Steam Plant Agreed Order, making all parties responsible for conducting and completing remedial action at the site. The City is responsible for 1/3 of the costs, with the Department's share at 90% and Seattle Public Utilities' share at 10%. The implementation of the RI work plan is ongoing and will continue into the first quarter of 2016. The schedule for the feasibility study (F/S) anticipates a draft F/S document in May 2018 and the Final F/S document in November 2018. Total estimated costs for the current order are \$6.0 million. Costs as of December 31, 2015 are approximately \$3.9 million with an additional \$2.1 million projected through completion of the F/S. Boeing and the City will each pay 100% of costs for remedial action at their own facilities.

The Department has included in its estimated liability those portions of the environmental remediation work that are currently deemed to be reasonably estimable. Cost estimates were developed using the expected cash flow technique in accordance with GASB Statement No. 49 of the GASB. Estimated outlays were based on current cost and no adjustments were made for discounting

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

or inflation. Cost scenarios were developed that defined a particular solution for a given site. Scenarios considered relevant potential requirements and alternatives for remediation of a site. Costs were calculated on a weighted average that was based on the probabilities of each scenario being selected and reflected cost-sharing agreements in effect. In addition, certain estimates were derived from independent engineers and consultants. The estimates were made with the latest information available; as new information becomes available, estimates may vary significantly due to price increases or reductions, technology, or applicable laws or regulations.

The Department is aggressively pursuing other third parties that may have contributed to the contamination of superfund sites for appropriate cost sharing. The Department's estimate for realized recoveries was \$4.1 million and \$1.0 million at December 31, 2015, and 2014, respectively, primarily representing an interfund receivable from Seattle Public Utilities for recovery of remediation costs incurred related to the lower Duwamish Waterway site. The Department's estimate for not yet realized recoveries from other parties for their share of remediation work performed that partially offset the Department's estimated environmental liabilities were zero at December 31, 2015, and 2014. As of December 31, 2015, and 2014, environmental costs of \$31.2 million and \$34.5 million were deferred primarily for the cleanup estimate of the Department's responsibility for the Lower Duwamish Waterway Superfund Site, and these costs will be recovered through future rates in accordance with GASB Statement No. 62.

The changes in the provision for environmental liabilities at December 31, 2015, and 2014 are as follows:

(\$ in millions)	2015	2014	
Beginning environmental liability, net of recoveries Payments Incurred environmental liability	\$ 57.6 (8.4) (3.3)	\$	60.2 (6.4) 3.8
Ending environmental liability, net of recoveries	\$ 45.9	\$	57.6

The provision for environmental liabilities included in current and noncurrent liabilities at December 31, 2015 and 2014, is as follows:

(\$ in millions)		2014		
Noncurrent liabilities Accounts payable and other current liabilities	\$	12.3 33.6	\$	34.0 23.6
Ending liability	\$	45.9	\$	57.6

#### 14. OTHER LIABILITIES

Other liabilities include unearned capital fees which are amortized to revenues as earned, deposits that are returned to customers, and certain other unearned revenues which expire at contract completion.

Other liabilities at December 31, 2015 and 2014 consisted of the following:

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

(\$ in millions)	2015		2014	
Other liabilities:				
Unearned capital fees	\$	24.6	\$	20.7
Customer deposits—sundry sales		4.5		5.4
Unearned operations and maintenance revenues		0.2		0.2
Unearned revenues—other		0.4		0.4
Total	\$	29.7	\$	26.7

# 15. DEFERRED INFLOWS OF RESOURCES

Seattle City Council passed resolutions authorizing the reporting of certain credits as regulatory liabilities in accordance with GASB Statement No. 62 of the GASB, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB & AICPA Pronouncements.* 

The unearned revenue for the Rate Stabilization Account for 2015 and 2014 is the result of spreading retail electric revenues and related activity over multiple periods to reduce the need for rapid and substantial rate increases (see Note 3 Rate Stabilization Account). Payments received from Bonneville's Energy Conservation Agreement are amortized to revenues over 20 years.

Bonneville Slice contract true-up credits are reported as regulatory liabilities in the year invoiced and recognized as revenue in the following year. Seattle City Council affirmed the Department's practice of recognizing the effects of reporting the fair value of exchange contracts in future periods for rate making purposes and maintaining regulatory accounts to spread the accounting impact of these accounting adjustments, in Resolution No. 30942 adopted January 16, 2007 (see Note 17 Long-Term Purchased Power, Exchanges, and Transmission).

Deferred inflows of resources at December 31, 2015 and 2014 consisted of the following:

(\$ in millions)	2015		2014	
Deferred inflows of resources:				
Unearned revenue—rate stabilization account	\$	66.0	\$	89.4
Bonneville energy conservation agreement		17.7		16.4
Bonneville Slice true-up credit		5.6		5.6
Exchange energy: regulatory gain		0.6		0.1
Total	\$	89.9	\$	111.5

# 16. SHORT-TERM ENERGY CONTRACTS AND DERIVATIVE INSTRUMENTS

The Department engages in an ongoing process of resource optimization, which involves the economic selection from available energy resources to serve the Department's load obligations and using these resources to capture available economic value. The Department makes frequent projections of electric loads at various points in time based on, among other things, estimates of factors such as customer usage and weather, as well as historical data and contract terms. The Department also makes recurring projections of resource availability at these points in time based on variables such as estimates of stream flows, availability of generating units, historic and forward market information, contract terms, and

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

experience. On the basis of these projections, the Department purchases and sells wholesale electric capacity and energy to match expected resources to expected electric load requirements, and to realize earnings from surplus energy resources. These transactions can be up to 24 months forward. Under these forward contracts, the Department commits to purchase or sell a specified amount of energy at a specified time, or during a specified time in the future. Except for limited intraday and interday trading to take advantage of owned hydro storage, the Department does not take market positions in anticipation of generating revenue. Energy transactions in response to forecasted seasonal resource and demand variations require approval by the Department's Risk Oversight Council.

It is the Department's policy to apply the normal purchase and normal sales exception of Statement No. 53 of the GASB, *Accounting and Financial Reporting for Derivative Instruments*, as appropriate. Certain forward purchase and sale of electricity contracts meet the definition of a derivative instrument, but are intended to result in the purchase or sale of electricity delivered and used in the normal course of operations. Accordingly, the Department considers these forward contracts as normal purchases and normal sales under GASB Statement No. 53. These transactions are not required to be recorded at fair value in the financial statements.

The aggregate contract amounts, fair value, and unrealized gain or (loss) of the Department's commodity derivative instruments qualifying as normal purchases and normal sales at December 31 follow:

(\$ in millions)		Aggregate Aggregate Fair Contract Amount Value		1.99.19.11		realized Gain (Loss)	
2015	Johna	ot / illount	•	uiuo	\-	.000,	
Sales	\$	13.3	\$	13.5	\$	(0.2)	
Purchases		1.4		1.3		(0.1)	
Total	\$	14.7	\$	14.8	\$	(0.3)	
		Aggregate Contract Amount		Aggregate Fair Value		Unrealized Gain (Loss)	
2014							
Sales	\$	13.3	\$	11.9	\$	1.4	
Purchases							
Total	\$	13.3	\$	11.9	\$	1.4	

Fair value measurements at December 31, 2015, and 2014, used an income valuation technique consisting of Kiodex Forward Curves and interest rates from HIS Global Insight that are used to calculate discount rates.

All derivative instruments not considered as normal purchases and normal sales are to be recorded within the financial statements using derivative accounting according to GASB Statement No. 53. In 2010, the Seattle City Council adopted a resolution granting the Department authority to enter into certain physical put and call options that would not be considered normal purchases and normal sales under GASB Statement No. 53. The Department did not have any such activity for 2015 and 2014. In addition, the Seattle City Council has deferred recognition of the effects of reporting the fair value of derivative financial instruments for rate-making purposes, and the Department maintains regulatory

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

accounts to defer the accounting impact of these accounting adjustments in accordance with GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* (see Notes 6 Other Assets and 15 Deferred Inflows of Resources).

Market Risk—Market risk is, in general, the risk of fluctuation in the market price of the commodity being traded and is influenced primarily by supply and demand. Market risk includes the fluctuation in the market price of associated derivative commodity instruments. Market risk may also be influenced by the number of active, creditworthy market participants, and to the extent that nonperformance by market participants of their contractual obligations and commitments affects the supply of, or demand for, the commodity. Because the Department is active in the wholesale energy market, it is subject to market risk

Credit Risk—Credit risk relates to the potential losses that the Department would incur as a result of nonperformance by counterparties of their contractual obligations to deliver energy or make financial settlements. Changes in market prices may dramatically alter the size of credit risk with counterparties, even when conservative credit limits are established. The Department seeks to mitigate credit risk by: entering into bilateral contracts that specify credit terms and protections against default; applying credit limits and duration criteria to existing and prospective counterparties; and actively monitoring current credit exposures. The Department also seeks assurances of performance through collateral requirements in the form of letters of credit, parent company guarantees, or prepayment.

The Department has concentrations of suppliers and customers in the electric industry including: electric utilities; electric generators and transmission providers; financial institutions; and energy marketing and trading companies. In addition, the Department has concentrations of credit risk related to geographic location as it operates in the western United States. These concentrations of counterparties and concentrations of geographic location may impact the Department's overall exposure to credit risk, either positively or negatively, because the counterparties may be similarly affected by changes in conditions.

Other Operational and Event Risk—There are other operational and event risks that can affect the supply of the commodity, and the Department's operations. Due to the Department's primary reliance on hydroelectric generation, the weather, including spring time snow melt, runoff, and rainfall, can significantly affect the Department's operations. Other risks include regional planned and unplanned generation outages, transmission constraints or disruptions, environmental regulations that influence the availability of generation resources, and overall economic trends.

# 17. LONG-TERM PURCHASED POWER, EXCHANGES, AND TRANSMISSION

**Bonneville Power Administration**—The Department purchases electric energy from the U.S. Department of Energy, Bonneville Power Administration (Bonneville) under the Block and Slice Power Sales Agreement, a 17-year contract, for the period October 1, 2011 through September 30, 2028. Block quantities, Slice percentage and Bonneville rates are expected to be recalculated periodically during the term of the contract. Rates will be developed and finalized every two years. Accordingly, certain estimates and assumptions were used in the calculations in the estimated future payments table below.

The terms of the Slice product specify that the Department will receive a percentage of the actual output of the Federal Columbia River Power System (the System). The percentage is adjusted annually with a Slice Adjustment Ratio no greater than 1.0 times the 3.65663 initial slice percentage, no later than 15 days prior to the first day of each federal fiscal year, beginning with fiscal year 2012. The current Slice

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

percentage is 3.62643%, and the previous fiscal year was 3.62763%. The cost of Slice power is based on the Department's same percentage of the expected costs of the System and is subject to true-up adjustments based on actual costs with specified exceptions.

Bonneville's Residential Exchange Program (REP) was established as a mechanism to distribute financial benefits of the Federal Columbia River Power System to residential customers of the region's investor owned utilities (IOUs). In May 2007, the Ninth Circuit Court (the Court) rulings found the 2000 REP Settlement Agreements with IOUs inconsistent with the Northwest Power Act. To remedy this inconsistency, the court ruled that refunds be issued to non IOUs through 2019. The Department received \$5.7 million in both 2015 and 2014 in billing credits related to both the Block and Slice agreements as a result of the Court decision.

Lucky Peak—In 1984, the Department entered into a purchase power agreement with four irrigation districts to acquire 100% of the net surplus output of a hydroelectric facility that began commercial operation in 1988 at the existing Army Corps of Engineers Lucky Peak Dam on the Boise River near Boise, Idaho. The irrigation districts are owners and license holders of the project, and the FERC license expires in 2030. The agreement, which expires in 2038, obligates the Department to pay all ownership and operating costs, including debt service, over the term of the contract, whether or not the plant is operating or operable.

The Department provided and billed Lucky Peak \$0.3 million for operational and administrative services in both 2015 and 2014. These amounts are recorded as offsets to purchased power expense. The Department paid \$3.4 and \$3.2 million for energy from Lucky Peak in 2015 and 2014, respectively.

The Department's receivables from Lucky Peak were less than \$0.1 million at December 31, 2015, and 2014, respectively. The Department's payables to Lucky Peak were \$0.5 million and \$0.3 million at December 31, 2015, and 2014, respectively.

British Columbia—High Ross Agreement—In 1984, an agreement was reached between the Province of British Columbia and the City under which British Columbia will provide the Department with energy equivalent to that which would have resulted from an addition to the height of Ross Dam. Delivery of this energy began in 1986 and is to be received for 80 years. In addition to the direct costs of energy under the agreement, the Department incurred costs of approximately \$8.0 million in prior years related to the proposed addition and was obligated to help fund the Skagit Environmental Endowment Commission through four annual \$1.0 million payments. These other costs are included in utility plant-in-service as an intangible asset, and are being amortized to purchase power expense over 35 years through 2035 (see Note 2 Utility Plant).

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Energy received and expenses incurred under these and other long-term purchased power agreements at December 31, 2015 and 2014 were as follows:

	Expense		Average N	<u>Megawatts</u>	
(\$ in millions)		2015	2014	2015	2014
Bonneville Block	\$	78.7	\$ 78.1	269.8	266.5
Bonneville Slice		77.8	 77.5	297.8	322.0
Long-term purchase power—Bonneville		156.5	155.6	567.6	588.5
Lucky Peak, including royalties		6.3	6.3	31.7	35.2
British Columbia - High Ross Agreement		13.4	13.4	35.4	35.1
Grant County Public Utility District		3.2	3.2	2.7	2.5
Columbia Basin Hydropower		6.6	6.1	29.5	31.1
Bonneville South Fork Tolt billing credit		(3.3)	(3.3)	-	-
Renewable energy - State Line Wind		20.8	23.7	34.2	40.8
Renewable energy - other		8.7	7.1	15.5	12.5
Exchanges and loss returns energy at fair value		6.1	8.9	71.2	14.5
Long-term purchased power booked out		(4.7)	 (6.7)	(24.0)	(25.3)
Long-term purchased power—other		57.1	 58.7	196.2	146.4
Total	\$	213.6	\$ 214.3	763.8	734.9

Renewable Energy Purchase and/or Exchanges—The Energy Independence Act, Chapter 19.285 Revised Code of Washington, requires all qualifying utilities in Washington State to meet certain annual targets of eligible new renewable resources and/or equivalent renewable energy credits as a percentage of total energy delivered to retail customers. The annual targets are: at least 3% by 2012, at least 9% by 2016, and at least 15% by 2020. The Department's 2015 and 2014 resource portfolio met the 3% target.

Energy Exchange—Northern California Power Agency (NCPA) and the Department executed a long-term Capacity and Energy Exchange Agreement in March 1993. The Department delivers energy to NCPA from June through October 15. NCPA returns energy under conditions specified in the contract at a 1.2:1 ratio of exchange power, from November through April. The agreement includes financial settlement and termination options. In a letter NCPA dated May 17, 2011, NCPA gave seven year's advance written notice to the Department terminating the agreement effective no later than May 31, 2018.

Fair Value of Exchange Energy—Exchange energy receivable and the related regulatory gains at December 31, 2015 and 2014, were valued using Kiodex Forward Curves, and Dow Jones U.S. Daily Electricity Price Indices for settled deliveries. An income valuation technique that uses interest rate forecasts from HIS Global Insight is used to discount for present value based on the interest rate for U.S. Government Treasury constant maturities, bond-equivalent yields by the future month of the transactions (see Note 15 Deferred Inflows of Resources).

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Estimated Future Payments Under Purchased Power, Transmission and Related Contracts—The Department's estimated payments for purchased power and transmission, Renewable Energy Credits (RECs) and other contracts for the period from 2016 through 2065, undiscounted, are as follows:

Years Ending December 31 (\$ in millions)	Estimated Payments <sup>(a)</sup>
2016	\$ 286.0
2017	291.2
2018	305.8
2019	317.8
2020	339.6
2021-2025(b)	1,675.2
2026-2030(c)	850.2
Thereafter (through 2065)	185.2
Total	\$ 4,251.0

- (a) 2016 to 2019 includes estimated REP recoveries from Bonneville.
- (b) Bonneville transmission contract expires July 31, 2025.
- (c) Bonneville Block and Slice contract expires September 30, 2028.

# 18. COMMITMENTS AND CONTINGENCIES

*Operating Leases*—While the Department owns several buildings including those at the Skagit and Boundary hydroelectric projects, service centers, and the System Control Center, the Department leases some administrative office space from the City. Such lease payments to the City are made through a central cost allocation process, similar to all other payments for tenancy of City property. These payments are not included in the operating leases table below. The Department also leases certain office equipment and smaller facilities for various purposes through long-term operating lease agreements. Expenses for all operating leases totaled \$1.6 million in 2015 and \$1.6 million in 2014.

Minimum payments under the operating leases are:

Year Ending December 31 (\$ in millions)	Minimum Payments
2016 2017 2018 2019	\$ 1.5 1.4 1.0 0.9
Total	\$ 4.8

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

**2016 Capital Program**—The budget for the Department's 2016 program for capital improvement, conservation, and deferred operations and maintenance including required expenditures on assets owned by others is \$646.4 million. At December 31, 2015, the Department had approximately \$176.8 million in commitments relating thereto. Department overhead costs and other allocations associated with the capital program are not included in the budget amount.

Federal Energy Regulatory Commission Fees—Estimated Federal land use and administrative fees related to hydroelectric licenses total \$190.6 million through 2055; these estimates are subject to change. The estimated portion of fees attributed to the Skagit and Tolt licenses are excluded after 2025, at which time their current FERC licenses expire. The estimated portion of Boundary fees is included through 2055, the year in which the current license issued by FERC expires. The current Boundary FERC license and related issues are discussed below.

**New Boundary License**—The Department's FERC license for the Boundary Project expired on September 30, 2011 and a new license was issued on March 20, 2013 with a 42 year life and a total cost of \$48.6 million. The terms and conditions of the new license have been evaluated and the Department has moved to the license implementation process, which imposes mitigation of endangered species including water quality standards and conservation management.

As part of the application process, the Department negotiated a settlement with external parties such as owners of other hydroelectric projects, Indian tribes, conservation groups and other government agencies. The settlement sought to preserve the Department's operational flexibility at Boundary Dam while providing for natural resource protection, mitigation and enhancement measures.

The cost projections for such mitigation over the expected 42-year life of the license, included in the Department's license application, were estimated to be \$381.5 million adjusted to 2015 dollars, of which \$32.0 million were expended through 2015. Projected mitigation cost estimates are subject to revision as more information becomes available.

Skagit and South Fork Tolt Licensing Mitigation and Compliance—In 1995, the FERC issued a license for operation of the Skagit hydroelectric facilities through April 30, 2025. On July 20, 1989, the FERC license for operation of the South Fork Tolt hydroelectric facilities through July 19, 2029, became effective. As a condition for both of these licenses, the Department has taken and will continue to take required mitigating and compliance measures.

Total Skagit license mitigation costs from the effective date until expiration of the federal operating license were estimated at December 31, 2015, to be \$130.2 million, of which \$114.5 million had been expended. Total South Fork Tolt license mitigation costs were estimated at \$1.8 million, of which \$1.3 million were expended through 2015. In addition to the costs listed for South Fork Tolt mitigation, the license and associated settlement agreements required certain other actions related to wildlife studies and wetland mitigation for which no set dollar amount was listed. Requirements for these actions have been met, and no further expenditures need to be incurred for these items.

Capital improvement, other deferred costs, and operations and maintenance costs are included in the estimates related to the settlement agreements for both licenses. Amounts estimated are adjusted to 2015 dollars. Department labor and other overhead costs associated with the activities required by the settlement agreements for the licenses are not included in the estimates.

Hydroelectric projects must satisfy the requirements of the Endangered Species Act (ESA) and the Clean Water Act in order to obtain a FERC license. ESA and related issues are discussed below.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

**Endangered Species** – Several fish species that inhabit waters where hydroelectric projects are owned by the Department, or where the Department purchases power, have been listed under the ESA as threatened or endangered. Although the species were listed after FERC licenses were issued for all of the Department's hydroelectric projects, the ESA listings still affect operations of the Department's Boundary, Skagit, Tolt, and Cedar Falls hydroelectric projects.

Federal Regulations in response to the listing of species affect flow in the entire Columbia River system. As a result of these regulations, the Department's power generation at its Boundary Project is reduced in the fall and winter when the region experiences its highest sustained energy demand. The Boundary Project's firm capability is also reduced.

The Department, with the support of City Council, elected to take a proactive approach to address issues identified within the ESA. The Department is carrying out an ESA Early Action program in cooperation with agencies, tribes, local governments, and watershed groups for bull trout, Chinook salmon, and steelhead in the South Fork Tolt and Skagit Watersheds. The ESA Early Action program is authorized by City Council, but is separate from any current FERC license requirements. The program includes habitat acquisition, management and restoration. The ESA Early Action has been successful in protecting listed species. Total costs for the Department's share of the Early Action program from inception in 1999 through December 31, 2015, are estimated to be \$10.7 million, and \$1.6 million has been allocated for the program in the 2016 budget.

Project Impact Payments—Effective August 2010, the Department renewed its contract with Pend Oreille County and committed to pay a total of \$19.0 million over 10 years ending in 2019 to Pend Oreille County for impacts on county governments from the operations of the Department's hydroelectric projects. Effective February 2009, the Department renewed its contract with Whatcom County committing to pay a total of \$15.8 million over 15 years ending in 2023. The payments compensate the counties, and certain school districts and towns located in these counties, for loss of revenues and additional financial burdens associated with the projects. The Boundary Project, located on the Pend Oreille River, affects Pend Oreille County, and Skagit River hydroelectric projects affect Whatcom County. The impact payments totaled \$2.5 million and \$2.5 million to Pend Oreille County, and \$1.0 million and \$1.0 million to Whatcom County in 2015 and 2014, respectively

*Energy Crisis Refund Litigation* — The Department (City) is involved in various legal proceedings relating to the enormous price spikes in energy costs in California and the rest of the West Coast in 2000 and 2001.

• California Refund Case, Appeals and Related Litigation—In the proceeding before the Federal Energy Regulatory Commission (FERC), various public and private California entities (the California Parties) sought refunds in markets that had been created by the State of California. In February 2011, the City agreed to a settlement, which was eventually approved by the trial court and by FERC. Under the settlement, the City has resolved this matter for \$9.0 million, none of which was immediately paid by the Department. As part of the settlement, the City has assigned its accounts receivable from the California Independent Systems Operator to the California Parties, which was valued at approximately \$1.4 million at the time of the settlement agreement. The balance of over \$7.6 million is contingent upon the Department recovering monies in the Pacific Northwest Refund Case, discussed below. To date, the Department has received \$4.6 million in payments in the Pacific Northwest Refund Case, half of which has been paid to the California parties pursuant to the settlement.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Pacific Northwest Refund Case—In a proceeding before FERC, various buyers of energy, including the City, sought refunds from various sellers on energy sales in the Pacific Northwest between December 1999 and June 2001. The case was tried at FERC between August and October of 2013. In March 2014, the FERC administrative law judge issued an Initial Decision denying all refunds. In May 2014, the City filed a brief objecting to the Initial Decision, and the parties are now awaiting a final decision from FERC. Prior to the FERC trial, the City settled refund claims with twelve entities, with a combined total settlement amount of \$4.6 million. In February 2015, after hearing argument in a related case, the Ninth Circuit sua sponte reactivated certain City Light appeals previously stayed at the Ninth Circuit that were primarily related to City Light's appeal of the FERC's determination that the Mobile-Sierra presumption applied to the contracts at issue and whether FERC had improperly excluded certain evidence that City Light had presented in order to overcome the Mobile-Sierra presumption. After a truncated briefing schedule, oral arguments were heard in June 2015. On December 17, 2015, the Ninth Circuit issued its opinion finding that the Mobile-Serra presumption does apply to the issues in this case. The Ninth Circuit also determined that it did not have jurisdiction over the evidentiary issues. On December 31, 2015, FERC issued its decision largely confirming the Initial Decision issued by the administrative law judge on March 28, 2014. City Light filed its notice of appeal to the Ninth Circuit on February 22, 2016.

State Farm, et al. v. City, Puget Sound Energy(PSE) and Inghams - This case stems from a gas explosion in September 2011 in the Pinehurst neighborhood in Seattle. Discovery thus far indicates the Ingham home exploded after an undiscovered gas leak caused a gas buildup in the crawl space of their home. The Inghams were inside their home at the time, and Mrs. Ingham suffered severe burns. After cross-claims and joinders of additional parties, this case involves the claims of six insurance companies seeking over \$1.0 million in property damages involving eight different properties and the personal injury claims of the Inghams and their next-door neighbors. The plaintiffs' theory against the Department is that the gas leak was caused by arcing electricity from a fallen Department power line blocks away from the Inghams' home. Puget Sound Energy is a co-defendant and was sanctioned by the State UTC regarding this incident. The City settled with State Farm during 2015 for \$795,000. Shortly thereafter, the claim by American Family Insurance was settled for \$26,000 for a total settlement in this matter of \$821,000.

*Taylor, et al. v. City* – Four plaintiffs allege that certain Department managers retaliated and discriminated against them on the basis of age, race, gender, and sexual orientation. The Department managers deny all allegations of discrimination, harassment, and retaliation. An adverse result in litigation could result in awards of back pay, compensatory damages, and attorneys' fees. Trial is currently scheduled for June 20, 2016, in King County Superior Court. The Department's ultimate liability is indeterminate.

Sharma v City – The Department terminated the plaintiff for poor job performance. Plaintiff alleges that the termination was discriminatory on account of his national origin. Because the plaintiff alleges violation of anti-discrimination laws, an adverse result in the litigation could create an obligation to pay the plaintiff's attorneys' fees. Trial is currently scheduled for October 31, 2016, in King County Superior Court. The Department's ultimate liability is indeterminate.

Gamble v. City – The plaintiff is a long-time Department employee who alleges that she has been denied promotions on the basis of her gender, age, disability, and use of Family Medical Leave. The plaintiff also alleges that she has suffered from working in a work environment that was hostile due to the same characteristics. An adverse result in litigation could result in awards of back pay, compensatory

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

damages, and attorneys' fees. Trial is currently scheduled for May 3, 2016, in King County Superior Court. The Department's ultimate liability is indeterminate.

Gomez v. City; King County – This case stems from a single vehicle/Department power pole collision that took place on November 11, 2012. The driver of the vehicle is believed to have been racing another vehicle. The driver of the vehicle that hit the pole died as a result of the collision. There were five passengers in this vehicle and they were all minors. One died as a result of the collision. The other four passengers were also injured but the Department has not received notice of the filing of a lawsuit against the City on their behalf as of the end of March 2016. There are three pending lawsuits arising out of the incident. The first lawsuit was filed on behalf of the estate of a deceased passenger and an injured passenger. The second lawsuit was brought by the parents of the deceased passenger but raising an additional cause of action under RCW 4.24.010 "Action for injury or death of a child." The third lawsuit was brought on behalf of the estate of the deceased driver and his parents, bringing both wrongful death claims as well as claims under RCW 4.24.010. The Department's ultimate liability is indeterminate.

Centralia Steam Plant Project Asbestos Claims – In 2013, the Department received notice of a lawsuit that had been filed against PacifiCorp (the successor in interest of the former operator of the Centralia Steam Plant Project) by an employee of a contractor who worked at the Project between April 26, 1971 and December 3, 1971. The claimant alleges he developed mesothelioma as a result of his exposure to asbestos during the time he worked at the Project. PacifiCorp provided notice to the Department, and all the other former owners of the Project that, as a former owner of the Project, it could liable for any liabilities resulting from the construction not covered by insurance in proportion to its ownership share. Based on the agreement for the construction and ownership of the Project, the Department owned 8% of the Project during the material times. Recently, the Department received additional notice indicating there are two additional decedent estates have filed lawsuits against the former operator alleging similar claims. The Department is not named in any of the litigation and trial dates for these cases against the former operator are set for various times in 2016. The Department's ultimate liability is indeterminate.

Other Contingencies—In addition to those noted above, in the normal course of business, the Department has various other legal claims and contingent matters outstanding. The Department believes that any ultimate liability arising from these actions will not have a material adverse impact on the Department's financial position, operations, or cash flows.

# 19. SUBSEQUENT EVENTS

2016 Bonds – On January 28, 2016, the Department issued \$31.9 million Municipal Light and Power (ML&P) Revenue Bonds, 2016A, Taxable New Clean Renewable Energy Bonds (CREBS), and \$116.9 ML&P Refunding Revenue Bonds, 2016B. The 2016A Bonds will finance certain capital improvements to and conservation programs consisting of overhaul of the Hydroelectric Generating Units 31 and 32 at the Department's Diablo Powerhouse within the Skagit Project. The 2016B Bonds were issued to refund certain 2008 Serial and Term bonds totaling \$122.8 million. The arbitrage yield was 1.009% for the CREBS and 1.881% for the 2016B Bonds.

GM and CEO – Larry Weis was nominated General Manager and Chief Executive Officer and joined the Department on February 1, 2016. The City Council confirmed Mr. Weis in March 2016 to a 4 year term. Mr. Weis began his career at Snohomish County PUD, previously served as General Manager at Pend Oreille PUD, and later Turlock Irrigation District in California. Most recently, Mr. Weis served as General Manager of Austin Energy beginning in 2010. Mr. Weis holds a Bachelor of Science degree in Electrical and Mechanical Technology from Western Washington University.

# NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

Seattle Information Technology Department – In May 2015, the Mayor announced plans to create a new consolidated Seattle Information Technology (IT) Department. The new Seattle IT Department will be responsible for the delivery of IT services for the entire City government, including the Department. As a result of this reorganization, Seattle IT became operational in April 2016 and the Department's IT staff of approximately 104 full-time employees transferred to Seattle IT. The Department is currently evaluating the impact this transition will have on its financial statements.

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# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

# **DEFINED BENEFIT PENSION PLAN**

The Department's schedule of the employer's proportionate share of the net pension liability for the year ending December 31 (dollar amounts in millions):

2015

Employer's proportion of the net pension liability	24.53%
Employer's proportionate share of the net pension liability	\$271.8
Employer's covered-employee payroll	\$152.3
Employer's proportionate share of net pension liability as a percentage	
of its covered-employee payroll	178.48%
Plan fiduciary net position as a percentage of the total pension liability	67.70%

## Notes:

The amounts presented have a measurement date of December 31, 2014

This schedule is intended to show information for 10 years. Since 2015 is the first year for this presentation, no other data is available. However, additional years will be included as they become available.

The Department's proportionate schedule of employer's contributions (dollar amounts in millions):

	2015
Contractually required contribution	\$ 24.9
Contributions in relation to contractually required contribution	24.9
Contribution deficiency (excess)	\$ -
Covered-employee payroll	\$165.0
Contributions as a percentage of covered-employee payroll	15.09%

# Note:

This schedule is intended to show information for 10 years. Since 2015 is the first year for this presentation, no other data is available. However, additional years will be included as they become available.

# **REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**

## SCHEDULES OF FUNDING PROGRESS

**SCERS.** The schedule of funding progress for SCERS prior to the 2015 implementation of GASB 68 is presented below for the most recent actuarial valuation and the two preceding valuations for which the Department has available data (\$ in millions):

Actuarial Value of Assets (A)	Actuarial Accrued Liabilities (AAL) <sup>(a)</sup> (B)	Unfunded AAL (UAAL) <sup>(b)</sup> (B-A)	Funding Ratio (A/B)	Covered Payroll <sup>(c)</sup> (C)	UAAL (or Excess) as a Percentage of Covered Payroll ((B-A)/C)
\$ 1,954.3	\$ 2,859.3	\$ 905.0	68.3 %	\$ 557.0	\$ 162.5
1,920.1	3,025.3	1,105.2	63.5	567.8	194.6
2,094.3	3,260.1	1,165.8	64.2	597.9	195.0
	Value of Assets (A) \$ 1,954.3 1,920.1	Actuarial Value of Liabilities Assets (AAL) <sup>(a)</sup> (B)  \$ 1,954.3 \$ 2,859.3 1,920.1 3,025.3	Actuarial Accrued Value of Liabilities Assets (AAL)(a) (UAAL)(b) (B-A)  \$ 1,954.3 \$ 2,859.3 \$ 905.0 1,920.1 3,025.3 1,105.2	Actuarial Value of Liabilities Assets (AAL) <sup>(a)</sup> (UAAL) <sup>(b)</sup> Ratio (A/B)  \$ 1,954.3 \$ 2,859.3 \$ 905.0 68.3 % 1,920.1 3,025.3 1,105.2 63.5	Actuarial Value of Liabilities AAL Funding Covered Assets (AAL) <sup>(a)</sup> (B) (B-A) (A/B) (C)  \$ 1,954.3 \$ 2,859.3 \$ 905.0 68.3 % \$ 557.0 1,920.1 3,025.3 1,105.2 63.5 567.8

<sup>(</sup>a) Actuarial present value of benefits less actuarial present value of future normal costs based on entry age actuarial cost method.

**OPEB.** The schedule of funding progress for the other post-employment benefit healthcare plans is presented below for the most recent actuarial valuation and the two preceding valuations for which the Department has available data (\$ in millions):

centage Covered Payroll B-A)/C)
10.8 %
8.4
4.2

<sup>(</sup>b) Actuarial accrued liabilities less actuarial value of assets; funding excess if negative.

<sup>(</sup>c) Covered payroll includes compensation paid to all active employees on which contributions were made in the year preceding the valuation date.

# **OTHER INFORMATION (UNAUDITED)**

# **DEBT SERVICE COVERAGE**

Following is a table that provides information for the Department's debt service coverage for years 2015, 2014, and 2013. The target level for debt service coverage was 1.8x on all bonds for 2015, 2014, and 2013 in accordance with current financial policies (which include a Rate Stabilization Account that will result in greater compliance of actual debt service coverage with the policy-specified level).

# (\$ in millions)

Debt Service Coverage			Dec	cember 31		
		2015		2014		2013
OPERATING REVENUES:						
Retail power revenues	\$	736.6	\$	720.8	\$	697.7
Short-term wholesale power revenues		61.2		96.8		63.0
Other power-related revenues (a)(b)(c)		36.8		50.8		40.4
Transfers from/(to) rate stabilization account (d)		23.4		(4.4)		18.3
Other operating revenues		24.9		22.4		22.8
Total operating revenues	\$	882.9	\$	886.4	\$	842.2
OPERATING EXPENSES:						
Long-term purchased power—Bonneville and other	\$	213.6	\$	214.3	\$	203.1
Short-term wholesale power purchases		26.8		14.9		19.8
Other power expenses		59.6		65.9		66.4
Transmission (e)		54.3		52.8		48.2
Distribution		65.1		59.7		59.5
Customer service		38.3		37.6		39.2
Conservation		29.1 92.1		27.3 75.8		21.5
Administrative and general Taxes		92.1 81.1		73.8 80.0		71.7 79.3
Depreciation and amortization		112.0		105.8		102.3
Total operating expenses	\$	772.0	\$	734.1	\$	711.0
Total operating expenses	<u>3</u>	772.0	Þ	/34.1	<u>s</u>	/11.0
NET OPERATING REVENUE (f)	\$	110.9	\$	152.3	\$	131.2
Adjustments to Net Operating Revenue (g)						
City Taxes (h)	\$	45.5	\$	44.6	\$	42.8
Depreciation and amortization		112.0		105.8		102.3
Depreciation & amortization included in operating & maintenance expenses (i)		27.1		24.8		22.3
Pension expense (j)		27.9		-		-
Pension contributions (j)		(24.9)		-		-
Valuation on exchange power, net (b)(c)		0.6		0.3		(0.2)
BPA Conservation Augmentation/Agreement revenue (k)		(0.9)		(0.7)		(0.5)
Investment income (l)		6.7		5.4		4.7
Non-cash expenses (m)		(0.3)		1.9		10.8
Other (n)		2.0		7.0		6.2
Total adjustments	\$	195.7	\$	189.1	\$	188.4
Net Revenue Available for Debt Service	\$	306.6	\$	341.4	\$	319.6
Total Debt Service (o)	\$	189.6	\$	184.8	\$	172.8
Ratio of Available Net Revenue to Debt Service		<u>1.62x</u>		<u>1.85x</u>		<u>1.85x</u>

#### **OTHER INFORMATION (UNAUDITED)**

#### Notes to Debt Service Coverage

- (a) Includes conservation and renewable credits under the power sales contract with BPA, the recognition of payments from BPA for the purchase of conservation savings, revenue from deliveries of power to Pend Oreille PUD pursuant to the Boundary Project's FERC license, and other energy credits.
- (b) Effective in 2012, the Department adopted GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. Non-monetary transactions are measured at fair value in accordance with GASB No. 62.
- (c) Includes significant activity for the valuation of energy delivered under seasonal exchanges, basis sales, and other power exchange contracts. Energy exchanges have both revenue and expense components; therefore, a net revenue or expense adjustment is made for a given year.
- (d) Transfers from/(to) the RSA in accordance with Ordinance 123260, primarily to address fluctuations in surplus power sales.
- (e) Includes revenue from the short-term sale of excess transmission capacity.
- (f) Operating Income per audited financial statements.
- (g) Significant non-cash transactions are adjusted from Net Operating Revenue to calculate Revenue Available for debt Service. Furthermore, some types of revenue in addition to Operating Revenue are included to calculate Revenue Available for Debt Service. These adjustments are listed in the remaining lines within the table.
- (h) City taxes are excluded because the lien on such taxes is junior to debt service in accordance with the Bond Legislation.
- (i) The majority of the depreciation and amortization (non-cash) expenses included in Operating and Maintenance Expense are for amortization of conservation expenses that are recognized over a 20-year period.
- (j) Pension expense is the amount recorded for compliance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions an amendment of GASB Statement No. 27, implemented in 2015, a non-cash item. Pension contributions are the 2015 Department cash contributions to the Seattle City Employee's Retirement System.
- (k) Payments received for conservation measures are initially recorded as unearned revenue. The adjustment represents the amount of revenue amortized and recognized over future periods for financial reporting, a non-cash transaction.
- (I) Investment income is not included in Total Revenue in this table; therefore, an adjustment is made to Net Operating Revenue, consisting primarily of interest earnings from City's cash pool and interest receipts from suburban underground charges. This amount excludes unrealized gains and losses, which are non-cash adjustments.
- (m) Primarily claim expenses and capital project expenditures from prior year which were determined not to be capital expenditures.
- (n) Includes proceeds from sale of properties, principal receipts from suburban underground charges from local jurisdictions, and miscellaneous items.
- (o) Net of federal bond subsidies.

# **DEBT SERVICE COVERAGE: ALL BONDS**

Year Ending December 31 (\$ in millions)	Revenue Available for Debt Service	Debt Service Requirements	Debt Service Coverage
2015	\$ 306.6	\$ 189.6	1.62
2014	341.4	184.8	1.85
2013	319.6	172.8	1.85
2012	306.1	169.1	1.81
2011	269.9	146.7	1.84

# **OTHER INFORMATION (UNAUDITED)**

# INTEREST REQUIREMENTS AND PRINCIPAL REDEMPTION ON LONG-TERM DEBT

Year Ending December 31			
(\$ in millions)	Principal	Interest	Total (a)
2016	\$ 105.9	\$ 96.9	\$ 202.8
2017	109.1	89.1	198.2
2018	109.6	83.9	193.5
2019	106.2	78.6	184.8
2020	105.6	73.2	178.8
2021	105.0	68.0	173.0
2022	104.4	62.7	167.1
2023	106.2	57.4	163.6
2024	109.2	51.9	161.1
2025	98.0	46.4	144.4
2026	94.5	41.6	136.1
2027	68.7	37.5	106.2
2028	70.1	34.2	104.3
2029	63.7	31.1	94.8
2030	47.0	28.4	75.4
2031	48.8	26.4	75.2
2032	50.6	24.2	74.8
2033	52.6	21.9	74.5
2034	54.8	19.5	74.3
2035	57.2	17.1	74.3
2036	59.6	14.6	74.2
2037	47.1	12.4	59.5
2038	48.9	10.4	59.3
2039	50.9	8.4	59.3
2040	52.9	6.3	59.2
2041	41.0	4.4	45.4
2042	31.7	3.2	34.9
2043	33.0	2.1	35.1
2044	23.4	0.9	24.3
2045	15.1	0.2	15.3
Total	\$ 2,070.8	\$ 1,052.9	\$ 3,123.7

<sup>(</sup>a) Maximum debt service of \$202.8 is due in 2016. See Note 8 Long-term debt.

Note: All parity bonds of the Department are fixed rate bonds except the 2015B bonds which are variable rate bonds.

# **OTHER INFORMATION (UNAUDITED)**

# STATEMENT OF LONG-TERM DEBT

As of December 31, 2015

(\$ in millions)

Bond Series	When Due	Interest Rate (%)	Amount Is sued	Amount Outs tanding	Amount Due Within One Year	Accrued Interest
Series 2008	2016-2018	5.000	\$ 36.7	\$ 36.7	\$ 15.1	\$ 0.5
Series 2008	2019-2020	5.250	20.6	20.6		0.3
Series 2008	2021-2022	5.500	21.4	21.4		0.3
Series 2008	2023	5.750	10.8	10.8		0.2
Series 2008	2024-2025	6.000	23.6	23.6		0.4
Series 2008	2026-2029	5.750	56.4	56.4		0.7
Series 2010A	2016-2021	4.447	4.6	4.6		0.1
Series 2010A	2022	4.597	7.2	7.2		0.1
Series 2010A	2023	4.747	7.5	7.5		0.1
Series 2010A	2024	4.947	7.7	7.7		0.2
Series 2010A	2025	5.047	8.0	8.0		0.2
Series 2010A	2026	5.147	8.2	8.2		0.2
Series 2010A	2027	5.247	8.5	8.5		0.2
Series 2010A	2028-2030	5.470	27.4	27.4		0.6
Series 2010A	2031-2040	5.570	102.6	102.5		2.4
Series 2010B	2016	4.000	10.0	10.0	10.0	0.2
Series 2010B	2016	5.000	38.3	38.3	38.3	0.8
Series 2010B	2017	4.000	4.4	4.4		0.1
Series 2010B	2017	5.000	46.3	46.3		1.0
Series 2010B	2018	4.000	5.0	5.0		0.1
Series 2010B	2018	5.000	38.8	38.8		0.8
Series 2010B	2019	4.000	1.5	1.5		0.0
Series 2010B	2019	5.000	42.7	42.7		0.9
Series 2010B	2020	4.000	2.6	2.6		0.0
Series 2010B	2020	5.000	43.9	43.9		0.9
Series 2010B	2021-2026	5.000	187.8	187.8		3.9
Series 2010C	2016-2040	5.590	13.3	13.3		0.3
Series 2011A	2016-2027	5.000	176.9	147.4	13.2	3.1
Series 2011A	2028	5.250	9.4	9.4		0.2
Series 2011A	2029-2030	5.500	20.4	20.4		0.5
Series 2011A	2031-2036	5.250	75.8	75.8		1.6
Series 201lB	2027	5.750	10.0	10.0		0.2
Series 2012A	2016-2027	5.000	198.0	185.8	11.4	0.8
Series 2012A	2028	3.250	12.4	12.4		0.0
Series 2012A	2034-2036	4.000	25.1	25.1		0.1
Series 2012A	2037-2041	4.000	49.1	49.1		0.2
Series 2012C	2028	3.400	4.3	4.3		0.0
Series 2012C	2029	3.500	7.7	7.7		0.0
Series 2012C	2030	3.500	7.7	7.7		0.0
Series 2012C	2031-2033	3.750	23.4	23.4		0.1
Series 2013	2016-2033	5.000	97.4	97.4	3.0	2.4
Series 2013	2034-2035	4.000	14.7	14.7		0.3
Series 2013	2036-2038	4.125	24.4	24.4		0.5
Series 2013	2039-2043	4.500	48.3	48.3		1.1
Series 2014	2016-2029	5.000	163.2	147.9	10.5	2.5
Series 2014	2030-2038	4.000	53.9	53.9		0.7
Series 2014	2039-2040	4.000	14.8	14.8		0.2
Series 2014	2041-2044	4.000	33.3	33.3		0.4
Series 2015A	2016-2026	5.000	62.9	62.9	4.4	1.5
Series 2015A	2027-2045	4.000	109.0	109.0		2.1
Series 2015B B.1	2026-2045	0.69 - 0.71 <sup>^</sup>	50.0	50.0		0.0
Series 2015B B.2	2026-2045	0.69 - 0.71 <sup>^</sup>	50.0	50.0		0.0
Total			\$ 2,127.9	\$ 2,070.8	\$ 105.9	\$ 34.0

A Range of adjustable rates in effect during 2015.

 $Note: All\ parity\ bonds\ of\ the\ Department\ are\ fixed\ rate\ bonds\ except\ the\ 2015B\ bonds\ , which\ are\ variable\ rate\ bonds\ .$ 

# **OTHER INFORMATION (UNAUDITED)**

## POWER COSTS AND STATISTICS

Year ending December 31 (\$ in millions)	2015	2014	2013	2012	2011
POWER COSTS					
Hydroelectric generation(a)(c)	\$ 50.1	\$ 49.9	\$ 54.0	\$ 45.7	\$ 43.3
Long-term purchased power(b)	213.6	214.3	203.1	204.1	206.9
Wholesale power purchases(c)(e)	26.8	14.9	19.8	11.8	11.5
Fair valuation & other power purchases(b)(e)	11.8	17.7	14.1	7.8	9.0
Owned transmission(a)	17.2	15.3	15.1	14.5	12.4
Wheeling expenses	42.0	42.1	37.4	36.5	38.9
Other power expenses	12.9	13.2	12.2	10.3	10.2
Total power costs	374.4	367.4	355.7	330.7	332.2
Less short-term wholesale power sales(c)	(61.2)	(96.8)	(63.0)	(70.4)	(102.7)
Less other power-related revenues	(19.9)	(25.5)	(21.5)	(16.8)	(37.7)
Less fair valuation other power-related(b)	(16.9)	(25.3)	(18.9)	(12.5)	(17.0)
Net power costs	\$ 276.4	\$ 219.8	\$ 252.2	\$ 231.0	\$ 174.8
POWER STATISTICS (MWh)					
Hydroelectric generation(c)	5,979,884	7,091,368	6,108,908	6,947,088	7,546,905
Long-term purchased power(b)	6,900,647	6,658,689	6,482,960	7,232,362	7,859,766
Wholesale power purchases(c)	1,379,168	900,527	2,072,066	2,592,354	1,696,861
Wholesale power sales(c)	(3,548,507)	(4,083,391)	(3,854,352)	(5,625,088)	(6,053,258)
Other(d)	(1,023,970)	(655,569)	(760,882)	(1,064,692)	(847,282)
Total power available	9,687,222	9,911,624	10,048,700	10,082,024	10,202,992
Less self consumed energy	(25,195)	(29,717)	(30,910)	(31,072)	(32,752)
Less system losses	(504,533)	(541,323)	(511,390)	(584,310)	(570,008)
Total power delivered to retail customers	9,157,494	9,340,584	9,506,400	9,466,642	9,600,232
Net power cost per MWh delivered	\$ 30.18	\$ 23.53	\$ 26.53	\$ 24.40	\$ 18.21

<sup>(</sup>a) Including depreciation.

<sup>(</sup>b) Long-term purchased power, fair valuation power purchases and fair valuation other power-related include energy exchanged under seasonal and other exchange contracts valued at market in accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB & AICPA Pronouncements.

<sup>(</sup>c) The level of generation (and consequently the amount of power purchased and sold on the wholesale market) can fluctuate widely from year to year depending upon water conditions in the Northwest region.

<sup>(</sup>d) "Other" includes seasonal exchange power delivered and miscellaneous power transactions.

<sup>(</sup>e) Bookout purchases are excluded from wholesale power purchases and are reported on a net basis in wholesale power sales. Note: Certain dollar amounts for 2011 - 2014 have been revised to conform with the 2015 presentation.

# **OTHER INFORMATION (UNAUDITED)**

# **HISTORICAL ENERGY RESOURCES (in MWh)**

	2015	2014	2013	2012	2011
Department-Owned Generation					
Boundary Project	3,469,855	4,249,957	3,465,890	3,802,251	4,499,134
Skagit Hydroelectric Project:		-	-	-	-
Gorge	953,628	1,057,865	955,265	1,081,349	1,094,529
Diablo	775,025	857,757	828,200	937,646	920,969
Ross	684,687	796,513	726,560	939,943	870,310
Cedar Falls/Newhalem	47,571	65,687	77,397	122,615	111,959
South Fork Tolt	49,118	63,589	55,596	63,284	50,004
Subtotal	5,979,884	7,091,368	6,108,908	6,947,088	7,546,905
Energy Purchases					
Bonneville	4,971,459	5,155,271	5,079,991	5,633,906	6,214,839
Priest Rapids	23,698	21,961	33,205	36,381	32,285
CBH (formerly GCPHA) <sup>(a)</sup>	258,678	272,842	254,568	255,569	237,785
High Ross	310,102	307,873	312,350	308,365	313,817
Lucky Peak	278,001	308,334	215,587	401,400	388,786
Stateline Wind Project	299,551	357,325	363,099	365,192	413,697
Columbia Ridge	94,271	68,920	51,577	49,779	50,120
Seasonal and Other Exchange <sup>(b)</sup>	664,887	411,555	69,940	100,782	276,656
Wholesale Market Purchases <sup>(c)</sup>	1,379,168	900,527	2,072,066	2,592,354	1,696,861
Subtotal	8,279,815	7,804,608	8,452,383	9,743,728	9,624,846
Total Department Resources	14,259,699	14,895,976	14,561,291	16,690,816	17,171,751
Minus Offsetting Energy Sales					
Firm Energy Sales and Marketing Losses <sup>(d)</sup>	331,897	393,844	421,375	491,724	439,013
Seasonal and Other Exchange <sup>(b)</sup>	692,073	507,117	236,864	491,980	476,488
Wholesale Market Sales <sup>(e)</sup>	3,548,507	4,083,391	3,854,352	5,625,088	6,053,258
		· · · · · · · · · · · · · · · · · · ·		· · · · · · ·	
Total Energy Resources	9,687,222	9,911,624	10,048,700	10,082,024	10,202,992

<sup>(</sup>a) Columbia Basin Hydropower (formerly Grand Coulee Project Hydroelectric Authority.)

<sup>(</sup>b) Includes exchange contracts with the Northern California Power Authority (NCPA), Sacramento Municipal Utility District (SMUD), Grant County and the Lucky Peak Project.

<sup>(</sup>c) Purchases to compensate for low water conditions and to balance loads and resources.

<sup>(</sup>d) Energy provided to Public Utility District of Pend Oreille County under the Boundary Project's FERC license and include incremental losses due to expanded activity in the wholesale market.

<sup>(</sup>e) Runoff was 121% of historical average in 2012, and 133% of historical average in 2011.

# **OTHER INFORMATION (UNAUDITED)**

## **CUSTOMER STATISTICS**

Year ended December 31		2015		2014		2013		2012		2011
Average number of customers: Residential Non-residential	_	381,419 41,391	_	374,619 40,437	_	367,837 40,218		362,658 39,950	_	360,442 39,909
Total	_	422,810	=	415,056	=	408,055		402,608	_	400,351
Megawatt-hours <sup>(b)</sup> : Residential Non-residential	32% 68%	2,914,563 6,242,931	32% 68%	2,987,711 6,352,873	33% 67%	3,158,629 6,347,771	33% 67%	3,098,745 6,367,897	34% 66%	3,217,101 6,383,131
Total	100%	9,157,494	100% _	9,340,584	100%	9,506,400	100%	9,466,642	100% _	9,600,232
Average annual revenue per customer <sup>(b)</sup> : Residential Non-residential	\$		\$			\$ 710 \$ 10,820		\$ 664 \$ 10,603	\$	
Year ended December 31		2015		2014		2013		2012		2011
Average annual consumption per customer (kWhs	) <sup>(a)(b)</sup> :									
Residential										
- Seattle		7,641		7,975		8,587		8,545		8,925
- National		n/a		10,936		10,916		10,837		11,279
Non-residential										
- Seattle		150,829		157,107		157,834		159,399		159,942
- National		n/a		126,114		125,871		125,674		126,703
Average rate per kilowatt-hour (cents) <sup>(a)(b)</sup>										
Residential										
- Seattle		9.05		8.71		8.27		7.77		7.61
- National				10.50		12.12		11.88		11.72
		n/a		12.52		12.12		11.00		11.72
Non-residential										
Non-residential - Seattle - National		n/a 7.55 n/a		7.29 9.20		6.86 8.84		6.65 8.64		6.44 8.78

<sup>(</sup>a) Source of national data: Department of Energy (www.eia.doe.gov/electricity/annual/) 2015 National average annual consumption data and average rate data not available. Certain 2014-2011 National average annual consumption and national average rate data were updated with revised actuals.

(b) Seattle amounts include an allocation for the net change in unbilled revenue. Effective 2013, allocation of net change in unbilled revenue excludes retail Customer voluntary payments for conservation and solar energy. Prior years presented were not revised.

NOTE: A comprehensive rate change of 4.2% became effective January 1, 2015. In addition, a rate change of 0.9% occurred on October 1, 2015 for all customer classes, except Utility Discount Program participants. On August 1, 2015 all classes of Shoreline customers, except Utility Discount Utility Discount Program participants, were subject to a rate change of \$0.0005/kWh.

Notice of public hearings on future rate actions may be obtained on request to The Office of the City Clerk, 600-4th Ave, Floor Three, Seattle, WA 98104. Phone number 206-684-8344. Additional information about Council meetings can be found on the Web at www.seattle.gov/council/calendar.

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# APPENDIX D

# DEMOGRAPHIC AND ECONOMIC INFORMATION

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#### DEMOGRAPHIC AND ECONOMIC INFORMATION

Seattle is the largest city in the Pacific Northwest, serves as the County seat and is the center of the County's economic activity. King County is the largest county in the State in population, number of cities and employment, and the fourteenth most populated county in the United States. Of the State's population, nearly 30% reside in the County, and of the County's population, 32% live in the City of Seattle.

#### **Population**

Historical and current population figures for the State, the County, and the City are given below.

#### **POPULATION**

Year	Washington	King County	Seattle
1980 (1)	4,130,163	1,269,749	493,846
1990 (1)	4,866,692	1,507,319	516,259
2000 (1)	5,894,121	1,737,034	563,374
2010 (1)	6,724,540	1,931,249	608,660
2011 (2)	6,767,900	1,942,600	612,100
2012 (2)	6,817,770	1,957,000	616,500
2013 (2)	6,882,400	1,981,900	626,600
2014 (2)	6,968,170	2,017,250	640,500
2015 (2)	7,061,410	2,052,800	662,400
2016 (2)	7,183,700	2,105,000	686,800

(1) Source: U.S. Department of Commerce, Bureau of Census

(2) Source: State of Washington, Office of Financial Management

# Per Capita Income

The following table presents per capita personal income for the Seattle Metropolitan Division (the cities of Seattle, Bellevue, and Everett), the County, the State, and the U.S.

## PER CAPITA INCOME

	2010	2011	2012	2013	2014
Seattle MD	\$ 51,370	\$ 53,931	\$ 56,267	\$ 58,483	\$ 62,481
King County	54,927	57,837	60,090	62,770	68,877
State of Washington	42,024	43,878	46,045	47,717	49,610
U.S.	39,791	41,560	43,735	44,765	46,049

Source: U.S. Bureau of Economic Analysis, U.S. Department of Commerce

# Construction

The table below lists the value of housing construction for which building permits have been issued by entities within the City. The value of public construction is not included in this table.

CITY OF SEATTLE
RESIDENTIAL BUILDING PERMIT VALUES

	New Sin	New Single Family Units New Multifamily Units			
Year	Number	Value(\$)	Number	Value(\$)	Total Value(\$)
2010	241	\$ 53,269,934	2,456	\$ 192,261,935	\$ 245,531,869
2011	316	71,808,767	2,857	376,591,834	448,400,601
2012	498	120,592,378	6,799	984,110,088	1,104,702,466
2013	822	205,297,350	5,855	805,297,482	1,010,594,832
2014	898	227,307,102	6,547	881,734,102	1,109,041,204
2015	810	215,818,201	10,530	1,684,630,374	1,900,448,575
2015 <sup>(1)</sup>	496	130,513,874	6,340	955,825,259	1,086,339,133
$2016^{(1)}$	462	125,059,887	4,933	644,189,024	769,248,911

<sup>(1)</sup> Through July.

Source: U.S. Bureau of the Census

# **Retail Activity**

The following table presents taxable retail sales in King County and Seattle.

# KING COUNTY AND THE CITY OF SEATTLE TAXABLE RETAIL SALES

Year	King County	Seattle
2011	\$ 40,846,118,928	\$ 15,751,585,856
2012	43,506,804,227	17,162,539,275
2013	46,601,198,766	18,258,200,683
$2014^{(1)}$	49,638,174,066	19,995,171,842
2015 <sup>(1)</sup>	54,890,159,770	22,407,443,037
2015 <sup>(2)</sup>	12,088,335,636	5,009,892,962
$2016^{(2)}$	13,378,793,026	5,480,078,811

<sup>(1)</sup> Through first quarter.

Source: Washington State Department of Revenue and Quarterly Business Review

# **Industry and Employment**

The following table presents major Puget Sound-area employers and their State-wide employment data in 2015.

# PUGET SOUND AREA MAJOR EMPLOYERS

Employer	Employees
The Boeing Company	80,100
Joint Base Lewis-McChord	60,000
Microsoft Corp.	41,700
Navy Region Northwest	37,700
University of Washington	34,700
Amazon.com Inc.	24,000
Wal-Mart Stores, Inc.	$18,100^{(1)}$
Providence Health & Services	17,600
Fred Meyer Stores	15,900
Costco Wholesale Corp.	14,900
King County Government	13,600 <sup>(2)</sup>
City of Seattle	$13,200^{(3)}$
Starbucks Corp.	$12,400^{(1)}$
Franciscan Health System	11,800
Swedish Health Services	11,600
MultiCare Health System	10,900

- (1) Does not include part-time or seasonal employment figures.
- (2) Source: King County. Figure includes temporary workers.
- (3) Source: City of Seattle. Figure includes temporary workers.

Source: Puget Sound Business Journal Book of Lists, 2016

# ${\bf KING~COUNTY} \\ {\bf RESIDENT~CIVILIAN~LABOR~FORCE~AND~EMPLOYMENT} \\ {\bf AND~NONAGRICULTURAL~WAGE~AND~SALARY~EMPLOYMENT}^{(1)} \\ {\bf COUNTY} \\ {\bf C$

		Annual Average				
	2011	2012	2013	2014	2015	
Civilian Labor Force	1,115,790	1,129,670	1,139,610	1,158,230	1,177,297	
Total Employment	1,025,070	1,055,000	1,079,950	1,104,930	1,124,990	
Total Unemployment	90,720	74,670	59,660	53,300	52,307	
Percent of Labor Force	8.1%	6.6%	5.2%	4.6%	4.4%	
NAICS INDUSTRY	2011	2012	2013	2014	2015	
Total Nonfarm	1,168,100	1,196,042	1,237,217	1,278,033	1,313,475	
Total Private	1,003,175	1,030,608	1,069,975	1,108,425	1,139,325	
Goods Producing	148,942	154,283	162,508	168,283	174,042	
Mining and Logging	525	425	458	425	567	
Construction	48,258	50,625	55,883	60,792	66,308	
Manufacturing	100,192	103,225	106,167	107,025	107,167	
Service Providing	1,019,158	1,041,758	1,074,708	1,109,750	1,139,433	
Trade, Transportation, and Utilities	210,850	216,167	225,167	235,758	244,667	
Information	80,183	81,017	82,617	85,583	89,400	
Financial Activities	68,175	68,850	70,892	72,000	69,025	
Professional and Business Services	184,567	192,525	201,042	207,933	216,083	
Educational and Health Services	157,008	159,275	162,633	167,983	169,950	
Leisure and Hospitality	111,075	114,850	120,575	124,883	129,675	
Other Services	42,375	43,642	44,542	46,000	46,483	
Government	164,925	165,433	167,242	169,608	174,150	
Workers in Labor/Management Disputes	0	0	0	0	0	

	July 2016
Civilian Labor Force	1,206,103
Total Employment	1,152,655
Total Unemployment	53,448
Percent of Labor Force	4.4%

<sup>(1)</sup> Columns may not add to totals due to rounding.

Source: Washington State Employment Security Department

# APPENDIX E BOOK-ENTRY TRANSFER SYSTEM

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#### **BOOK-ENTRY TRANSFER SYSTEM**

The following information has been provided by DTC. The City makes no representation as to the accuracy or completeness thereof. Purchasers of the Bonds (the "Beneficial Owners") should confirm the following with DTC or its participants (the "Participants").

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully registered bonds, registered in the name of Cede & Co. (DTC's partnership nominee), or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of the Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.6 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized bookentry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Bonds unless authorized by a Direct Participant in accordance with DTC's MMI procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Bond Registrar on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Bond Registrar or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) are the responsibility of the City or the Bond Registrar, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of DTC, and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the City or the Bond Registrar. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The following information has been provided by the City.

The City may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered to DTC.

The information in this appendix concerning DTC and DTC's book-entry system has been obtained from sources the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

The Bond Registrar is not obligated to exchange or transfer any Bond during the 15 days preceding any principal or interest payment or redemption date.

Neither the City nor the Bond Registrar shall have any responsibility or obligation to Participants of DTC or the persons for whom they act as nominees with respect to the Bonds regarding accuracy of any records maintained by DTC or its Participants of any amount in respect of principal of or interest on the Bonds, or any notice which is permitted or required to be given to Registered Owners under the Bond Ordinance (except such notice as is required to be given by the Bond Registrar to DTC).